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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 1, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather	Observers.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.04	763.0	63.3	17.4	70	NE			2		5			0	0	Fair	Dr. Ollive.
Nemours			30.24	768.1	58.5	14.7	68	NE			2		0			0	0	Clear	Raynard.
Algiers			30.22	767.5	50.0	10.0	89	NNW			2		10			0.791	20.1	Covered	Nicolas.
La Calle			30.19	766.7	51.8	11.0	87	W			4		10			0	0	Covered.	Fonfréde.
Tunis			30.12	765.0															Jacques.
Sfax			30.18	766.6															Gau.
Saida			30.18	766.6	43.2	6.2	88	NE			2		3			0	0	Pretty fair.	Dumas.
Tebessa			30.13	765.2	43.2	6.2	88	NNW			3		10			0	0	Covered	Watrin.
Gerville																			Lonchamp.
Laghouat			30.24	768.2	51.4	10.8	52	NNW			2		2			0	0	Fair	Herbin.
Biskra			30.19	766.9	62.6	17.0	68	NW			5		5			0	0	Cloudy	Bandasse.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.68	753.9	29.77	756.1	56.0	13.3	86	S	7	3.1			6			0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.61	752.1	67	19.4		W			3		10			0.03	0.8	Squally	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.64	753.8	30.21	767.3	39.9	4.4	73	NE			1		10			0.008	0.2		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.44	747.7	30.24	768.1	34.2	1.2	92	W	3.8	1.7			10			0.067	1.7		Dr. Wiersbicki.
Eperies	29.22	742.1	30.12	765.1	41.4	5.2	72	N			1		98		S	0	0		Julius Mikolik.
Gratz‡	28.97	735.7	30.27	768.8	38.1	3.4	83	SSE			2		7			0	0		Andreas Rospini.
Hermannstadt	28.68	728.5	30.15	765.7	43.7	8.5	84	NW			1		10			0.222	5.65		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.87	733.4	30.28	769.1	34.9	1.6	82	WNW			2		5			0	0		The Staff.
Lemberg	29.12	739.7	30.15	765.8	36.7	2.6	87	NE			1		10			Inap.	Inap.		Dr. T. Stanecki.
Pola	29.97	761.2	30.08	764.1	47.7	8.7	61	ENE			2		2			0	0		I. R. HydrographicOffice.
Szathmar	29.67	753.6	29.73	755.1	43.7	6.5	83	SW			2		8			0.610	15.5		Beicht Peter, S. J.
Szegedin	29.86	758.5	30.15	765.9	39.2	4.0	90	Calm			0		7			0.156	3.95		Karl Stancel.
Trieste	30.03	762.8	30.13	765.4	46.2	7.9	65	ENE			2		2			0	0	Almost clear	P. Busin.
Vienna	29.51	749.5	30.25	768.4	41.0	5.0	50	W			3		8			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 10, 1882.

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METEOROLOGICAL OFFICE

STATIONS.	Barometer. Corrected for instrum't'al error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the last 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

BRITISH SERIES.

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

Aberdeen	29.87	758.7	29.97	761.2	46.0	7.8	66	W	8	3.6			9			0	0	Misty	W. Boswell.
Armagh, Observatory	30.03	762.7	30.27	768.8	43.7	6.5	95	SSW	10	4.5			10					Gloomy	S. Call.
Bidston, Liverpool Obs'y			30.26	768.6	44.2	6.8	70	WSW	27	12.1			10					Overcast	John Hartnup.
Bolton, Sharples	29.72	754.9	30.27	768.8	37.9	3.3	90	SW	3	1.3			10					Raining	Thomas Mackereth.
Bradford, Yorkshire	29.84	757.9	30.23	767.8	43.5	6.4	86	W			3		10			0.01	0.3	Overcast	J.McLandsborough, F.R.S
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	80.0	26.7	74	NE			2		3					D. clouds	Pvt. J. Surgener, A. H. C.
Cardington			30.30	769.6	39.0	3.9	86	W			0.2		9					Overcast	John McLaren.
Chatham, School M. E.	30.23	767.8	30.37	771.4	42.1	5.6	76	Calm			0		3					Misty	Cpl. Gwinn, R. E.
Falmouth, Observatory	30.19	766.8	30.42	772.7	47.3	8.5	93	W			1		9					Foggy	The Staff.
Fort Napier, Natal	27.49	698.2	29.72	754.9	79.2	26.2	78	NE			1		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.58	751.3	29.81	757.2	86	30.0	84	SE			1		5					D. clouds	C. E. Keane.
Galway, Queen's College			30.23	767.8	49	9.4	93	SW			2		10					Overcast	J. O'Donaghadue.
Gibraltar, Mediterranean	30.16	766.1	30.21	767.3	55.6	13.1	65	E			3		4					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.92	760.0	30.12	765.0	45.8	7.7	86	W			4		10					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	30.18	766.6	30.36	771.1	33.8	1.0	86	WSW			1		10					Overcast	The Staff, for G. B.Airy.
Guernsey	30.19	766.8	30.41	772.4	47.5	8.6	81	NNW			2		5					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.32	770.1	30.35	770.9	40.0	4.4	87	WSW	5	2.2			10						The Met'g'l Office.
Leicester, Museum	30.02	762.5	30.28	769.1	41.1	5.1	91	SW			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.93	760.2	30.01	762.2	64.4	18.0	70	NW			1		4					D. clouds	A. King.
Nassau, Bahamas			30.06	763.5	72.5	22.5	98	SW			2		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.81	757.2	30.34	770.6	39.9	4.4	93	SW			1		10					Misty	Rev. Stephen J. Whitty.
Oxford, Radcliffe Obs'y	30.10	764.5	30.36	771.1	40	4.4	91	WSW			3		7					Misty	The Staff for E. J. Stone, Esq.
Plymouth	30.32	770.1	30.39	771.9	45.2	7.3	98	Calm			0		10					Drizzling	John Morrifield.
Sandwick Manse, Orkneys			29.88	758.9	44.9	7.2	96	W	28	12.5			10					Drizzling	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.05	763.3	30.12	765.0	57.0	13.9	67	SSW			2		7			Blank	Blank	D. clouds	Serg't W. H. Lyne.
Sheffield	30.05	763.3	30.35	770.9	45.0	7.2	88	SW			1		10			0.03	0.8	Overcast	W. F. Cooper.
Siloth Rectory	30.15	765.8	30.18	766.6	43.7	6.5	89	W			2		10			0	0	Overcast	Rev. F. Redford, A. M.
Stonyhurst, Observatory			30.25	768.3	43.5	6.4	98	SW	11	4.9			10					Raining	Rev. S. J. Perry.
Strathfield Turgiss	30.14	765.5	30.37	771.4	39.0	3.9	87	W			1-2		10					Rain & fog	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	30.32	770.1	30.40	772.1	51	10.6	93	W			4		10					Raining	W. Newcombe.
Valencia, Observatory	30.37	771.4	30.40	772.1	50.9	10.5	93	W	11	4.9			10					Raining	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B	30.02	762.5	30.06	763.5	— 3.5	—19.7		NW	5	2.2		0	3s			0	0	Clear	Hon. J. Ferguson.
Chatham, N. B.*	29.98	761.5	30.06	763.5	— 1.2	—24.4	90	Calm	0	0		8ck	2ks	SW	SW	0	0	Fair	G. A. Blair.
Charlottetown, P. E. Island	30.02	762.5	30.07	763.8	3	—16.1	95	W	3	1.3		2c	2s	W		0	0	Fair	H. J. Cundall, C. E.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario	29.98	761.5	30.19	766.8	0.8	—17.3	94	SW			2	0	2s			0	0	Clear	James Smith, M. A.
Dalhousie, N. B	29.98	761.5	30.02	762.5	3.0	—16.1		W			1		10s			0	0	Cloudy	H. A. Johnson.
Father Point, Quebec*	30.02	762.5	30.04	763.0	7	—13.9	84	SW	8	3.6			10n			0	0	Cloudy	J. McWilliams.
Fredericton, N. B	30.08	764.0	30.15	765.8	—18.9	—28.3	100	Calm	0	0		1cs	0	W		0	0	Fair	Prof. Harrison.
Fort Garry, Manitoba*	28.86	733.0	29.79	756.7	— 9	—22.8	96	S	10	4.5		Haze	0			0	0	Hazy	James Stewart.
Granton, Ontario	29.04	737.6	30.26	768.6	8.6	—13.0	76	W			1		10n			0	0	Cloudy	James Grant.
Halifax, N. S.*	29.99	761.7	30.13	765.3	13	—10.6	94	W	4	1.8		0	8k			Inap.	Inap.	Cloudy	A. Allison.
Hamilton, Ontario	29.85	758.2	30.28	769.1	8.1	—13.3	76	SW			2	0	9ks			0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.82	757.4	30.20	767.1	0	—17.8	85	W	5	2.2		5k	0	Calm		0	0	Fair	S. Woods, M. A.
Little Glace Bay, N. S	29.95	760.7	29.99	761.7	12.7	—10.7	89	W	8	3.6		0	5k			0	0	Fair	C. H Rigby.
Montreal, Quebec*	29.96	761.0	30.18	766.6	3	—16.1	73	SW	15	6.7		0	0			0	0	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A.
Parry Sound, Ontario*	29.34	745.2	30.09	764.3	16	— 8.9	92	SW	20	8.9			10n		SW	0.59	15.0	Light snow	Rev. R. Moseley.
Peterboro, Ontario	29.43	747.5	30.26	768.6	—10.7	—23.7	59	SW			1	0	0			0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.51	749.5	30.28	769.1	8	—13.3	100	SW	20	8.9		5k	5n	SW		0.02	0.5	Cloudy	H. Morgan.
Port Stanley, Ontario	29.56	750.8	30.27	768.8	10	—12.2	94	W	24	10.7			10ks		W	0.04	1.0	Cloudy	M. Payne.
Quebec, Quebec*	29.74	755.4	30.10	764.5	— 1	—18.3		W			1		10n		W	0	0	Light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.61	752.1	30.12	765.0	3	—16.1	78	Calm	0	0			10n		SW	0	0	Cloudy	W. H. McIntyre.
St. Andrews	30.06	763.5	30.11	764.8	4	—15.6	84	NW	2	0.9		5k	2s	W		0	0	Fair	
St. John's, N. B	29.94	760.5	30.12	765.0	6.0	—14.4	100	NW	7	3.1		7ck	0			0	0	Fair	G. Murdock, C. E.
Saugeen, Ontario*	29.36	745.7	30.15	765.8	9	—12.8	85	S	20	8.9			10s			0.12	3.0	Cloudy	K. Stewart.
Stratford, Ontario	28.88	733.5	30.33	770.4	0.3	—17.6	88	SW	7	3.1			10s		W	0	0	Cloudy	C. J. MacGregor, M. A.
Sydney, C. B*	29.99	761.7	30.03	762.7	15	— 9.4	90	SW	8	3.6			10s		Calm	0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.85	758.2	30.28	769.1	7	—13.9	90	W	5	2.2			10n			0	0	Cloudy	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario	29.08	738.6	30.26	768.6	8.1	—13.3	93	SW	11	4.9			10ks		NW	0	0	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*	30.04	763.0	30.11	764.8	20	— 6.7	75	Calm	0	0			10s			0.18	4.6	Cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. John's, Newfoundland	29.94	760.5	30.12	765.0	23	— 5.0	100	NW	2	0.9			10n			0	0		John Delany.
St. Pierre, N. F., Marine Hospital			29.91	759.7	24.8	— 4.0		NW			2					0	0		The Commandant.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	30.01	762.2	30.04	763.0	81.0	27.2	47	S	9.4	4.2		0	0			0	0	Clear	The Staff, for D. Gill.
Cape St. Francis Lt. House	29.94	760.5			68.0	20.0	87	WSW	16.6	7.4			3k			0	0	Fine	John Duthie.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.53	775.4	30.55	776.0	28.4	— 2.0	88	N	1.8	0.8		0				0	0	Clear	M. Marc Dechevrens, S.J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.24	666.5	29.96	761.0	59.9	15.5	89	SE			1	10				0	0	Clear.	Frederico Maison.

DANISH SERIES.

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

Copenhagen	30.07	763.7	30.11	764.9	33.8	1.0	80	W	13	6			2						
Fanöe	30.12	765.1	30.14	765.6	36.7	2.6	82	WSW			4		9						
Godthaab, Greenland	28.94	735.1	28.98	736.2	18.0	— 7.8	77	NW			1		10						
Stykkisholm, Iceland	28.87	733.3	28.91	734.4	33.3	0.7	98	W			2		8						
Thorshavn	29.39	746.4	29.42	747.3	46.0	7.8	90	SW	31	14			10						
Vestervig	29.96	760.9	30.05	763.3	36.9	2.7	75	W			2		10						

FRENCH SERIES.

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

Agen, Normal School	29.82	757.4	30.47	774.1	52.2	11.2	80	NW			1		k		E	0	0		M. Labroue Director.
Alençon	29.87	758.6	30.42	772.6	38.5	3.6	94	W			1		10k	NW	W	0.04	1.	Snowing	M. Nicot, Director.
Arras, Engineer School	30.11	764.7	30.37	771.5	36.5	2.5	93	NW	3	1.4			s						M. Klein, Commandant.
Avignon, Normal School	30.14	765.6	30.22	767.6	42.3	5.7	54	N			6		0			0	0	Very clear	M. Giraud, Director.
Bar-sur-Seine	29.83	757.7	30.42	772.6	36.5	2.5	88	S			1		10			0	0	Covered	C. Saillard, Director.
Beauvais, Normal School	30.11	764.7	30.39	771.8	39.6	4.2	83	W			1		8			0.08	2.	Very cloudy	Frère Eugene Marie.
Besançon, Normal School	29.21	741.8	30.30	769.5	54.1	12.3	75	N			1		2n		S	0	0	Slightly cl'dy	M. Gobin, Director.
Bordeaux, Observatory	30.24	768.0	30.51	775.0	40.5	4.7	76	SW			1		0			0.020	0.5	Hazy	M. Rayet, Director.
Bourges, Normal School	29.91	759.8	30.48	774.2	45.3	7.4	96	NNW			1	2c				0	0	Slightly cov.	M. Postel, Director.
Brest, Naval Observatory	30.25	768.4	30.50	774.6	48.2	9.0	92	N			1		3		N	0.118	3.00		Ch. de Rermaree, Dir.
Caen, Normal School	30.25	768.4	30.37	771.4	45.7	7.6	97	W			1		8		NW	0	0	Very cloudy	M. Bietrix, Director.
Châlons-sur-Marne, N.Sch'l	30.08	764.0	30.41	772.4	35.6	2.0	96	Calm			0		5			0.047	1.2	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.84	757.8	30.38	771.6	35.2	1.8	87	SW			1		10					Light snow	M. Baumler, Director.
Clermont-Ferrand Obs'y	29.02	737.1	30.46	773.6	33.8	1.0	62	N			1		8			0.102	2.6		M. Alluard, Director.
Cluny, Normal School	29.55	750.5	30.42	772.7	35.6	2	67	NE			2		10		NE			Snowing	Gouré de Villemontée, Dir.
Commercy, Normal School	29.49	749.0	30.39	771.9	39.2	4	87	W			1		10n					Snowing	Dr. Coullet, Director.
Gap, Normal School	27.54	699.5	30.13	765.3	45.0	7.2	97	N			3					0	0		M. Jeangirard, Director.
Gréasque, Bouches-du-Rhone	29.06	738.1	30.20	767.1	41.4	5.2	56	NW			3		5		NW	0	0		L. Kina, Director.
Grenoble, Normal School	29.48	748.8	30.29	769 3	37.0	2.8	65	WNW			3		10			0.024	0.60	Rain & snow	M. Ablard, Director.
Guéret, Normal School	28.84	732.4	30.54	775.7	32.9	0.5	80	NW			1		10		SE	0	0	Covered	M. Rivoir, Director.
Lamballe, Normal School	30.11	764.8	30.39	771.8	46.4	8	85	W			2		Mist		W	0.126	3.2	Misty	M. Ollitrault, Director.
Lescar, Normal School	29.87	758.8	30.57	776.5	46.2	7.9	59	NW					0			0.346	8.80	Clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.45	773.5	30.56	776.1	46.0	7.8	89	W			1		10		W	0	0	Covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	29.28	743.8	30.35	771.0	35.8	2.1	64	NNE			3		n		N	0.008	0.2		Ch. André, Director.
Mans, Normal School	30.19	766.8	30.51	775.0	41.2	5.2	94	NW			1		2		NNE	0	0	Slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.85	758.2	30.13	765.2	42.1	5.6	73	NNW			1		7		WSW	0	0		E. Stephan, Director.
Montlouis l'Instituteur	24 94	633.5	30.16	766.0	27.5	— 2.5	68	NE	18.6	8.3			10	N		0.236	6.0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.95	760.8	30.26	768.6	45.3	7.4	37	N			6		0			0	0	Clear	M. F. Galzin, Director.
Nancy, Normal School	29.56	750.9	30.37	771.5	33.1	0.6	92	NE			1		2s		WNW	0	0	Slightly cl'dy	M. Hasse, Director.
Nantes, Observatory	30.41	772.4	30.58	776.6	44.2	6.8	85	W			1		10		N	0	0	Gloomy	M. L. E. Larocque, Dir.
Nice	30.01	762.3	30.05	763.2	55.4	13.0	28	NW			3		5	NW	NW	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	30.19	766.7	30.29	769.4	43.0	6.1	49	S	29.8	13.3			4		NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.56	572.9			13.1	—10.5							10			0.839	21.3	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.26	743.2	30.36	771.2	43.2	6.2	42	N			3		5k	N	N	0	0	Cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.28	642.2			17.1	— 8.3	97	N			3		10			0.476	12.1	Snow and fog	M. Alluard, Director.
Rochefort, Naval Obs'y	30.49	774.4	30.52	775.2	42.8	6.0	91	WSW			1		0			0.08	2.	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.19	766.8	30.41	772.4	43.2	6.2	79	WNW			1		10			0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	28.11	714.1	30.38	771.7	33.1	0.6	89	NW			2		10		NW	0	0	Covered	M. Richard, Director.
Rouen, Normal School	30.41	772.4	30.50	774.6	40.3	4.6	80	NW			1		2		NW	0.071	1.8	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School																			M. Delaplanche, Dir.
Saint Maur, Observatory	30.25	768.4	30.42	772.6	41.0	5.0	72	WNW			1		10	NE	N				E. Renou, Director.
Toulouse, Observatory	29.77	756.2	30.50	774.8	36.0	2.2	81	NW			3		1		W	0.008	0.2	Clear	B. Baillaud, Director.
Tours	30.24	768.0	30.43	773.0	41.0	5.0	81	N			1		2	Calm	N	0.012	0.3	¼ covered	M. de Tastes.
Versailles, Observatory	29.92	760.0	30.41	772.5	36.0	2.2	89	NW			1					0	0		Dr. A. Berigny, Director.
Sun-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	29.43	747.6	30.30	769.7	32.9	0.5	87	NW			4		3k	W		0.091	2.3		Prof. Dr. Hoh.
Berlin	30.10	764.4	30.28	769.0	33.1	0.6	87	W			1		7			0	0		Prof. Dr. Arndt.
Breslau	29.75	755.7	30.29	769.3	32.7	0.4	85	NW			2		6			0	0		Royal University Obs'y.
Carlsruhe	29.96	760.9	30.41	772.4	34.9	1.6	90	SSW			2		10	SW		0	0		Albert Senz.
Cassel	29.71	754.7	30.33	770.3	34.9	1.6	78	S			4		6	SW		0	0		Dr. H. Möhl.
Frankfort on the Main	30.07	763.8	30.46	773.7	32.7	0.4	90	WSW			0		10			0.028	0.7	Snowing	Physical Society.
Friedrichshafen	28.85	732.9	30.37	771.3	33.4	0.8	87	SE			2		10	NE		0.016	0.4	Snowing	Chief Telegrapher Wilhelm.
Hamburg	30.19	766.9	30.26	768.7	34.7	1.5	92	W			3		9			0	0		Dr. R. Kiceman.
Kiel	30.13	765.2	30.14	765.6	35.2	1.8	83	WSW			1		6			0.002	0.04		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.87	758.6	30.31	769.9	33.1	0.6	85	SW			2		2			0.087	2.2	Hazy	Prof. Dr. Bruhns.
Magdeburg	30.06	763.4	30.29	769.4	32.5	0.3	94	W			3		18	W		0	0		Dr. Assmans.
Memel	30.02	762.6	30.07	763.8	37.0	2.8	84	W			6		5k						Reinbrecht & Issermann.
Munich	28.44	722.4	30.32	770.2	32.5	0.3	76	NW			2		10	NW		0.071	1.8		Central Station.
Neufahrwasser	30.16	766.0	30.17	766.4	30.7	—0.7	84	SSW			2		0			0	0		A Lothes.
Neustadt, Palatinate	29.92	759.9	30.45	773.4	34.3	1.3	80	W			2		10			0	0		Dicknether.
Stuttgart	29.36	745.8	30.30	769.6	35.1	1.7	69	W			1		3	W		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.74	730.1	30.29	769.4	33.4	0.8	83	Calm			0		9	NW		0.094	2.4		Prof. Kemlein.
Wustrow	30.19	766.7	30.21	767.3	35.6	2.0	82	WSW			4		5s			0	0		Prof. S. Reimer.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW, IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.77	756.1	30.16	766.0	61.0	16.1		S			1.0							Smoky	Alexander Waurlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.96	760.8	30.01	762.2	74.4	23.6	76	WSW	5.0	2.2		6		WNW		0	0	D. clouds	
Deesa	29.48	748.8	29.96	761.0	71.7	22.1	45	SSE	5.2	2.3		6		S		0	0	D. clouds	
Bombay	29.91	759.8	29.95	760.7	80.5	26.9	69	NNW	12.0	5.4		0				0	0	Blue sky	
Poona, Yarrowda	28.09	713.4	29.92	759.9	87.3	30.7	22	WNW	6.0	2.7		0				0	0	Blue sky	
Belgaum	27.40	669.6	29.92	760.1	81.1	27.3	19	E	3.0	1.3		0				0	0	Blue sky	
Lahore	29.27	743.3	30.04	762.9	64.6	18.1	40	E	1.6	0.7		10				0	0	Misty	
Roorkee	29.12	739.7	30.06	763.6	60.8	16.0	60	W				3				0	0		
Agra	29.48	748.8	30.08	763.9	59.3	14.1	44	NW	0.8	0.4		0				0	0		
Nagpur	28.93	734.8	29.98	761.4	80.4	26.9	44	SE	2.4	1.1		4		W		0	0	D. clouds	
Jubbulpore	28.66	728.0	30.06	763.6	70.2	21.2	34	Calm	1.6	0.7		3				0	0	D. clouds	
Lucknow	29.72	754.8	30.11	764.8	62.3	16.8	49	Calm	0.3	0.1		0				0	0	Blue sky	
Allahabad	29.74	755.4	30.07	763.8	62.3	16.8	64	Calm	1.0	0.4		0				0	0	Blue sky	
Patna	29.89	759.3	30.08	764.1	63.9	17.7	77	W	1.2	0.5		0				0	0	Blue sky	
Hazaribagh	27.99	710.9	30.08	764.1	61.0	16.1	55	NNW	4.2	1.9		0				0	0	Blue sky	
Cuttack	29.96	761.0	30.04	763.0	77.5	25.3	63	WSW	0.7	0.3		1				0	0	Blue sky	
Calcutta, Alipore	30.00	762.0	30.02	762.6	70.3	21.3	70	NNE	3.0	1.3		0				0	0	Blue sky	
Goalpara	29.64	752.8	30.06	763.6	62.2	16.8	73	ESE	8.5	3.8		0				0	0	Blue sky	
Chittagong	29.90	759.6	30.00	762.0	69.8	21.0	69	WSW	2.2	1.0		2				0	0	Blue sky	
Sibsagar	29.76	756.0	30.12	765.1	57.3	14.1	87	NE	1.3	0.6		0				0	0	Blue sky	
ITALIAN SERIES. By authority of the MINISTER OF AGRICULTURE, INDUSTRY AND COMMERCE. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.75	755.6	30.17	766.4	44.6	7.0	55	E	1.8	0.8		5				0	0		Prof. Giovanni Clodig.
Milan	29.62	752.4	30.17	766.2	39.2	4.0	92	SW	0.7	0.3		8		NW		0.016	0.4		Prof. Schiaparelli.
Padua	30.02	762.6	30.14	765.6	48.2	9.0	48	ENE	13.6	6.1		3		NE		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.23	742.5	30.18	766.6	44.6	7.0	28	N	2.5	1.1		0				0	0		Prof. P. F. Denza.
Genoa	29.89	759.3	30.10	764.4	49.6	9.8	36	N	12.5	5.6		0				0	0		Prof. G. M. Garibaldi.
Mondovi	28.20	716.3	30.22	767.5	39.6	4.2	29	W			4	0				0	0		Prof. D. C. Bruno.
Pesaro	30.04	763.1	30.10	764.4	43.7	6.5	84	W	7.4	4.3		10				0	0		Prof. Luigi Guidi.
Florence	29.78	756.4	30.04	763.0	48.0	8.9	54	NE			6	6		SSW		0	0		Cav. F. Meucci.
Leghorn	29.95	760.8	30.04	763.0	50.2	10.1	55	ENE	9.8	4.4		3				0	0		Prof. P. Monte.
Rome	29.80	756.9	29.98	761.4	49.5	9.7	82	NNW	6.9	3.1		10				0	0		Prof. P. S. Ferrari.
Lecce	29.73	755.2	29.99	761.8	60.4	15.8	79	S	14.3	6.4		8		S		0	0		Prof. C. de Giorgi.
Cosenza	29.11	739.5	30.02	762.5	56.3	13.5	65	Calm	0	0		10		SSE		0.055	1.4		Prof. D. Conti.
Cagliari	29.77	756.1	29.97	761.1	54.1	12.3	54	NNW			4	4		NNW		0	0		Prof. A. Pacinotti.
Palermo	29.77	756.2	30.02	762.6	56.8	13.8	81	WNW	3.8	1.7		10		WNW		0	0		Prof. G. Ciaccatore.
Syracuse	29.97	761.2	30.01	762.3	60.8	16.0	69	SW	6.3	2.8		10		S		0	0		Prof. Vincenzo Guiliano.
SUB-SERIES.																			
Naples, S. R.	29.46	748.2	29.99	761.8	52.3	11.3	75	ESE	3.1	1.4		10k		WSW		0.012	0.3		Prof. F. Brioschi.
Stelvio	22.10	561.6			6.8	—14.0	58	NE				0				0	0		P. F. Denza.
Valdobbia	22.06	560.4			12.2	—11.0	59	SE				0				0	0		
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.23	767.8	30.24	768.1	41.4	5.2	69	NE	4.9	2.2		10ck				0	0	Gloomy	K. Sasaki.
Kioto	29.96	761.0	30.14	765.5	35.4	1.9	97					2s				0.006	0.15	Clear	
Nagasaki, I. M. Obs'y	30.08	764.0	30.29	769.3	42.0	5.6	70	N	7.3	3.3		10s				0	0		S. Takehayashi.
Tokei Obs'y, Yeddo	29.89	759.2	29.96	761.0	33.3	0.7	75	N	5.8	2.6		0	0			0	0	Clear	The Staff.
Wakayama	30.09	764.3	30.15	765.8	45.0	7.2	60	NW	8.5	3.8		9cks				0.002	0.05	Cloudy	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.86	758.4	30.05	763.2	80.2	26.8	67	NE	14.0	6.3		0	8		ENE	0	0	Cloudy	A. N. Figoy.
MEXICAN SERIES. By authority of the SECRETARY OF PUBLIC WORKS. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.79	756.6	30.05	763.3	64.5	18.1	78	NNE			2	0	1k			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.34	770.6	30.34	770.6	41.4	5.2		WNW			2					0.457	11.6		
Groningen	30.21	767.2	30.26	768.6	34.7	1.5		SW			1					0.028	0.7		
Helder	30.25	768.4	30.26	768.4	40.5	4.7		WSW			2					0.075	1.9		
Hellevoetsluis	30.31	769.8	30.31	769.8	39.7	4.3	93	W			1					0.165	4.2		
Utrecht	30.27	768.8	30.32	770.0	37.9	3.3	86	W			2	8				0.067	1.7	Very cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.75	755.7	29.82	757.3	33.1	0.6	89	SSE	25.7	11.5			10			0.465	11.8	Rain & snow	
Christiania	29.71	754.5	29.85	758.5	20.5	— 6.4	82	NE	0	0			9			0	0		
Gjæsvær	29.24	742.7	29.26	743.3	23.7	— 4.6		SE			2		5						
Lodingen	29.33	745.0	29.38	746.2	27.9	— 2.3	79	SE			4		8			0.902	22.9		
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.09	764.3	30.25	768.3	59.7	15.4	85	ESE	18.6	8.3			6			0.079	2.0		Dr. J. A. Sampaio.
Campo Major	29.39	746.6	30.43	773.0	47.8	8.8	47	NNE	6.3	2.8			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.09	764.2	30.17	766.4	62.8	17.1	62	E	9.4	4.2			10			0	0		Capt. D. A. da Cunha.
Lisbon, Observatory	30.11	764.9	30.49	774.4	44.4	6.9	66	NE	12.5	5.6			0			0	0		The Staff.
Ponta Delgada, Azores	30.17	766.3	30.24	768.1	61.5	16.4	79	E	12.5	5.6			10			0.035	0.9		
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinsk	28.80	731.6	29.98	761.5	6.8	—14.0	100	WSW	40	18			10			Blank	Blank		Capt. Sselliwerstow.
Archangel	29.79	756.6	29.81	757.1	10.9	—11.7	85	ESE	13	6			10						Capt. Wisganow.
Astrakhan	30.44	773.1	30.35	771.0	35.1	1.7	94	WSW	2	1			10					Light fog	Meteorological Obs'y.
Barnaul	29.54	750.3	30.07	763.8	22.1	— 5.5	88	SW	2	1			10						Observatory.
Dorpat	29.54	750.4	29.80	756.8	32.0	0.0	85	SW	13	6			9k						Meteorological Obs'y.
Ekaterinburg	29.26	743.2	30.33	770.3	6.3	—14.3	85	NNW	4	2			2c						Observatory.
Kasan	29.97	761.2	30.26	768.7	12.7	—10.7	85	SE	9	4			10						Lagorio & Sastyrez.
Kertch	30.19	766.7	30.21	767.2	46.0	7.8	92	S	4	2			4						Observatory.
Kieff	29.38	746.3	30.04	763.1	35.8	2.1	100	NNW	7	3			10n					Foggy	Cand. Fatjanow.
Krotkowo, N. 58°47', E. 48°34'																			Meteorological Obs'y.
Lugan	29.92	760.0	30.13	765.4	33.6	0.9	82	ESE	2	1			10						Meteorological Obs'y.
Moscow	29.30	744.2	29.88	758.9	34.9	1.6	89	SSW	7.8	3.5			10s						Meteorological Obs'y.
Nertchinsk	28.00	711.2	30.69	779.6	—21.1	—29.5	87						0						1st. Lieut. Kurdakov.
Nikolaiev	30.01	762.3	30.08	764.1	45.0	7.2	99	S	9	4			10n						Lieut. Iwanow.
Nikolaievsk, on the Amoor	29.69	754.0	29.77	756.2	—13.4	—25.2	75	Calm	0	0			0						Dr. Dobrochotow.
Nukuss	30.29	769.3	30.54	775.6	35.2	1.8	75	WSW	4	2		8ok							Physical Observatory.
Pekin, China	30.39	771.8	30.53	775.4	20.5	— 6.4	43	Calm	0	0			0						Central Physical Obs'y.
St. Petersburg	29.72	754.8	30.73	755.2	30.6	— 0.8	77	WSW	13	6			9kn					Light clouds	Teich, A. M.
Tashkend, Laboratory	28.79	731.2	30.45	773.5	33.4	0.8	85	Calm	0	0			10						Physical Observatory.
Tiflis	28.87	733.3	30.34	770.5	44.4	6.9	50	N	2	1			0						Astronomical Obs'y
Warsaw	29.80	756.8	30.24	768.1	30.4	— 0.9	92	WNW	4	2			10ks						Berg, Assistant.
Wilna	29.65	753.2	30.09	764.3	34.3	1.3	76	W	7	3			1						M. O. Marks, Phot.
Yeniseisk	29.91	759.6	30.22	767.6	7.9	—13.4	90	SE	2	1			10						
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.09	764.3	44.8	7.1	92	W			6		10s			0	0	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides			30.01	762.2	50	10.0	93	WSW			4		10			0.4	10		J. Youngclause.
North Unst, Shetland Isl'ds			29.70	754.4				W			7		10			Blank	Blank		Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.07	763.7	30.18	766.5	49.3	9.6	44	NNW	1.6	0.7			1ks			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.47	773.8	30.52	775.3	42.4	5.8	94	SE	2.6	1.17			10			0.575	14.6	Raining	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.42	696.5			35.6	2.0	82	N	5.0	2.24			3			0.059	1.5	Cloudy	Domingo Mantiny Perez.
Madrid, Royal Obs'y	28.12	714.2	30.45	773.5	41.4	5.2	57	N	20.4	9.1		0	4			0	0	Cloudy	The Staff.
Murcia, Met. Obs'y.	30.17	766.2	30.32	770.1	51.3	10.7	66	WNW	5.6	2.5		2	3	SW		0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.66	751.7	30.53	775.4	44.8	7.1	76	NE	8.1	3.6			2			0.008	0.2	Light clouds	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.97	761.2	30.04	762.9	67.2	19.6	94	SE	1.8	0.8		10	0	SW		0.012	0.3	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.90	759.5	29.95	760.8	78.9	26.1	70	ESE	0	0			8kn	E		0	0	Covered	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.23	767.8	30.33	770.4	54.1	12.3	47	NE	9.4	4.2		0	2	NE		0	0		Capt. C. Pajason, R. N., Dir.
San Juan de Porto Rico, W. I	30.02	762.6	30.11	764.9	74.1	23.4	95	SE	10.6	4.76		3k	4kn	SE	SE	0.148	3.75	Cloudy	Enrique Gades, Chief Engineer.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.48	748.9	29.52	749.9	20.5	— 6.4	95	NE			2		10			0.079	2.0		
Umea	29.50	749.2	29.55	750.5	19.0	— 7.2	100	Calm			0		8			0.083	2.1		
Hernosand	29.56	750.9	29.61	752.2	31.5	— 0.3	79	WNW			2		5			0.031	0.8		
Stockholm	29.64	752.9	29.82	757.4	29.1	— 1.6	84	NW			4		8			0	0		
Wisby	29.82	757.3	29.87	758.8	35.2	1.8	82	WNW			4		5			0	0		
Sub-Series.																			
Upsala	29.71	754.5	29.79	756.7	27.0	— 2.8	73	W	8.3	3.7			4	N		0.004	0.10		Nils Ekholm
SWISS SERIES.																			
Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.87	733.3	30.35	770.8	36.5	2.5	69	N			3		1			0.035	0.9	Clear	The Observatory.
Zurich	28.66	728.0	30.37	771.4	33.1	0.6	83	W			1		9			0.028	0.7	Snowing	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. +5.6 mm.; Ther. +1°.0 cent.; Hum. —11 per cent.																			
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.19	766.7	57.7	14.3	65	SW	12	5.5			7	SW		0	0		The Observatory.
Valona			30.03	762.8	64.8	18.2		S			2		5			0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.25	768.3	61.9	16.6	62	NW			2		1k			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	30.29	769.4	30.38	771.6	— 5	—20.6	100	S	2	0.9	.....	0	Fog	.....	Calm	0	0	Clear	
Alpena, Michigan	29.43	747.5	30.13	765.3	9	—12.8	78	SW	11	4.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Atlanta, Georgia	28.99	736.3	30.22	767.6	22	— 5.6	72	N	6	2.7	.....	Haze	10s	.....	Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.40	772.1	30.42	772.7	3	—16.1	72	W	2	0.9	.....	.....	0	.....	Calm	0	0	Clear	
Augusta, Georgia	30.04	763.0	30.26	768.6	29	— 1.7	67	NE	5	2.2	.....	Haze	10s	.....	Calm	0	0	Threatening	
Baltimore, Maryland	30.38	771.6	30.44	773.2	— 2	—18.9	67	W	2	0.9	.....	0	Haze	Calm	Calm	0	0	Hazy	
Barnegat, New Jersey	30.40	772.1	30.42	772.7	5	—15.0	87	NW	5	2.2	.....	.....	0	.....	.....	0	0	Clear	
Bismarck, Dakota	27.83	706.9	29.69	754.1	12	—11.1	80	E	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Boise City, Idaho	27.35	694.7	30.31	769.9	28	— 2.2	83	NW	4	1.8	.....	0	10s	.....	Calm	0.15	3.8	Cloudy	
Boston, Massachusetts	30.11	764.8	30.28	769.1	0	—17.8	70	W	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Brackettville, Texas	28.98	736.1	30.12	765.0	20	— 6.7	85	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Brownsville, Texas	28.25	717.5	30.30	769.6	21	— 6.1	86	Calm	0	0	.....	0	0	.....	.....	0.19	4.8	Clear	
Buffalo, New York	29.52	749.8	30.31	769.9	1	—17.2	71	SW	9	4.0	.....	0	8s	.....	SW	0.03	0.8	Fair	
Burlington, Vermont	30.00	762.0	30.32	770.1	1	—17.2	71	S	11	4.9	.....	Haze	0	.....	.....	0	0	Clear	
Cairo, Illinois	29.91	759.7	30.34	770.6	15	— 9.4	82	Calm	0	0	.....	0	Fog	Calm	Calm	0	0	Clear	
Campo, California	27.42	696.5	29.99	761.7	29	— 1.7	89	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Camp Thomas, Arizona	27.26	692.4	.....	.....	23	— 5.0	86	Calm	.....	.....	0	.....	5s	.....	Calm	0	0	Fair	
Cape Henry, Virginia	30.36	771.1	30.37	771.4	26	— 3.3	75	N	6	2.7	.....	2c	10s	.....	NW	0	0	Cloudy	
Cape May, New Jersey	30.37	771.4	30.44	773.2	8	—13.2	78	N	4	1.8	.....	0	0	Calm	.....	0	0	Fair	
Castroville, Texas	29.41	747.0	30.18	766.6	18	— 7.8	53	NW	2	0.9	.....	.....	0	.....	.....	0	0	Clear	
Cedar Keys, Florida	29.98	761.5	30.00	762.0	38	3.3	100	N	19	8.5	.....	0	10s	.....	NE	0.86	21.8	Cloudy	
Champaign, Illinois	29.29	744.0	30.18	766.6	3	—16.1	73	S	8	3.6	.....	.....	0	.....	.....	0	0	Clear	
Charleston, S. Carolina	30.18	766.6	30.24	768.1	33	0.6	79	N	9	4.0	.....	.....	10n	.....	Calm	0.14	3.6	Light rain	
Charlotte, N. Carolina	29.38	746.2	30.27	768.8	16	— 8.9	83	NE	6	2.7	.....	5cs	10s	.....	Calm	0	0	Cloudy	
Chattanooga, Tennessee	29.42	747.3	30.30	769.6	13	—10.6	81	N	2	0.9	.....	.....	Sm'e	SW	Calm	0	0	Fair	
Cheyenne, Wyoming	23.77	603.8	29.71	754.6	28	— 2.2	88	NW	14	6.3	.....	0	10n	.....	Calm	Inap.	Inap.	Light snow	
Chicago, Illinois	29.39	746.5	30.14	765.5	10	—12.2	18	SW	6	2.7	.....	10cs	0	.....	.....	0	0	Clear	
Chincoteague, Virginia	30.38	771.6	30.46	772.1	14	—10.0	82	N	8	3.6	.....	0	0	S	.....	0	0	Cloudy	
Cincinnati, Ohio	29.64	752.8	30.38	771.6	2	—16.7	72	SE	4	1.8	.....	0	Fog	.....	Calm	Inap.	Inap.	Clear	
Cleveland, Ohio	29.53	750.0	30.35	770.9	2	—16.7	86	S	7	3.1	.....	9	0	.....	.....	0	0	Clear	
Coleman City, Texas	28.27	718.0	30.09	764.3	15	— 9.4	65	SW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Columbus, Ohio	29.42	747.3	30.37	771.4	0	—17.8	70	S	4	1.8	.....	5c	0	.....	.....	0	0	Clear	
Concho, Texas	28.08	713.2	29.88	758.9	20	— 6.7	85	SW	2	0.9	.....	0	0	Calm	.....	0	0	Fair	
Corsicana, Texas	29.78	756.4	30.28	769.1	24	— 4.4	61	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Davenport, Iowa	29.41	747.0	30.11	764.8	8	—13.3	78	Calm	0	0	.....	.....	0	.....	.....	0	0	Clear	
Dayton, Washington T'y	28.50	723.9	30.22	767.6	32	0.0	100	SW	6	2.7	.....	0	10s	.....	Calm	0.29	7.4	Cloudy	
Deadwood, Dakota	25.04	636.0	.....	.....	34	1.1	70	SW	4	1.8	.....	0	0	.....	.....	0.05	1.3	Clear	
Decatur, Texas	28.94	735.1	30.20	767.1	24	— 4.4	74	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Delaware Breakwater, Del.	30.39	771.9	30.41	772.4	15	— 9.4	82	W	3	1.3	.....	0	5ks	.....	SW	0	0	Fair	
Denison, Texas	29.36	745.7	30.21	767.3	21	— 6.1	86	SW	5	2.2	.....	.....	0	.....	.....	0	0	Clear	
Denver, Colorado	24.51	622.5	29.73	755.1	37	2.8	53	W	8	3.6	.....	0	10s	.....	Calm	0	0	Cloudy	
Des Moines, Iowa	29.07	738.4	30.04	763.0	5	—15.0	75	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Detroit, Michigan	29.53	750.0	30.28	769.1	4	—15.6	74	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Dodge City, Kansas	27.19	690.6	29.66	753.4	6	—14.4	52	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Dubuque, Iowa	29.34	745.2	30.14	765.5	— 7	—21.7	59	Calm	0	0	.....	0	Fog	.....	Calm	0	0	Fair	
Duluth, Minnesota	29.22	742.2	29.98	761.5	— 6	—21.1	100	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Eagle Pass, Texas	29.43	747.5	30.23	767.8	21	— 6.1	86	NE	1	0.4	.....	.....	0	.....	.....	0	0	Clear	
Eagle Rock, Texas	25.22	640.6	29.87	758.7	21	— 6.1	86	Calm	0	0	.....	.....	10s	.....	Calm	0.49	12.4	Cloudy	
Eastport, Maine	30.06	763.5	30.14	765.5	8	—13.3	78	W	4	1.8	.....	0	10s	.....	W	0	0	Cloudy	
Edinburg, Texas	.....	.....	.....	.....	23	— 5.0	60	N	.....	.....	1	0	8ks	.....	Calm	0.03	0.8	Fair	
El Paso, Texas	26.21	665.7	.....	.....	10	—12.2	58	Calm	0	0	.....	0	1s	.....	Calm	0	0	Clear	
Erie, Pennsylvania	29.52	749.8	30.32	770.1	4	—15.6	86	S	11	4.9	.....	.....	Haze	.....	Calm	0	0	Clear	
Escanaba, Michigan	29.37	746.0	30.09	764.3	5	—15.0	75	S	2	0.9	.....	10k	10s	.....	Calm	0	0	Cloudy	
Florence, Arizona	28.48	723.4	30.08	764.0	35	1.7	61	NE	2	0.9	.....	0	0	W	.....	0	0	Cloudy	
Fort Apache, New Mexico	24.93	633.2	30.38	771.6	22	— 5.6	58	SE	1	0.4	.....	.....	2s	.....	Calm	0	0	Fair	
Fort Assinniboine, Montana	27.09	688.1	.....	.....	25	— 3.9	75	SW	5	2.2	.....	0	10s	.....	Calm	Inap.	Inap.	Cloudy	
Fort Bennett, Dakota	28.06	712.7	29.54	750.3	11	—11.7	80	Calm	0	0	.....	.....	0	.....	.....	0	0	Clear	
Fort Benton, Montana	27.16	689.8	.....	.....	26	— 3.3	100	W	4	1.8	.....	.....	10n	.....	Calm	0.04	1.0	Light snow	
Fort Buford, Dakota	27.78	705.6	.....	.....	15	— 9.4	100	W	5	2.2	.....	.....	10n	.....	Calm	0.18	4.6	Light snow	
Fort Custer, Montana	26.81	681.0	.....	.....	27	— 2.8	100	N	4	1.8	.....	0	10n	.....	Calm	0.01	0.3	Light snow	
Fort Davis, Texas	25.04	636.0	30.00	762.0	20	— 6.7	85	W	8	3.6	.....	0	5s	.....	Calm	0	0	Fair	
Fort Elliott, Texas	27.12	688.8	29.57	751.1	11	—11.7	20	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Gibson, Indian T'y	29.58	751.3	30.17	766.3	18	— 7.8	68	SE	4	1.8	.....	2cs	0	.....	.....	0	0	Clear	
Fort Grant, Arizona	25.10	637.5	29.90	759.4	29	— 1.7	56	NE	3	1.3	.....	0	0	Calm	.....	0	0	Clear	
Fort Griffin, Texas	28.79	731.3	30.17	766.3	18	— 7.8	68	Calm	0	0	.....	.....	0	.....	.....	0	0	Clear	
Fort Keogh, Montana	27.31	693.7	.....	.....	28	— 2.2	78	N	15	6.7	.....	.....	10s	.....	Calm	0.04	1.0	Cloudy	
Fort Macon, North Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Missoula, Montana	26.74	679.2	.....	.....	22	— 5.6	86	Calm	0	0	.....	.....	10n	.....	Calm	0.41	10.4	Heavy snow	
Fort McKavett, Texas	27.75	704.8	29.81	757.2	20	— 6.7	70	SW	7	3.1	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Fort Shaw, Montana	26.33	668.3	.....	.....	27	— 2.8	100	W	4	1.8	.....	.....	10n	.....	Calm	0.12	3.0	Light snow	
Fort Sill, Indian Territory	28.78	731.0	29.98	761.5	14	—10.0	82	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Stevenson, Dakota	27.71	703.8	.....	.....	11	—11.7	60	W	4	1.8	.....	.....	10ks	.....	W	0	0	Cloudy	
Fort Verde, Arizona	.....	.....	.....	.....	27	— 2.8	76	NW	.....	.....	1	5cs	0	W	.....	0	0	Fair	
Fredericksburg, Texas	28.37	720.6	30.06	763.5	21	— 6.1	71	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Galveston, Texas	30.23	767.8	30.27	768.8	32	0.0	79	NW	4	1.8	.....	Haze	0	Calm	.....	0	0	Clear	
Grand Haven, Michigan	29.44	747.8	30.14	765.5	16	— 8.9	66	SE	6	2.7	.....	10k	0	S	.....	0.19	4.8	Cloudy	
Hatteras, North Carolina	30.27	768.8	30.29	769.4	32	0.0	79	N	24	10.7	.....	.....	10s	.....	Calm	0.04	1.0	Cloudy	
Helena, Montana	25.69	652.5	.....	.....	26	— 3.3	100	SW	1	0.4	.....	.....	10n	.....	Calm	0.06	1.5	Heavy snow	
Henrietta, Texas	29.10	739.1	30.12	765.0	18	— 7.8	68	S	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Indianapolis, Indiana	29.37	746.0	30.25	768.3	4	—15.6	74	SE	5	2.2	.....	0	Sm'e	.....	Calm	0	0	Clear	
Indianola, Texas	30.29	769.4	30.32	770.1	22	— 5.6	72	NW	6	2.7	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Jacksboro, Texas	28.94	735.1	30.18	766.6	20	— 6.7	85	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Jacksonville, Florida	30.09	764.3	30.14	765.5	39	3.9	91	NW	8	3.6	.....	.....	10n	.....	Calm	0.09	2.3	Light rain	
Keokuk, Iowa	29.39	746.5	30.10	764.5	16	— 8.9	66	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Key West, Florida	30.02	762.5	30.05	763.3	72	22.2	90	S	11	4.9	.....	5k	0	SW	.....	0.01	0.3	Fair	
Kittyhawk, North Carolina	30.31	769.9	30.34	770.6	29	— 1.7	78	NE	28	12.5	.....	5k	0	W	.....	0	0	Fair	
Knoxville, Tennessee	29.24	742.7	30.36	771.1	12	—11.1	80	NE	7	3.1	.....	5cs	0	SW	.....	0	0	Fair	
La Crosse, Wisconsin	29.24	742.7	30.08	764.0	— 6	—21.1	61	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
La Mesilla, New Mexico	26.07	662.2	30.22	767.6	14	—10.0	82	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Laredo, Texas	29.81	757.2	30.18	766.6	23	— 5.0	86	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Leavenworth, Kansas	29.14	740.1	30.05	763.3	16	— 8.9	66	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Lewiston, Idaho	29.42	747.3	30.10	764.5	33	0.6	79	SW	1	0.4	.....	.....	10s	.....	Calm	0.80	20.3	Cloudy	
Little Rock, Arkansas	29.92	760.0	30.27	768.8	23	— 5.0	73	S	1	0.4	.....	2ck	5ks	W	W	0	0	Fair	
Los Angeles, California	29.70	754.4	30.05	763.3	45	7.2	76	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Louisville, Kentucky	29.69	754.1	30.31	769.9	8	—13.3	55	SE	3	1.3	.....	0	Sm'e	.....	Calm	0	0	Clear	
Lynchburg, Virginia	29.64	752.8	30.42	772.7	2	—16.7	72	E	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Madison, Wisconsin	29.01	736.8	30.11	764.8	— 1	—18.3	68	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Marquette, Michigan	29.26	743.2	30.03	762.7	11	—11.7	60	SW	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Mason, Texas	28.48	723.4	30.41	772.4	20	— 6.7	85	W	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Memphis, Tennessee	29.92	760.0	30.29	769.4	22	— 5.6	72	SE	2	0.9	.....	0	5s	.....	Calm	0	0	Fair	
Milwaukee, Wisconsin	29.33	745.0	30.13	765.3	5	—15.0	75	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.16	766.1	30.24	768.1	28	— 2.2	100	N	11	4.9		0	10n		Calm	0.12	3.0	Heavy sleet.	
Montgomery, Alabama	29.98	761.5	30.23	767.8	27	— 2.8	88	N	6	2.7			10s		Calm	0	0	Cloudy	
Morgantown, W. Virginia	29.33	745.0	30.46	773.7	0	—17.8	70	Calm	0	0			Haze			0	0	Clear	
Moorhead, Minnesota	28.79	731.3	29.83	757.7	0	—17.8	70	S	8	3.6		0	0			0	0	Clear	
Mt. Washington, N. H.	23.34	592.8	29.70	754.4	—17	—27.2	68	NW	46	20.6		0	2s		NW	0	0	Clear	
Nashville, Tennessee	29.75	755.6	30.34	770.6	16	— 8.9	83	W	1	0.4		5cs	Sm'e	Calm	W	0	0	Fair	
New Haven, Connecticut	30.25	768.3	30.38	771.6	— 3	—19.4	66	W	4	1.8		0	0			0	0	Clear	
New London, Connecticut	30.29	769.4	30.35	770.9	2	—16.7	72	NW	5	2.2		0	0			0	0	Clear	
New Orleans, Louisiana	30.17	766.3	30.23	767.8	34	1.1	70	N	7	3.1		5c	0	SW		0.01	0.3	Fair	
Newport, Rhode Island	30.26	768.6	30.31	769.9	8	—13.3	78	W	18	8.0		0	0			0	0	Clear	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.31	769.9	30.34	770.6	11	—11.7	60	NW	18	8.0		0	Haze		Calm	0.09	2.3	Clear	
New York, New York	30.21	767.3	30.41	772.4	5	—15.0	75	W	2	0.9		0	Fog		Calm	0	0	Clear	
Norfolk, Virginia	30.31	769.9	30.37	771.4	22	— 5.6	72	N	4	1.8			10s;sm		N;Calm	0	0	Cloudy	
North Platte, Nebraska	26.79	685.5	30.50	774.7	14	—10.0	82	NW	3	1.3			10s		Calm	0	0	Cloudy	
Olympia, Washington T'y	30.27	768.8	30.31	769.9	41	5.0	96	SE	1	0.4		0	5s		Calm	0.40	10.4	Fair	
Omaha, Nebraska	28.74	730.0	29.93	760.2	8	—13.3	78	S	6	2.7		0	0			0	0	Clear	
Oswego, New York	29.93	760.2	30.28	769.1	9	—12.8	68	SW	10	4.5		Haze	2s		W	0	0	Fair	
Pensacola, Florida	30.21	767.3	30.24	768.1	31	— 0.6	89	NW	8	3.6			10n		Calm	0.02	0.5	Light sleet	
Philadelphia, Pa	30.38	771.6	30.43	772.9	10	—12.2	79	Calm	0	0			Fog		Calm	0	0	Dense fog	
Phœnix, Arizona	28.90	734.0	30.82	782.8	30	— 1.1	57	E	1	0.4		2c	0	E		0	0	Fair	
Pike's Peak, Colorado	17.38	441.4	29.59	751.6	1	—17.2	71	NW	24	10.7		0	0			0.14	3.6	Clear	
Pilot Point, Texas																			
Pioche, Nevada	23.97	608.8	29.74	755.4	31	— 0.6	69	N	7	3.1		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.50	749.3	30.40	772.1	7	—13.9	77	SW	5	2.2		0	0			Inap.	Inap.	Clear	
Port Huron, Michigan	29.48	748.8	30.22	767.6	7	—13.9	77	S	16	7.2			10s		Calm	0	0	Cloudy	
Portland, Maine	30.14	765.5	30.20	767.1	4	—15.6	48	W	9	4.0		0	2s		Calm	0	0	Clear	
Portland, Oregon	30.30	769.6	30.38	771.6	37	2.8	100	Calm	0	0			Fog		Calm	0.01	0.3	Dense fog	
Portsmouth, N. Carolina					30.0	— 1.1	78	NE	25	11.7			10n		NE	0.01	0.3	Sleeting	
Prescott, Arizona	24.69	627.1	30.05	763.3	26	— 3.3	75	SW	1	0.4		0	0			0	0	Clear	
Punta Rassa, Florida	29.98	761.5	30.00	762.0	57	13.9	94	NE	9	4.0		8cs	1ks	S	S	1.59	39.9	Cloudy	
Red Bluff, California	29.90	759.4	30.26	768.6	44.0	6.7	92	N	5	2.2		0	0			0	0	Clear	
Rio Grande City, Texas	30.08	764.0	30.33	770.4	20	— 6.7	85	Calm	0	0		0	0			0.04	1.0	Clear	
Rochester, New York	29.62	752.3	30.31	769.9	1	—17.2	71	SW	3	1.3		0	2s		Calm	0	0	Clear	
Roseburg, Oregon	29.83	757.7	30.42	772.7	44	6.7	96	Calm	0	0		0	5s		Calm	0	0	Fair	
Sacramento, California	30.13	765.3	30.21	767.3	48	8.9	93	N	10	4.5			10s		Calm	0	0	Cloudy	
St. Louis, Missouri	29.60	751.8	30.23	767.8	13	—10.6	81	S	13	5.8		0	0			0	0	Clear	
St. Paul, Minnesota	29.02	737.1	29.95	760.7	— 6	—21.1	81	E	7	3.1		0	0			0	0	Clear	
Salt Lake City, Utah	25.59	650.0	29.92	760.0	34	1.1	70	NW	12	5.4			10n		Calm	0.06	1.5	Light snow	
San Antonio, Texas	29.53	750.0	30.30	769.6	21	— 6.1	71	Calm	0	0		0	0			0	0	Clear	
San Diego, California	29.99	761.7	30.05	763.5	47	8.3	70	NE	7	3.1		0	0			0	0	Clear	
Sandusky, Ohio	29.56	750.8	30.31	769.9	6	—14.4	76	S	14	6.3			10s		Calm	0	0	Cloudy	
Sandy Hook, New Jersey	30.36	771.1	30.40	772.1	10	—12.2	58	SW	10	4.5		0	0			0	0	Clear	
San Francisco, California	30.16	766.1	30.22	767.6	52	—11.1	89	N	6	2.7			10s		Calm	0	0	Cloudy	
Santa Fé, New Mexico	23.03	585.0	29.57	751.1	18	— 7.8	51	N	6	2.7		0	0			0	0	Clear	
Savannah, Georgia	30.12	765.0	30.22	767.6	33	0.7	95	N	8	3.6			10n		Calm	0.23	5.8	Light rain	
Shreveport, Louisiana	30.01	762.2	30.28	769.1	28	— 2.2	77	Calm	0	0			10s		Calm	0	0	Cloudy	
Silver City, New Mexico	24.13	612.9	30.56	776.2	25	— 3.9	62	NW	2	0.9		0	0			0	0	Clear	
Smithville, North Carolina	30.25	768.3	30.29	769.4	28	— 2.2	100	N	6	2.7			10n		Calm	0.22	5.6	Sleeting	
Socorro, New Mexico	25.41	645.4	29.47	748.5	4	—15.6	48	NE	2	0.9		0	0			0	0	Clear	
Springfield, Illinois	29.43	747.5	30.17	766.3	11	—11.7	70	S	7	3.1		0	0			0	0	Clear	
Springfield, Massachusetts	30.22	767.6	30.36	771.1	— 9	—22.8	54	Calm	0	0		0	0			0	0	Clear	
Stockton, Texas	26.88	682.7	29.88	758.9	25	— 3.9	75	SW	8	3.6		0	1s		Calm	0	0	Fair	
St. Vincent, Minnesota	28.82	732.0	29.68	753.9	0	—17.8	100	S	10	4.5		0	0			0	0	Clear	
Thatcher's Island, Mass	30.23	767.8	30.29	769.4	5	—15.0	50	W	14	6.3		5k	0	W		0	0	Fair	
Toledo, Ohio	29.51	749.5	30.26	768.6	7	—13.9	78	SE	7	3.1		0	0			0	0	Clear	
Tucson, Arizona	27.53	699.2	30.08	764.0	29	— 1.7	67	Calm	0	0		0	0			0	0	Clear	
Umatilla, Oregon	29.95	760.7	30.49	774.4	21	— 6.1	93	SE	10	4.5		0	5s		SE	0.03	0.8	Fair	
Uvalde, Texas	29.27	743.4	30.19	766.8	17	— 8.3	67	Calm	0	0		0	0			0	0	Clear	
Vicksburg, Mississippi	30.02	762.5	30.30	769.6	30	— 1.1	68	SE	2	0.9			10s		Calm	9	0	Cloudy	
Visalia, California	29.80	756.9	30.18	766.6	50	10.0	93	NW	6	2.7			Fog		Calm	0	0	Dense fog	
Washington, D. C	30.31	769.9	30.44	773.2	—10	—23.3	54	N	3	1.3		0	Fog		Calm	0	0	Clear	
Wickenburg, Arizona					30	— 1.1	68	NW			1	2c	5s	Calm	Calm	0	0	Cloudy	
Wilmington, N. Carolina	30.25	768.3	30.31	769.9	31	— 0.6	79	NE	7	3.1			10s		Calm	0.09	2.3	Cloudy	
Winnemucca, Nevada	25.76	654.3	30.12	765.0	34	1.1	70	SW	4	1.8		Haze	2ks		SW	0	0	Fair	
Wood's Holl, Mass	30.24	768.1	30.28	769.1	11	—11.7	80	NW	24	10.7		0	2s		NW	0	0	Fair	
Yankton, Dakota	28.46	722.9	29.87	758.7	3	—16.1	73	Calm	0	0		0	0			0	0	Clear	
Yuma, Arizona	29.88	758.9	30.03	762.7	46	7.8	40	NE	1	0.4		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.00	558.8			50.5	10.3	76	Calm	0	0		0	2s			0	0	Fair	Thomas Herran.
Havana, Cuba, W. I.	30.01	762.2	30.06	763.5	70	21.1	90	Calm	0	0		4c;cs	0	Calm		0.02	0.5	Fair	Charles Hasselbrink.
Jakobshavn, Greenland	28.81	731.8	28.87	733.3	16.9	— 8.4		S		6			10			0	0		
Kingston, Jamaica, W. I.	30.06	763.5	30.07	763.8	72.4	22.4	83	Calm	0	0		5cs	5s	E	E	0.02	0.05		James Gall.
Navassa, W. I.	30.00	762.0	30.08	764.0	75.5	24.7	73	NE	11	4.9		5k	5s	E	NE	0.04	1.0	Fair	F. M. Everett.
Paramaribo, D. Guiana, S. A.	30.02	762.5	30.02	762.5	79	26.1	87	E			2	5k	5s	E		0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.93	760.7	80	26.7	85	Calm			0		10ks;s		N	0	0	Cloudy	Francesco J. Cisneros.
Riyas, Nicaragua					73.4	23		NE			2	0	7ks		NE	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.08	764.0	30.11	764.8	74	23.3	81	Calm	0	0		4c	0			0	0		Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	28.58	726.0	28.64	727.4	— 1.3	—18.5		SE			6		4			0	0		
York Factory, B. A.	29.91	759.7	29.96	761.0	—26.0	—32.2		W	5	2.2		0	1s		W	0	0	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and Kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandre																			Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Eliott
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda																			Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J.Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.92	760.0	79	26.1	70	NW			2		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon,																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Callao Bay, Peru	29.98	761.5	67	19.4	89	SSE			2		3							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P.Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 26° 10′, E. 119° 55′	30.40	772.1	46.4	8.0	80	NE			5		10							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 22° 16′, E. 37° 29′	30.04	763.0	73	22.8	85	NW			1		2	NW			2	NW		D. clouds	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 38° 42′, W. 9° 06′	30.44	773.2	52	11.1	76	E			3		0							Blue sky	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda, W. I.			63	17.2	72	NW			1		5							D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Seraphis, N. 47° 40,′ W. 8° 40′	30.53	775.4	52	11.1	93	WNW			4–5		10					3	WNW	Overcast	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark																			Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	29.95	760.8	76.1	24.5	87	ENE			2		4			0	0	2	SE	D. clouds	S. C. da Silva Costa, Comd't.
Sado, Mossamedes, Benguela	29.92	759.9	73.4	23.0	73	NW			1		1		NW	0	0	1		Blue sky	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla.	30.41	772.4	38	3.3	90	N	5	2.2		10		N		0	0			Cloudy	
N. Yard, Portsmouth, N. H.	30.09	764.3				NW	14	6.3		0				0	0			Clear	
Adams, Callao Peru	30.07	763.8	68	20.0	90	Calm			0		5		SW			Long	W	Fair	
Alaska, N. Yard, Mare I'd, Cal*	30.17	766.3	51	10.6	93	Calm			0		10			0	0			Misty	
Alert, Hong-Kong, China	30.14	765.5	58	14.4	70	Calm			0		2		Calm	0	0	Smooth		Fair	
Alliance, N. 28° 00′, W. 91° 00′	30.18	766.6	54	12.2	87	NNE			2–3		10		NNE	Li	ght	Smooth	NNE	Cloudy	
Ashuelot, Tientsin, China	30.55	776.0	21	— 6.1	100	WNW			1		0							Clear	
Colorado, New York, N. Y.	30.38	771.6	6	—14.4	100	W	0	0			0			0	0			Clear	
Constitution, N. Yard, League I'd., Pa			— 3	—19.4		Calm	0	0			0							Dense fog	
Franklin, Off N. Yard, Norfolk, Va	30.32	770.1	25	— 3.9		NNW	8.4	3.8			8		NW	0	0			Cloudy	
Galena, N. 36° 46′, W. 41° 20′	30.09	764.3	63	17.2	89	SW			5		10					Mod'ate	W	Cloudy	
Independence, N. Yard, Mare I'd, Cal.	30.23	767.8	52	11.1	86	Calm	0	0			2		WSW	0	0			Clear	
Jamestown, Sitka, Alaska*	29.98	761.5	37	2.8	90	E			1		8			0	0	Smooth		Cloudy	
Kearsarge, Curacoa, W. I.	30.01	762.2	78	25.6	82	E			2		2		E			Long		Fair	
Lackawanna, Ancon, Peru†	30.16	766.1	71	21.7	80	S			1		10		S	0	0			Cloudy	
Marion, S. 50° 28′, W. 64° 25′	29.61	752.1	49	9.4	78	WSW			5							Mod'ate		Clear	
Michigan, Erie, Pennsylvania	30.33	770.4	5	—15.0		SW			4		0							Clear	
Minnesota, New York, N. Y.	30.41	772.4	5	—15.0		W			1		0							Hazy	
Monocacy, Shanghai, China	30.56	776.2	33	0.6	90	NNW			1		0							Clear	
New Hampshire, Port Royal, S. C.	30.17	766.3	35	1.7	100	NNE	18	8.0			10		NNE	0.30	7.6			Drizzling	
Nepsic, Villafranca, France	30.04	763.0	56	13.3	24	N			3		5					Smooth		D. clouds	
Onward, Chimbote Bay, Peru...†	29.95	760.7	70	21.1	75	S			4		2		N			Long	N;W	Fair	
Palos, Shanghai, China	30.59	777.0	30	— 1.1	100	NNW			1		2							Fair	
Passaic, Washington, D. C.	30.45	773.4	—14	—25.6	50	NW			1		0							Clear	
Pensacola, San Francisco, Cal.	30.22	767.6	52	11.1	93	N			1		10							Hazy	
Portsmouth, Washington, D. C.	30.23	767.8	—11	—23.9	100	Calm			0		0							Hazy	
Powhatan, New York, N. Y.	30.37	771.4	8	—13.3		N			2		0							Hazy	
Quinnebaug, Alexandria, Egypt	30.26	768.6	64	17.8	68	NNE			3		5		NNW			Smooth		Fair	
Richmond, Shanghai, China	30.54	775.7	37	2.8	70	NNE			2		2			0	0			Clear	
Saratoga, Baltimore, Md.	30.41	772.4	— 2	—18.9	100	NW			2					0	0			Foggy	
Shenandoah, Montevideo, Uruguay*	29.80	756.9	72	22.2	85	NNE			4		10		W			Smooth		Cloudy	
St. Louis, League Island, Pa.	30.35	770.9	— 5	—20.6	100	NW	2	0.9			0			0	0			Foggy	
Swatara, Yokohama, Japan†	29.88	758.9	42	5.6	58	NE			2		0					Smooth		Blue sky	
Tennessee, Barbadoes, W. I.	30.07	763.8	83	28.3	70	ENE	18	8.0			8		ENE	0.005	0.13	Smooth		Cloudy	
Trenton, Villafranca, France*	30.02	762.5	64	17.8	25	N			3		5			0	0			Fair	
Vandalia, N. Yard, New York	30.41	772.4	10	—12.2	79	W			1		0							Clear	
Wabash, Boston, Massachusetts	30.28	769.1	1	—17.2	100	W	10	4.5			0			0	0			Clear	
Wachusetts, Panama, Panama	29.37	751.1	76	24.4	91	NW			2		5		N	0	0			Fair	
Wyoming, Naples, Italy	29.99	761.7	55	12.8	74	NE			1		10		NNE			Smooth		Showery	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡ S. 24° 26′, E. 60° 15′	30.09	764.3	79.8	26.6	67	NW			1		2							Blue sky	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡ N. 41° 03, W. 14° 19′	30.52	775.2	54.4	12.4	65	NE			5		9							Overcast	Capt. N. Youlden.
City of Agra, ‡ S. 53° 58′, W. 155° 30′	30.18	766.6	45.5	7.5	88	NNE			3		10							Overcast	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Coppename, N. 45° 53′, W. 12° 36′	30.65	778.5	51.3	10.7	63	NW			1		9							Overcast	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra, ‡ S. 22° 00′, E. 80° 20′	30.06	763.5	76	24.4	73	ESE			5		5							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams
Ship Iron Cross, N. 48° 18′, W. 23° 20′	30.33	770.4	55.8	13.2	96	SSW			6		7					6	S	Drizzling	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ S. 8° 50′, E. 86° 42′	29.84	757.9	79.5	26.4	84	WSW			4		6							Showery	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland ‡																			Capt. H. W. Dyke.
Barque Mertola																			Capt E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 14° 30′, E. 52° 50′	29.94	760.5	76.5	24.7	82	ENE			3		7							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
Moravian																			
S. S. Peruvian																			Capt. W. H. Smith, R.N.R.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia, N. 43° 39′, W. 48° 38′	30.02	762.5	40	4.4	91	W			5		10			Hea	vy	Mod'ate	WNW	Dull	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Britanic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Glendell.
S. S. Germanic, N. 51° 42′, W. 15° 22′ †	30.49	744.4	53	11.7		WSW			4		8		WSW	0	0	Mod'ate	WSW	Misty	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Undütsch.
S. S. Hermann, N. 48° 57′, W. 25° 35′	30.17	766.3	55.4	13.0		SW			6		8		SW	0	0	Rough		Fair	Capt. H. Maur.
S. S. Köln, N. 38° 32′, W. 71° 35′	30.31	769.9	36.5	2.5		WNW			4-5		8		WNW	Hail;	rain	Mod'ate	WNW	Cloudy	
S. S. Leipzig ‡																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolph Fredholm, ‡ S. 24° 13′, W. 42° 26′ *†	30.04	763.0	77	25	88	NE			8		5							D. clouds	Capt. Albert Fredholm.
Ship Peru, ‡ N. 15° 09′, W. 64° 01′	30.04	763.0	78.6	25.9	88	NE			5		4k							Squally	Capt. O. F. Sköterbrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. Liverpool, England	30.16	766.1	46	7.8	92	WSW			4		10		SW					Cloudy	Capt. J. W. Shackford.
S. S. Indiana, N. 42° 14′, W. 63° 50′ †‡	30.01	762.2	31	— 0.6	69	W			4		2		W	0	0	Mod.	W	Fine	Capt. R. W. Sargent.
S. S. Ohio, N. 41° 11′, W. 65° 13′ *†‡	30.13	765.3	41	5.0	91	NW			3		10		NW	Sn	ow	Small	W	Cloudy	Capt. Henry Morrison.
S. S. Pennsylvania, Philadelphia, Pa †‡	30.28	769.1	2	—16.7		W			2		2		SW	0	0			Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 37° 10′, W. 163° 47′ †‡	29.41	747.0	58	14.4	76	SSW			6		2		SW	0	0	High	SW	Clear	Capt. L. Meyer.
S. S. Gaelic, N. 44° 57′, W. 173° 03′ *†‡	29.19	741.4	51	10.6	79	SW			4		5?		SW			Mod.	SW	Clear?	Capt. W. H. Kidley.
S. S. Oceanic, N. 25° 50′, E. 121° 47′	30.38	771.6	55	12.8	93	N			6		10		NE	0	0	High	NE	Overcast	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia																			Capt. E. Polemann.
S. S. Oregon, Mouth of Willamette river, Or.†	30.34	770.6	37.5	3.1	95	Calm			0		10							Foggy	Capt. Fred. Bolles.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon N. 32° 41′, W. 117° 16′ †‡	30.02	762.5	56	13.3	81	SE			3		2		E			Mod.	W	Fair	Capt. E. Alexander.
S. S. Idaho																			C. E. Lyons, 1st Officer.
S. S. Orizaba																			Capt. Chas. B. Johnson.
S. S. State of California, N. 38° 37′, W. 123° 50′ †‡	30.23	767.8	54	12.2	93	NW			4		2		NW			Light	WSW	Clear	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal †‡	30.22	767.6	51	10.6	93	W			1		0							Clear	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Alaska																			Capt. D. S. Austin.
S. S. Australia																			A. Bannerman.
S. S. City of New York																			Capt. W. B. Seabury.
S. S. City of Panama																			Capt. M. Connolly.
S. S. City of Peking																			Capt. G. G. Berry.
S. S. City of Sidney, S. 34° 03′, E. 163° 49′ *†‡	29.58	751.3	65	18.3	84	WSW			6		9		WSW	0.125	3.18	Rough	NW	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio																			Capt. J. Maury.
S. S. Colima, Panama, Panama †	29.96	761.0	76	24.4	86	NW			2		2		NW	0	0			Fair	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada																			Capt. J. M. Cavarly.
S. S. Zealandia																			Capt. R. C. Ghest.
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland ‡																			
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland ‡																			
S. S. Vaderland, N. 45° 10′, W. 45° 07′ ‡	30.22	767.6				WSW			5		10		W	0	0	Long	WSW	Cloudy	Capt. J. C. Jannson.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Brunswick, Ga	30.10	764.5	37	2.8	100	NNE	3	1.3			10n		NE	0.73	18.5			Rainy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, Arrogo, P. R ‡†	30.32	770.1	80	26.7		ENE			5		2		E	Show	ers	Smooth		Squally	Capt. W H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va†	30.44	773.2	26	— 3.3	63	N	1	0.4			8n			0	0			Cloudy	
Sch'r Hattie V. Kelsey																			Capt. J. L. Randall.
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, Lisbon, Spain ‡†	30.42	772.7	48	8.9	100	NE			4		0			0	0			Clear	Capt. Jos. Hand.

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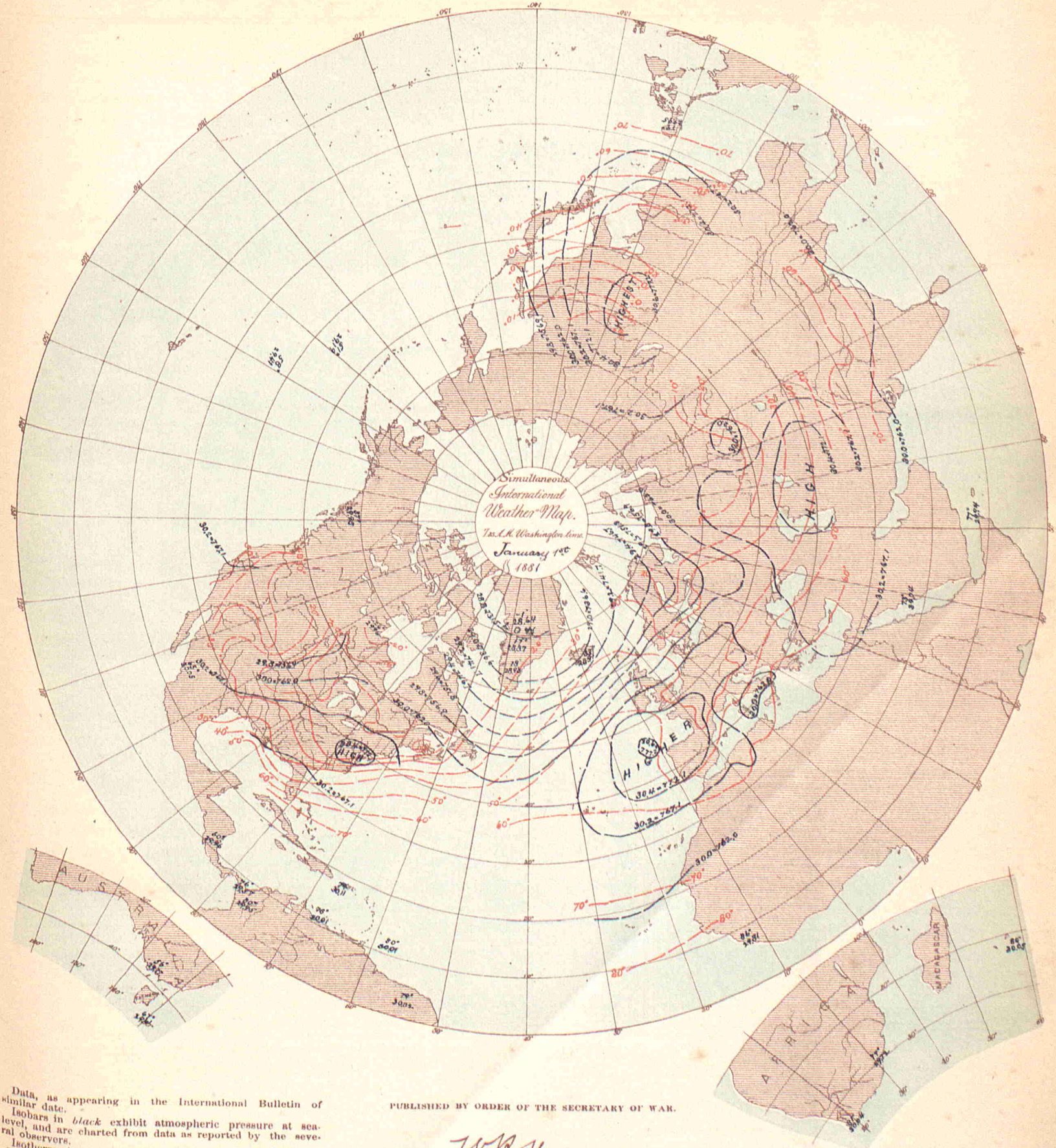
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 2, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer, Corrected for instrum'tal error and temperature		Barometer, Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower	Rain-fall or melted snow in the past 24 hours.		Weather	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.02	762.5	59.2	15.1	85	NE			2		4			0	0	Fair	Dr. Ollive.
Nemours			30.17	766.2	47.7	8.7	86	E			1		2			0.146	3.7	Fair	Raynard.
Algiers			30.17	766.2	47.5	8.6	76	WSW			3		3			1.736	44.1	Pretty fair	Nicolas.
La Calle			30.14	765.5	54.5	12.5	77	S			4		8			0	0	Very cloudy	Ponfrède.
Tunis			30.09	764.3															Jacques.
Sfax			30.14	765.5															Gau.
Saida			30.17	766.2	39.9	4.4	65	NE			3		4			0	0	Cloudy	Dumas.
Tebessa			30.11	764.8	50.4	10.2	46	SSW			2		8			0	0	Very cloudy	Watrin.
Gerville																			Lonchamp.
Laghouat			30.20	767.0	45.3	7.4	57	SSW			1		2			0	0	Fair	Herbin.
Biskra			30.12	765.1	54.3	12.4	82	NW			2		8			0	0	Very cloudy	Baudasse.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.82	757.4	29.91	759.7	56.6	13.7	89	SE	12	5.4			10			0.09	2.3	Showery	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.90	759.4	68	20.0		SW			3		5k			0.01	0.3	Cloudy	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.89	759.2	30.47	773.8	40.1	4.5	68	NE			2		10			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.79	756.7	30.61	777.6	27.5	— 2.5	94	NW	1.8	0.8			10			0	0		Dr. Wiersbicki.
Eperies	29.55	750.6	30.48	774.3	33.1	0.6	65	N			2		1cs		S	0	0		Julius Mikolik.
Gratz‡	29.20	741.7	30.51	775.0	37.0	2.8	76	S			2		0			0	0		Andreas Rospini.
Hermannstadt	28.89	733.8	30.38	771.7	39.6	4.2	93	SE			2		10			0.067	1.70	Raining	Prof. A. Gottschling.
Kremsmunster, Obs'y	29.07	738.4	30.49	774.5	33.1	0.6	82	ESE			3		0			0	0		The Staff.
Lemberg	29.48	748.7	30.53	775.5	30.9	— 0.6	81	NW			1		6			0	0		Dr. T. Stanecki.
Pola	30.18	766.5	30.29	769.4	46.8	8.2	57	ENE			4		6			0	0		I. R. Hydrographic Office
Szathmar	29.96	761.0	30.42	772.6	40.8	4.9	87	N			1		2			0	0		Beicht Peter, S. J.
Szegedin	30.11?	764.8?	30.01?	762.3?	37.0	2.8	86	Calm			0		10			0	0		Karl Stancel.
Trieste	30.26	768 6	30.36	771.2	42.4	5.8	55	ENE			5		5			0	0	Half clear	P. Busin.
Vienna	29.80	756.8	30.58	776.8	34.9	1.6	69	N			2		0			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 10, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.06	763.5	30.16	766.1	43.5	6.4	79	NNE	5	2.2			2			0	0	Blue sky	W. Boswell.
Armagh, Observatory	30.12	765.0	30.36	771.1	45.9	7.7	84	SW	10	4.5									S. Call.
Bidston, Liverpool Obs'y			30.40	772.1	45.8	7.7	92	W	12	5.4			10					Overcast	John Hartnup.
Bolton, Sharples	29.83	757.7	30.38	771.6	44.9	7.2	98	NW	3	1.3			10					Gloomy	Thomas Mackereth.
Bradford, Yorkshire																0	0		J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	83.0	28.3	65	NE			2		4					Cloudy	Pvt. J. Surgener, A. H. C.
Cardington			30.40	772.1	41.0	5.0	91	W			0.2		10					Foggy	John McLaren.
Chatham, School M. E.	30.30	769.6	30.44	773.2	43.1	6.2	92	Calm			0		0					Foggy	Cpl. Gwinn, R. E.
Falmouth, Observatory	30.20	767.1	30.43	772.9	48.0	8.9	74	NE			2		10					Overcast	The Staff.
Fort Napier, Natal	27.66	702.6	29.88	758.9	74.2	23.4	77	NW			1		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.68	753.9	29.81	757.2	86	30.0	88	NW			0		4					D. clouds	C. E. Keane.
Galway, Queen's College			30.27	768.8	47	8.3	92	W			2		8					Showery	J. O'Donaghadue.
Gibraltar, Mediterranean	29.95	760.7	30.00	762.0	55.4	13.0	97	E			3		3					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.07	763.8	30.27	768.8	46.2	7.9	89	SW			4		10					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	30.24	768.1	30.42	772.7	42.9	6.1	93	S			1		10					Foggy	The Staff, for G. B.Airy.
Guernsey	30.15	765.8	30.37	771.4	48.5	9.2	82	NE			2		8					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.40	772.1	30.43	772.9	42.2	5.7	96	WSW	1	0.4			10					Foggy	The Met'g'l Office.
Leicester, Museum	30.14	765.5	30.41	772.4	39.5	4.2	84	SW			1		8					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.91	759.7	29.99	761.7	66.0	18.9	81	NE			2		6					D. clouds	A. King.
Nassau, Bahamas			30.16	766.1	72.2	22.3	100	SW			0		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.88	758.9	30.42	772 7	44.5	6.9	92	W			0-1		10					Overcast	Rev. Stephen J. Whitty.
Oxford, Radcliffe Obs'y	30.18	766.6	30.44	773.2	40	4.4	100	Calm			0		10					Foggy	The Staff for E. J. Stone, Esq.
Plymouth	30.34	770.6	30.42	772.7	45.9	7.7	84	NNE			1		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.97	761.2	47.5	8.6	85	WSW	30	13.4			5					D. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.23	767.8	30.30	769.6	59.6	15.3	63	SSE			1		9			Blank	Blank	D. clouds	Serg't W. H. Lyne.
Sheffield	30.12	765.0	30.40	772.1	47.5	8.6	82	W			1		6			0	0	Misty	W. F. Cooper.
Silloth Rectory	30.54	775.7	30.57	776.5	44.3	6.8	76	W			3		10			0.020	0.5	Overcast	Rev. F. Redford, A. M.
Stonyhurst, Observatory			30.38	771.6	45.6	7.6	93	W	10	4.5			10					Overcast	Rev. S. J. Perry.
Strathfield Turgiss	30.20	767.1	30.43	772.9	44.4	6.9	92	SW			0-1		10					Rain & fog	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	30.36	771.1	30.43	772.9	48	8.9	78	SE			4		10					Gloomy	W. Newcombe.
Valencia, Observatory	30.36	771.1	30.39	771.9	48.6	9.2	85	S	24	10.7			7					Misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Chatham, N. B.*	30.15	765.8	30.22	767.6	—21	—29.4	92	Calm	0	0		0	0			0	0	Clear	G. A. Blair.
Charlottetown, P. E. Island	30.16	766.1	30.20	767.1	1	—17.2	100	W	1	0.4		0	0			0	0	Clear	H. J. Cundall, C. E.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario	29.97	761.2	30.18	766.6	4.0	—15.6	100	SW			1		10s			0	0	Cloudy	James Smith, M. A.
Dalhousie, N. B	30.10	764.5	30.13	765.3	4.0	—15.6		W			1	0	5s			0	0	Fair	H. A. Johnson.
Father Point, Quebec*	30.06	763.5	30.09	764.3	17	— 8.3	83	SW	5	2.2			10n		Calm	0	0	Cloudy	J. McWilliams.
Fredericton, N. B	30.22	767.6	30.29	769.4	—22.9	—30.5	100	Calm	0	0		0	0			0	0	Clear	Prof. Harrison.
Fort Garry, Manitoba*	29.50	749.3	30.47	773.9	—16	—26.7	100	N	5	2.2		0	0			0	0	Clear	James Stewart.
Granton, Ontario	28.98	736.1	30.20	767.1	4.0	—15.6	100	Calm			0	0	1s			0	0	Clear	James Grant.
Halifax, N. S.*	30.11	764.8	30.25	768.3	5	—15.0	93	NW	1	0.4		0	2ks		NW	0	0	Fair	A. Allison.
Hamilton, Ontario	29.75	755.6	30.18	766.6	14.3	— 9.8	77	SW			2	10cs	0	W		0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.79	756.7	30.16	766.1	11	—11.7	84	SE	4	1.8			10ks		Calm	0.02	0.05	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S								NE	3	1.3			10n			Inap.	Inap.	Cloudy	C. H Rigby.
Montreal, Quebec*	29.96	761.0	30.18	766.6	8	—13.3	91	SW	8	3.6			10s			0	0	Cloudy	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A.
Parry Sound, Ontario*	29.32	744.7	30.08	764.0	11	—11.7	90	SE	8	3.6			10n		SE	0.09	2.3	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.35	745.5	30.21	767.3	— 7.7	—22.1	80	Calm			0		10n			0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.44	747.8	30.19	766.8	15	— 9.4	84	SW	9	4.0		8k	0	SW		0	0	Cloudy	H. Morgan.
Port Stanley, Ontario	29.50	749.3	30.20	767.1	17	— 8.3	92	W	6	2.7			10n		W	Inap.	Inap.	Cloudy	M. Payne.
Quebec, Quebec*	29.83	757.7	30.18	766.6	4	—15.6	87	W			1		8n		W	0	0	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.59	751.6	30.09	764.3	10	—12.2	88	SE	3	1.3			10s		SE	Inap.	Inap.	Light snow	W. H. McIntyre.
St. Andrews	30.20	767.1	30.25	768.3	3	—16.1	92	Calm	0	0		0	0			0	0	Clear	
St. John's, N. B	30.05	763.3	30.24	768.1	— 1.0	—18.3	100	N	4	1.8		0	0			0	0	Clear	G. Murdock, C. E.
Saugeen, Ontario*	29.31	744.5	30.10	764.5	7	—13.9	93	S	13	5.8		0	0			0.02	0.5	Clear	K. Stewart.
Stratford, Ontario	28.80	731.5	30.24	768.1	0.3	—17.6	91	Calm	0	0		0	0			0	0	Clear	C. J. MacGregor, M. A.
Sydney, C. B*	30.12	765.0	30.17	766.3	19	— 7.2	81	W	6	2.7			10s			0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.76	755.9	30.19	766.8	6	—14.4	88	W	6	2.7		0	5ks		Calm	0	0	Cloudy	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario	29.02	737.1	30.19	766.8	8.9	—12.8	98	SE	7	3.1		5cs	0	SW		0	0	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*	30.15	765.8	30.22	767.6	15	— 9.4	67	Calm	0	0			10s		E	0.12	3.0	Cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. John's, Newfoundland	30.28	769.1	30.46	773.7	20	— 6.7	100	NW	1	0.4		5k	5s			0	0	Fair	John Delany.
St. Pierre, N. F			29.93	760.2	19.4	— 7.0		NW			2					0	0		The Commandant.
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.87	758.7	29.91	759.7	85.2	29.6	48	ESE	4.0	1.8		0	1			0	0	Vapory	The Staff, for D. Gill.
Cape St. Francis Lt. House	29.86	758.4			71.1	21.7	78	E	9.8	4.4			1k			0	0	Blue sky	John Duthie.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.45	773.5	30.48	774.2	31.1	—0.5	93	ENE	1.8	0.8			0			0	0	Clear	M. Marc Dechevrens, S.J.

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

STATIONS.	Barometer. Corrected for instru'tal error and temperature. Inch.	Barometer. Corrected for instru'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.24	666.5	29.96	761.0	64.0	17.8	90	NE			1	1c				0	0	Clear.	Frederico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.22	767.6	30.27	768.8	37.8	3.2	97	WSW	16	7		10						Foggy	
Fanöe	30.28	769.0	30.30	769.5	40.6	4.8	98	WSW			4	10							
Godthaab, Greenland	28.93	734.7	28.97	735.8	17.2	—8.2	76	Calm			0	10							
Stykkisholm, Iceland	29.08	738.6	29.12	739.7	29.5	—1.4	96	SW			6	10						Snowing	
Thorshavn	29.56	750.8	29.60	751.7	42.8	6.0	72	W	16	7		7							
Vestervig	30.13	765.3	30.22	767.7	40.1	4.5	100	SW			4	10						Foggy	
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.54	750.3	30.20	767.0	46.4	8	83	N			1	2c				0	0	Clear	M. Labroue Director.
Alençon	29.85	758.2	30.40	772.2	41.7	5.4	94	S			2		10n	SW	S	0	0	Covered	M. Nicot, Director.
Arras, Engineer School	30.17	766.2	30.44	773.1	38.1	3.4	93	SSW	3.6	1.6			n						M. Klein, Commandant.
Avignon, Normal School	30.21	767.2	30.28	769.2	39.6	4.2	49	N			4		0			0	0	Very clear	M. Giraud, Director.
Bar-sur-Seine	29.85	758.2	30.44	773.2	34.9	1.6	71	ESE			1	2c				0	0	Slightly cl'dy	C. Saillard, Director.
Beauvais, Normal School	30.20	767.0	30.48	774.1	41.9	5.5	81	SSE			1		10			0.04	1.	Covered	Frère Eugene Marie.
Besançon, Normal School	29.44	747.7	30.38	771.7	33.8	1	85	N			1		0			0	0	Clear	M. Gobin, Director.
Bordeaux, Observatory	30.07	763 8	30.34	770.7	41.9	5.5	73	SE			1		8		NNE	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.84	757.9	30.41	772.4	43.5	6.4	94	N			2		2k		NE	0	0	Slightly cov.	M. Postel, Director.
Brest, Naval Observatory	30.15	765.9	30.40	772.1	47.5	8.6	86	NNW			1		10		N	0.049	1.25		Ch. de Rermaree, Dir.
Caen, Normal School	30.24	768.1	30.36	771.2	46.8	8.2	97	S			1		8		S	0	0	Very cloudy	M. Bietrix, Director.
Châlons-sur-Marne, N.Sch'l	30.18	766.6	30.52	775.1	35.2	1.8	93	Calm			0		0			0	0	Clear	M. Jadot, Director.
Charleville, Normal School																			M. Baumler, Director.
Clermont-Ferrand Obs'y	28.95	735 2	30.36	771.2	32.9	0.5	84	N			1		5			0	0		M. Alluard, Director.
Cluny, Normal School	29.50	749 3	30.37	771.5	33.8	1	81	N			1		k		NE	0.008	0.2		Gouré de Villemontée, Dir.
Commercy, Normal School	29.56	750.8	30.48	774.1	32.0	0	85	S			1		kn			0	0		Dr. Coullet, Director.
Gap, Normal School	27.65	702.3	30.26	768.5	43.5	6.4	74	N			4		8		S	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.12	739.7	30.26	768.7	40.6	4.8	47	E			1		8		E	0	0		L. Kina, Director.
Grenoble, Normal School	29.55	750.6	30.36	771.1	36.3	2.4	60	ENE			1	2c				0	0	Slightly cl'dy	M. Ablard, Director.
Guéret, Normal School	28.75	730.3	30.43	772.8	34.7	1.5	70	E			1		1		N	c	0	Clear	M. Rivoir, Director.
Lamballe, Normal School	30.05	763.3	30.33	770.3	47.3	8.5	94	E			1		5		E	0.08	2.	Misty	M. Ollitrault, Director.
Lescar, Normal School	29.70	754.4	30.39	772.0	45.3	7.4	77	NW			1		1		N	0	0	Clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.31	769.9	30.41	772.5	48.6	9.2	97	NE			1		10		E	0	0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.28	743.7	30.36	771.1	32.0	0.0	57	NNW			1		k		NNW	0	0		Ch. André, Director.
Mans, Normal School	30.15	765.9	30.48	774.1	41.5	5.3	89	SE			1		8			0.20	5.	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.91	759.8	30.19	766.8	44.4	6.9	55	NW			1		9		SE	0.008	0.20		E. Stephan, Director.
Montlouis l'Instituteur	24.86	631.5	30.10	764.5	23.4	—4.8	55	N	20.6	9.2			9	E		1.024	26.0		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.12	765.0	30.24	768.0	44.2	6.8	38	N			4		0			0	0	Clear	M. F. Galzin, Director.
Nancy, Normal School	29.71	754.6	30.50	774.8	40.6	4.8	68	NW			2	10ck			NW	0	0	Covered	M. Hasse, Director.
Nantes, Observatory	30.30	769.6	30.46	773.7	46.8	8.2	94	WNW			1		8n		E	0.031	0.8		M. L. E. Larocque, Dir.
Nice	30.15	765.8	30.18	766.6	51.1	10.6	57	N			3		5	N	N	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	30.13	765.4	30.24	768.1	43.0	6.1	51	SW	15.0	6.7			5	NW		0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.41	569.2			15.1	—9.4							10		Calm	0.335	8.5	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.26	743.1	30.37	771.5	37.0	2.8	55	S			1	5c		N	S	0	0	Cloudy	M. Tallieu.
Puy de Dôme Observ'y, Summit	25.21	640.4			17.8	—7.9	97	ENE			3		0			0.362	9.2		M. Alluard, Director.
Rochefort, Naval Obs'y	30.35	770.9	30.38	771.7	44.2	6.8	88	ESE			1		10		E	0	0	Covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.12	765.0	30.34	770.6	44.2	6.8	85	NNE			1		10			0.08	2.	Covered	M. Mouillot, Director.
Rodez, Normal School	28.08	713.2	30.34	770.7	32.0	0.0	57	N			3		10					Sleeting	M. Richard, Director.
Rouen, Normal School	30.34	770 7	30.43	772.9	43.0	6.1	91	SE			1		10		S	0	0	Covered	M. Platrier, Director.
Saint Lô, Normal School																			M. Delaplanche, Dir.
Saint Maur, Observatory	30.29	769.3	30.45	773.5	39.2	4.0	78	E			1		2	ENE	SE	0.31	8.		E. Renou, Director.
Toulouse, Observatory	29.61	752.1	30.34	770.6	37.6	3.1	71	W			1		5			0	0	Cloudy	B. Baillard, Director.
Tours	30.20	767.1	30.40	772.1	42.8	6.0	75	NNE			1		5		E	0	0	¾ covered	M. de Tastes.
Versailles, Observatory	29.95	760.6	30.44	773.2	37.0	2.8	86	SE			1		1			0.006	0.15		Dr. A. Berigny, Director.
Sun-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.63	752.7	30.51	775.0	26.6	—3.0	90	E			6		8s			0	0		Prof. Dr. Hoh.
Berlin	30.31	769.9	30.49	774.5	33.4	0.8	81	SW			2		0			0	0		Prof. Dr. Arndt.
Breslau	30.02	762.6	30.57	776.4	31.1	—0.5	88	SSE			2		2.			0	0		Royal University Obs'y.
Carlsruhe	30.12	765.0	30.58	776.7	30.9	—0.6	77	NE			2		0			0	0		Albert Senn.
Cassel	29.87	758.8	30.49	774.5	32.4	0.2	85	S			4		7	SW		0	0		Dr. H. Möhl.
Frankfort on the Main	30.25	768.4	30.65	778.4	32.0	0.0	76	S			1		3			0.028	0.7		Physical Society.
Friedrichshafen	28.94	735.1	30.47	773.9	29.3	—1.5	90	NE			6		0			0	0		Chief Telegrapher Wilhelm.
Hamburg	30.36	771.2	30.43	773.0	34.9	1.6	87	W			3		10			0	0		Dr. R. Kleeman.
Kiel	30.37	771.3	30.38	771.7	36.1	2.3	94	SW			2		10			0.017	0.42		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.10	764.5	30.55	775.9	30.6	—0.8	54	SSW			2		5			0	0		Prof. Dr. Bruhns.
Magdeburg	30.26	768.5	30.50	774.6	33.4	0.8	83	Calm			0		7cs	NE		0	0		Dr. Assmans.
Memel	30.19	766.9	30.24	758.1	36.7	2.6	85	W			6–7		10n					Showery	Reinbrecht & Issermann.
Munich	28.59	725.7	30.46	773.7	28.6	—1.9	88	E			3		10	E		0	0		Central Station.
Neufahrwasser	30.38	771.6	30.39	772.0	35.1	1.7	73	SSW			3		10			0	0		A. Lothes.
Neustadt, Palatinate	29.93	760.1	30.46	773.7	28.9	—1.7		WSW			1		6			0	0		Dicknether.
Stuttgart	29.50	749.3	30.46	773.6	28.8	—1.8	86	NE			1		0	E		0	0		Prof. Dr. Schoder.
Thorn	28.90	734.0	30.45	773.3	25.3	—3 7	98	Calm			0		10	E		0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	30.38	771.7	30.41	772.3	34.9	1.6	93	SW			5		10s			0	0		Prof. Kemlein.
Wustrow																			Prof. S. Reimer.

‖ Observation taken 25 minutes late.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.92	760.0	30.31	769.9	62.6	17.0		S			2.0		5					½ clear	Alexander Waurlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.95	760.6	30.00	761.9	74.4	23.6	36	WSW	8.0	3.6			6	W		0	0	D. clouds	
Deesa	29.42	747.2	29.90	759.4	77.4	25.2	38	WSW	6.4	2.9			6	WNW		0	0	D. clouds	
Bombay	29.92	759.8	29.95	760.8	79.0	26.1	70	NW	17.0	7.6			9	NW	N	0	0	D. clouds	
Poona, Yarrowda	28.07	713.0	29.91	759.8	84.3	29.1	24	WSW	13.0	5.8			1		W	0	0	D. clouds	
Belgaum	27.39	695.6	29.92	760.0	78.1	25.6	23	S	5.0	2.2			2	SE		0	0	D. clouds	
Lahore	29.23	742.4	30.01	762.2	58.1	14.5	76	E	1.1	0.5			6			0.03	0.8	Misty	
Roorkee	29.16	740.6	30.10	764.6	59.8	15.4	76	E	3.2	1.4			10			0.01	0.3		
Agra	29.38	746.1	29.96	760.8	68.7	20.4	52	SE	4.8	2.2			8		SE	0	0		
Nagpur	28.88	733.6	29.93	760.2	80.2	26.8	42	SW	3.3	1.5			3	SW		0	0	D. clouds	
Jubbulpore	28.58	725.8	29.97	761.2	72.6	22.6	49	NE	1.2	0.5			7			0	0	D. clouds	
Lucknow	29.66	753.4	30.05	763.4	64.3	17.9	46	Calm	0.9	0.4			0			0	0	Blue sky	
Allahabad	29.69	754.2	30.02	762.5	62.0	16.7	67	Calm	1.1	0.5			3			0	0	D. clouds	
Patna	29.85	758.2	30.04	763.1	64.8	18.2	70	Calm	1.3	0.6			0			0	0	Blue sky	
Hazaribagh	27.95	710.0	30.04	762.9	63.0	17.2	46	NNW	3.4	1.5			0			0	0	Blue sky	
Cuttack	29.93	760.2	30.01	762.3	74.2	23.4	68	NE	2.3	1.0			0			0	0	Blue sky	
Calcutta, Alipore	30.00	762.0	30.02	762.5	65.2	18.4	81	NW	1.0	0.4			0			0	0	Blue sky	
Goalpara	29.58	751.4	30.00	762.0	68.2	20.1	51	ESE	4.5	2.0			0			0	0	Blue sky	
Chittagong	29.91	759.6	30.00	762.0	69.4	20.8	79	WNW	2.2	1.0			2			0	0	Misty	
Sibsagar	29.67	753.7	30.03	762.7	58.2	14.6	85	NE	2.0	0.9			6	W	W	0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.98	761.6	30.41	772.4	42.8	6.0	57	E	0.7	0.3			7			0	0		Prof. Giovanni Clodig.
Milan	29.87	758.6	30.41	772.4	39.7	4.3	55	W	1.8	0.8			3			0.020	0.5		Prof. Schiaparelli.
Padua	30.28	769.2	30.40	772.1	45.0	7.2	50	ENE	9.8	4.4			2	S		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.48	748.8	30.43	772.9	38.3	3.5	59	N	1.3	0.6			8	E		0	0		Prof. P. F. Denza.
Genoa	30.11	764.7	30.31	769.8	43.2	6.2	41	N	12.5	5.6			10	SW		0	0		Prof. G. M. Garibaldi.
Mondovi	28.45	722.6	30.47	773.8	34.3	1.3	76	W			4		10			0	0		Prof. D. C. Bruno.
Pesaro	30.24	768.2	30.30	769.5	47.8	8.8	79	N	18.6	8.3			10	E		0.335	8.5		Prof. Luigi Guidi.
Florence	30.00	762.0	30.26	768.6	47.3	8.5	58	NE			4		10	E		0	0		Cav. F. Meucci.
Leghorn	30.15	765.8	30.24	768.0	47.7	8.7	52	ENE	20.6	9.2			0			0	0		Prof. P. Monte.
Rome	29.98	761.5	30.16	766.0	53.2	11.8	64	NNE	10.5	4.7			2			0.276	7.0		Prof. P. S. Ferrari.
Lecce	29.96	761.0	30.22	767.6	55.6	13.1	93	ENE	4.3	1.9			10			0.496	12.6		Prof. C. de Giorgi.
Cosenza	29.28	743.6	30.18	766.6	51.1	10.6	62	Calm	0	0			10	ENE		0.098	2.5		Prof. D. Conti.
Cagliari	29.83	757.7	30.03	762.7	54.5	12.5	62	Calm	0	0			8	S		0	0		Prof. A. Pacinotti.
Palermo	29.83	757.6	30.08	764.0	57.2	14.0	68	ESE	0.7	0.3			10			0.067	1.7		Prof. G. Ciacciatore.
Syracuse	30.02	762.6	30.07	763.7	61.2	16.2	79	SE	11.2	5.0			8	SW		0	0		Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R.	29.62	752.4	30.15	765.9	54.9	12.7	69	N	1.8	0.8			28	S		0.118	3.0		Prof. F. Brioschi.
Stelvio	22.24	564.9			9.7	—12.4	59	E					0			0	0		P. F. Denza.
Valdobbia	22.22	564.6			11.3	—11.5	60	E					2			0	0		
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.34	770.6	30.35	770.9	40.5	4.7	70	NNE	6.9	3.1			1ck;s			0	0	Clear	K. Sasaki.
Kioto	30.16	766.0	30.35	770.9	34.4	1.3	83						10s			0	0	Cloudy	
Nagasaki, I. M. Obs'y	30.13	765.3	30.34	770.6	38.3	3.5	87	Calm	0	0			0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	30.21	767.3	30.28	769.1	32.1	0.1	62	N	6.8	3.0		0	1s		W	0	0	Fair	The Staff.
Wakayama	30.29	769.3	30.34	770.6	40.6	4.8	63	N	4.2	1.9			9ck;ks			0	0	Cloudy	S. Iyahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.84	757.9	30.03	762.8	77.8	25.4	73	S	8.0	3.6			10		E	0	0	Misty	A. N. Figoy.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.80	756.8	30.06	763.6	65.0	18.3	84	ENE			1	0	1s			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascallientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.45	773.3	30.45	773.3	41.4	5.2		SSW			3					0.051	1.3		
Groningen	30.35	771.0	30.41	772.4	39.9	4.4		SW			1					0.028	0.7		
Helder	30.39	772.0	30.39	772.0	43.3	6.3		SW			2					0	0		
Hellevoetsluis	30.43	772.9	30.43	772.9	42.3	5.7	96	SSW			1					0.079	2.0		
Utrecht	30.41	772.3	30.45	773.5	40.5	4.7	97	SSW			2		10			0.063	1.6	Dull	H. van der Brink.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.92	759.9	29.98	761.5	41.0	5.0	97	S	13.6	6.1			10						
Christiania	29.70	754.3	29.85	758.1	45.9	8.3	55	SSW	9	4			1			0	0		
Gjæsvær	28.65	727.7	28.67	728.3	33.1	0.6		WSW			7		9						
Lodingen	28.73	729.7	28.78	730.9	37.2	2.9	86	SW			7		8			0.453	11.5		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.82	757.3	29.97	761.3	61.2	16.2	91	SW	15.4	6.9			10			0.276	7.0	Raining	Dr. J. A. Sampaio.
Campo Major	29.14	740.1	30.16	766.0	50.7	10.4	48	NNE	6.3	2.8			4			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.92	759.9	30.00	762.1	62.6	17.0	57	E	15.0	6.7			5			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.89	759.3	30.25	768.7	48.9	9.4	52	NNE	11.9	5.3			1			0	0		The Staff.
Ponta Delgada, Azores	29.97	761.1	30.04	762.9	63.3	17.4	80	S	16.8	7.5			3			0.102	2.6		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinsk	29.02	737.2	30.26	768.5	— 9.4	—23.0	100	Calm	0	0			0			Blank	Blank		
Archangel	29.61	752.1	29.63	752.6	22.6	— 5.2	83	S	13	6			10						Capt. Seeliwerstow.
Astrakhan	30.45	773.3	30.36	771.2	39.4	4.1	88	Calm	0	0			10s						Capt. Wisganow.
Barnaul	29.65	753.0	30.19	766.9	9.9	—12.3	81	Calm	0	0			10						Meteorological Obs'y.
Dorpat	29.68	753.8	29.93	760.2	33.6	0.9	94	SW	11	5			10n					Light snow.	Observatory.
Ekaterinburg	29.26	743.3	30.34	770.7	— 1.1	—18.4	87	SSW	2	1			18						Meteorological Obs'y.
Kasan	29.60	751.9	29.89	759.1	25.5	— 3.6	94	S	9	4			10					Snowing	Observatory.
Kertch	30.34	770.5	30.35	771.0	45.7	7.6	90	S	7	3			4						Lagorio & Sastyrez.
Kieff	29.77	756.2	30.45	773.3	31.8	— 0.1	79	W	2	1			10ks						Observatory.
Krotkowo, N. 58°47′, E. 48°34′																			Cand. Fatjanow.
Lugan	30.05	763.6	30.28	769.0	35.2	1.8	91	WNW	4	2			10			Blank	Blank		Meteorological Obs'y.
Moscow	29.47	748.4	30.04	763.0	30.9	— 0.6	83	S	4	2			10s					Light snow.	Meteorological Obs'y.
Nertchinsk	27.95	709.9	30.64	778.3	—21.3	—29.6	88						0						Meteorological Obs'y.
Nikolaiev	30.39	771.9	30.46	773.7	37.9	3.3	85	NNE	13	6			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.67	753.7	29.76	755.9	— 2.2	—19.0	64	W	2	1	10c								Lieut. Iwanow.
Nukuss	30.37	771.3	30.61	777.6	33.4	0.8	96	NE	4	2			10n						Dr. Dobrochotow.
Pekin, China	30.22	767.7	30.37	771.3	18.9	— 7.3	56	Calm	0	0			0						Physical Observatory
St. Petersburg	29.80	756.8	29.81	757.2	28.9	— 1.7	88	SW	11	5			10n						Central Physical Obs'y.
Tashkend, Laboratory	28.86	733.1	30.55	776.0	28.4	— 2.	72	Calm	0	0			10						Teich, A. M.
Tiflis	28.96	735.5	30.42	772.7	20.1	— 6.6	39	N	13	6			0						Physical Observatory.
Warsaw	30.08	764.1	30.53	775.5	30.4	— 0.9	76	WSW	13	6			9ks						Astronomical Obs'y
Wilna	29.88	759.0	30.33	770.3	30.6	— 0.8	78	WSW	7	3			5						Berg, Assistant.
Yeniseisk	29.95	760.8	30.26	768.7	12.9	—10.6	91	SE	2	1			9						M. O. Marks, Phot.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.28	769.1	47.0	8.3	84	W			4		8k			0	0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			30.06	763.5	49	9.4	100	SW			4		10			0.2	5.		J. Youngclause.
North Unst, Shetland Isl'ds			29.78	756.4				W			7		10			Blank	Blank		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.04	763.1	30.15	765.9	46.4	8.	48	NNE	2.9	1.3			9			0	0	Covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.28	769.2	30.34	770.7	43.9	6.6	92	E	0.3	0.12			10			0.083	2.1	Raining	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.23	691.7			31.6	— 0.2	95	NE	4.3	1.94			10			0.039	1.0	Covered	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.91	708.8	30.23	767.9	39.2	4.0	57	NE	13.9	6.2		0	5			0.028	0.7	Cloudy	The Staff.
Murcia, Met. Obs'y.‡	30.01	762 2	30.16	765.1	48.4	9.1	55	NNW	2.2	1.0		2	3	SE		0.016	0.4	Misty	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.32	744.7	30.24	768.1	47.3	8.5	92	NE	15.4	6.9			7			0.008	0.2	Cloudy	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	30.12	765.0	30.18	766.7	70.0	21.1	80	N	12.5	5.6			10k;n		NE	0.721	18.3	Cloudy	Benito Vines, S. J.
Manilla, Philippine Islands	29.89	759.3	29.94	760.6	78.8	26.0	83	NE	2.6	1.2						0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.06	763.4	30.16	766.0	50.4	10.2	38	NE	12.7	5.7		3	5	NE	E	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.04	762.9	30.13	765.2	77.7	25.4	94	NE	20.3	9.09		4k	2k	NE	NE	0.039	1.00	Cloudy	Enrique Gadea, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.16	740.7	29.20	741.7	30.9	— 0.6	100	SW			4		10			0	0		
Umea	29.34	745.2	29.39	746.5	31.6	— 0.2	96	SW			2		9			0	0		
Hernosand	29.49	749.0	29.84	750.3	35.4	1.9	77	SSE			2		5			0	0		
Stockholm	29.64	752.9	29.82	757.4	37.8	3.2	87	W			2		1			0	0		
Wisby	29.89	759.1	29.95	760.6	38.5	3.6	87	WSW			6		7			0	0		
SUB-SERIES.																			
Upsala	29.68	753.8	29.76	756.0	36.1	2.3	87	SW	12.8	5.7			3		W				Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.91	734.2	30.40	772.1	32.7	0.4	79	N			3		6			0	0	Cloudy	The Observatory.
Zurich	28.74	729.9	30.48	774.1	29.1	— 1.8	70	E			3		4			0	0	Fair	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. +5.5 mm.; Ther.— 0°.9 cent.; Hum. —1 per cent																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.36	771.1	58.1	14.5	61	SE	0	0			9		WSW	0	0		The Observatory.
Valona			30.24	768.1	58.6	14.8		W			2		10			0.16	4.	Covered	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.35	770.8	62.1	16.7	51	NE			1		7c			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.23	767.8	30.32	770.1	2	—16.7	89	NE	1	0.4			10s		Calm	0	0	Cloudy	
Alpena, Michigan	29.34	745.2	30.04	763.0	8	—13.3	78	S	12	5.4		0	0			0.01	0.3	Clear	
Atlanta, Georgia	29.08	738.6	30.31	769.9	27	— 2.8	88	N	2	0.9			10s		Calm	0.17	4.3	Cloudy	
Atlantic City, New Jersey	30.27	768.8	30.28	769.1	14	—10.0	100	N	12	5.4			10n		Calm	0.01	0.3	Heavy snow	
Augusta, Georgia																			
Baltimore, Maryland	30.27	768.8	30.32	770.1	18	— 7.8	84	N	4	1.8			10n		Calm	0.09	2.5	Light snow.	
Barnegat, New Jersey	30.23	767.8	30.26	768.6	16	— 8.9	92	N	23	10.3			10n		Calm	0.02	0.5	Light snow.	
Benton, Montana	27.41	696.2			22	— 5.6	86	W	13	5.8			10s		Calm	0.07	1.8	Cloudy	
Bismarck, Dakota	28.41	721.6	30.27	768.8	— 2	—18.9		NW	6	2.7			10s		Calm	Inap.	Inap.	Cloudy	
Boise City, Idaho	27.50	698.5	30.46	773.7	26	— 3.3	81	N	3	1.3		0	0			0	0	Clear.	
Boston, Massachusetts	30.08	764.0	30.25	768.3	5	—15.0	50	W	7	3.1			10s		Calm	0	0	Cloudy	
Brackettville, Texas	28.83	732.3	29.94	760.5	29	— 1.7	89	NE	8	3.6		0	0			0	0	Clear	
Brownsville, Texas	29.99	761.7	30.04	763.0	45	— 7.2	92	Calm	0	0		10cs	0	Calm		0	0	Cloudy	
Buffalo, New York	29.44	747.8	30.20	767.1	11	—11.7	80	SW	5	2.2			10ks		SW	Inap.	Inap.	Cloudy	
Burlington, Vermont	29.99	761.7	30.32	770.1	2	—16.7	72	S	8	3.6		2cs	2s	W	SW	0	0	Fair	
Cairo, Illinois	29.94	760.5	30.37	771.4	19	— 7.2	85	Calm	0	0			Fog		Calm	0	0	Dense fog	
Campo, California	27.39	695.7	30.06	763.5	42	5.6	42	E	16	7.2		0	0			0	0	Clear.	
Camp Thomas, Arizona	27.14	689.3			28	— 2.2	88	Calm				0	0	2s		0	0	Clear	
Cape Henry, Virginia	30.19	766.8	30.21	767.3	26	— 3.3	88	NW	6	2.7			10n		NW	0.35	8.9	Light rain	
Cape May, New Jersey	30.23	767.8	30.26	768.6	18	— 7.8	84	N	25	11.2			10n		Calm	0.20	5.1	Light snow.	
Castroville, Texas	29.41	747.0	30.18	766.6	18	— 7.8	53	NW	2	0.9		0	0			0	0	Clear	
Cedar Keys, Florida	30.30	769.6	30.33	770.4	39	3.9	82	N	7	3.1		2cs	0	Calm		0.05	1.3	Clear	
Champaign, Illinois	29.36	745.7	30.24	768.1	9	—12.8	78	S	9	4.0		5c	0	SW		0	0	Fair	
Charleston, S. Carolina	30.23	767.8	30.29	769.4	31	— 0.6	89	NW	10	4.5			10s		Calm	0.56	14.2	Threatening	
Charlotte, N. Carolina	29.41	747.0	30.29	769.4	22	— 5.6	86	NE	2	0.9		5cs	0	Calm		0.36	9.1	Fair	
Chattanooga, Tennessee	29.50	749.3	30.37	771.4	25	— 3.9	87	Calm	0	0		10cs	0	Calm		0.08	2.0	Cloudy	
Cheyenne, Wyoming	24.04	610.6	29.98	761.5	11	—11.7	80	N	12	5.4		0	0			0.02	0.5	Clear	
Chicago, Illinois	29.39	746.5	30.14	765.5	20	— 6.7	27	SW	7	3.1		0	0			0	0	Clear	
Chincoteague, Virginia	30.20	767.1	30.22	767.6	17	— 8.3	83	NW	27	12.1			10n		NW	0.01	0.3	Light snow.	
Cincinnati, Ohio	29.63	752.6	30.34	770.6	18	— 7.8	68	SE	2	0.9		0	Fog		Calm	0	0	Clear	
Cleveland, Ohio	29.47	748.5	30.27	768.8	12.5	—10.8	80	S	7	3.1			10s		Calm	0	0	Cloudy	
Coleman City, Texas	28.25	717.5	30.01	762.2	28	— 2.2	66	S	6	2.7			10s		Calm	0	0	Cloudy	
Columbus, Ohio	29.40	746.7	30.31	769.9	18	— 7.8	68	S	4	1.8		0	0			0	0	Clear	
Concho, Texas	28.08	713.2	29.82	757.4	35	1.7	61	SW	6	2.7			10s		Calm	0	0	Cloudy	
Corsicana, Texas	29.72	754.9	30.22	767.6	28	— 2.2	54	Calm	0	0			10s		Calm	0	0	Cloudy	
Davenport, Iowa	29.44	747.8	30.12	765.0	19	— 7.2	69	SW	3	1.3		0	0			0	0	Clear	
Dayton, Washington T'y	28.70	729.0	30.52	775.2	21	— 6.1	100	Calm	0	0			Fog		Calm	0	0	Dense fog	
Deadwood, Dakota	25.44	646.2			15	— 9.4	82	SW	4	1.8			10n		Calm	0.08	2.0	Light snow.	
Decatur, Texas	28.89	733.8	30.13	765.3	26	— 3.3	75	SE	10	4.5		Haze	0	Calm		0	0	Hazy	
Delaware Breakwater, Del.	30.24	768.1	30.26	768.6	20	— 6.7	85	NW	25	11.2			10n		NW	0.02	0.5	Light snow.	
Denison, Texas	29.36	745.7	30.21	767.3	26	— 3.3	88	SE	4	1.8		2cs	0	Calm		0	0	Fair	
Denver, Colorado	24.85	631.4	30.08	764.0	20	— 6.7	85	E	7	3.1			10n		Calm	0.07	1.8	Light snow.	
Des Moines, Iowa	29.20	741.7	30.14	765.5	23	— 5.0	86	N	4	1.8			10s		Calm	0	0	Cloudy	
Detroit, Michigan	29.45	748.0	30.18	766.6	12	—11.1	80	SW	6	2.7		0	0			0	0	Clear	
Dodge City, Kansas	27.51	698.7	29.96	761.0	20	— 6.7	70	N	18	8.0		0	5s		N	Inap.	Inap.	Fair	
Dubuque, Iowa	29.34	745.2	30.09	764.3	17	— 8.3	67	Calm	0	0		0	2s		Calm	0	0	Clear	
Duluth, Minnesota	29.28	743.7	30.02	762.5	9	—12.8	100	NW	21	9.4		0	2s		NW	0	0	Clear	
Eagle Pass, Texas	29.30	744.2	30.08	764.0	26	— 3.3	75	SE	3	1.3		0	0			0	0	Clear	
Eagle Rock, Texas	25.45	646.4	30.10	764.5	— 9	—22.8	56	N	2	0.9		0	0			0	0	Clear	
Eastport, Maine	30.17	766.3	30.24	768.1	8	—13.3	78	W	7	3.1		5c	0	W		0	0	Fair	
Edinburg, Texas					35	1.7	70	N			1		10s		Calm	0	0	Cloudy	
El Paso, Texas	26.11	663.2			26	— 3.3	52	NW	1	0.4		0	2s		Calm	0	0	Clear	
Erie, Pennsylvania	29.43	747.5	30.20	767.1	17	— 8.3	67	S	8	3.6			10s		Calm	0	0	Cloudy	
Escanaba, Michigan	29.25	742.9	29.96	761.0	6	—14.4	76	SW	4	1.8		2c	2s	Calm	Calm	0	0	Fair	
Florence, Arizona	28.47	723.1	30.07	763.8	36	2.2	61	SW	1	0.4		0	0			0	0	Clear	
Fort Apache, New Mexico	24.84	630.9	30.29	769.4	30	— 1.1	78	Calm	0	0			10n		Calm	0.17	4.3	Light snow.	
Fort Assinniboine, Montana	27.38	695.4			21	— 6.1	71	SW	14	6.3			10s		Calm	0	0	Cloudy	
Fort Bennett, Dakota	28.66	728.0			6	—14.4	76	N	10	4.5		0	0			0	0	Clear	
Fort Buford, Dakota	28.27	718.0	30.33	770.4	5	—15.0	75	NW	4	1.8		10cs	0	Calm		0.02	0.5	Cloudy	
Fort Custer, Montana	27.05	687.1			20	— 6.7	85	Calm	0	0			10s		Calm	0.04	1.0	Cloudy	
Fort Davis, Texas	25.09	637.3	30.05	763.3	33	0.6	89	NW	1	0.4		0	5s		W	0	0	Fair	
Fort Elliott, Texas	27.24	691.9	29.69	754.1	16	— 8.9	49	NW	16	7.2		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.64	752.8	30.22	767.6	30	— 1.1	78	SE	6	2.7		10cs	0	E		0	0	Cloudy	
Fort Grant, Arizona	25.01	635.2	29.81	757.2	32	0.0	67	NE	4	1.8		5k	0	Calm		0	0	Fair	
Fort Griffin, Texas	28.73	729.7	30.06	763.5	32	0.0	69	S	8	3.6			10s		Calm	0	0	Cloudy	
Fort Keogh, Montana	27.71	703.8			20	— 6.7	84	SW	8	3.6			10s		Calm	0.01	0.3	Cloudy	
Fort Macon, North Carolina																			
Fort Missoula, Montana	27.01	686.0			18	— 7.8	100	N	1	0.4			10s		Calm	0.45	11.4	Cloudy	
Fort McKavett, Texas	27.73	704.3	29.73	755.1	32	0.0	89	SW	6	2.7			10s		SW	0	0	Cloudy	
Fort Shaw, Montana	26.56	674.6			18	— 7.8	84	W	8	3.6		0	0			0.08	2.0	Fair	
Fort Sill, Indian Territory	28.79	731.3	29.97	761.2	26	— 3.3	75	Calm	0	0		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.40	721.3			— 3	—19.4	65	NW	12	5.4		0	0			0	0	Clear	
Fort Verde, Arizona					28	— 2.2	66	NW			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.28	718.3	29.93	760.2	29	— 1.7	78	Calm	0	0		0	0			0	0	Clear	
Galveston, Texas	30.10	764.5	30.14	765.5	49	9.4	93	E	12	5.4			10ks		S	0	0	Cloudy	
Grand Haven, Michigan	29.38	746.2	30.05	763.3	28	— 2.2	88	SW	8	3.6		0	0			0	0	Clear	
Hatteras, North Carolina	30.08	764.0	30.10	764.5	33	0.6	89	N	29	13.0			10s		N	0.81	20.6	Cloudy	
Helena, Montana	26.02	660.9			14	—10.0	82	Calm	0	0			10s		Calm	0.04	1.0	Cloudy	
Henrietta, Texas	29.04	737.6	30.03	762.7	29	— 1.7	66	SE	12	5.4		0	0			0	0	Clear	
Indianapolis, Indiana	29.44	747.8	30.29	769.4	14	—10.0	64	S	3	1.3		0	0			0	0	Clear	
Indianola, Texas	30.09	764.3	30.12	765.0	42	5.6	83	E	10	4.5		0	2s		Calm	0	0	Fair	
Jacksboro, Texas	28.78	731.0	30.07	763.8	32	0.0	61	SE	8	3.6		0	5s		SE	0	0	Fair	
Jacksonville, Florida	30.29	769.4	30.34	770.6	38	3.3	81	W	7	3.1		0	10s		Calm	1.11	28.2	Cloudy	
Keokuk, Iowa	29.45	748.0	30.14	765.5	24	— 4.4	61	SW	9	4.0		0	2s		Calm	0	0	Clear	
Key West, Florida	30.21	767.3	30.24	768.1	62	16.7	83	N	21	9.4		5k	0	N		0.90	22.9	Fair	
Kittyhawk, North Carolina	30.11	764.8	30.14	765.5	30	— 1.1	100	NE	24	10.7			10n		Calm	1.18	30.0	Sleeting	
Knoxville, Tennessee	29.31	744.5	30.39	771.9	25	— 3.9	94	SW	1	0.4			10s		Calm	0.23	5.8	Cloudy	
La Crosse, Wisconsin	29.23	742.4	30.02	762.5	19	— 7.2	85	W	8	3.6			10s		Calm	0	0	Cloudy	
La Mesilla, New Mexico	25.99	660.1	30.14	765.5	29	— 1.7	78	W	1	0.4		1ck	2s	Calm	Calm	0	0	Fair	
Laredo, Texas	29.60	751.8	29.96	761.0	31	— 0.6	79	NE	1	0.4			10s		Calm	0	0	Cloudy	
Leavenworth, Kansas	29.26	743.2	30.16	766.1	26	— 3.3	63	S	3	1.3			10s			0	0	Cloudy	
Lewiston, Idaho	29.66	753.4	30.36	771.1	30	— 1.1	79	S	1	0.4			10s		Calm	0	0	Cloudy	
Little Rock, Arkansas	29.97	761.2	30.31	769.9	25	— 3.9	75	Calm	0	0		0	0			0	0	Clear	
Los Angeles, California	29.62	752.3	29.97	761.2	45	7.2	76	N	2	0.9		0	0			0	0	Clear	
Louisville, Kentucky	29.71	754.6	30.33	770.4	20	— 6.7	70	SE	2	0.9			Sm'e		Calm	0	0	Dense smoke	
Lynchburg, Virginia	29.57	751.1	30.31	769.9	21	— 6.1	86	Calm	0	0			10s		Calm	0.40	10.2	Cloudy	
Madison, Wisconsin	28.96	735.6	30.01	762.2	18	— 7.8	68	SW	8	3.6		0	0			0	0	Clear	
Marquette, Michigan	29.15	740.4	29.90	759.4	20	— 6.7	70	W	5	2.2			10s		W	0	0	Cloudy	
Mason, Texas	28.36	720.3	30.21	767.3	32	0.0	79	S	4	1.8		0	2s		Calm	0	0	Fair	
Memphis, Tennessee	29.98	761.5	30.35	770.9	24	— 4.4	87	E	4	1.8		1c	Fog	Calm	Calm	0	0	Fair	
Milwaukee, Wisconsin	29.27	743.4	30.04	763.0	23	— 5.0	73	SW	7	3.1		0	0			0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
United States Series—Continued.																			
Mobile, Alabama	30.26	768.6	30.34	770.6	36	2.2	61	SE	6	2.7	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Montgomery, Alabama	30.11	764.8	30.37	771.4	26	— 3.3	88	E	3	1.3	.....	.....	10s	.....	Calm	0.06	1.5	Cloudy	
Morgantown, W. Virginia	29.24	742.7	30.30	769.6	24	— 4.4	74	Calm	0	0	.....	.....	10s	.....	W	0	0	Cloudy	
Moorhead, Minnesota	29.22	742.2	30.31	769.9	—11	—23.9	76	N	10	4.5	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Mt. Washington, N. H.	23.56	598 4	29.92	760.0	10	—12.2	70	NW	31	13.9	.....	8k	0	NW	.....	0	0	Cloudy	
Nashville, Tennessee	29.78	756.4	30.36	771.1	24	— 4.4	74	Calm	0	0	.....	2cs	Sm'c	Calm	Calm	0	0	Fair	
New Haven, Connecticut	30.15	765.8	30.28	769.1	7	—13.9	77	W	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
New London, Connecticut	30.19	766.8	30.25	768.3	8	—13.3	78	N	6	2.7	.....	5k	5s	NW	N	0	0	Cloudy	
New Orleans, Louisiana	30.23	767.8	30.30	769.6	36	2.2	71	SE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Newport, Rhode Island	30.18	766.6	30.24	768.1	14	—10.0	64	N	9	4.0	.....	4c	1s	SW	Calm	0	0	Fair	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	30.24	768.1	30.27	768.8	22	— 5.6	72	NW	10	4.5	.....	10cs	0	NW	.....	0	0	Cloudy	
New York, New York	30.11	764.8	30.30	769.6	15	— 9.4	82	NW	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Norfolk, Virginia	30.20	767.1	30.26	768.6	20	— 6.7	85	N	14	6.3	.....	.....	10s;fg	.....	.....	0	0	Cloudy	
North Platte, Nebraska	27.23	691.6	30.03	762.7	13	—10.6	72	NW	20	8.9	.....	.....	10s	.....	N;Calm	0.09	2.3	Cloudy	
Olympia, Washington T'y	30.32	770.1	30.36	771.1	34.0	1.1	100	SE	1	0.4	.....	.....	10s	.....	NW	0.01	0.3	Clear	
Omaha, Nebraska	28.98	736.1	30.17	766.3	16	— 8.9	66	NW	18	8.0	.....	Haze	5s	.....	Calm	0	0	Cloudy	
Oswego, New York	29.86	758.4	30.22	767.6	6	—13.3	64	S	10	4.5	.....	8cs	0	Calm	Calm	0	0	Fair	
Pensacola, Florida	30.33	770.4	30.36	771.1	34	1.1	90	NE	5	2.2	.....	2k	Haze	NE	Calm	0.21	5.3	Fair	
Philadelphia, Pa	30.25	768.3	30.30	769.6	16	— 8.9	83	E	3	1.3	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy	
Phœnix, Arizona	28.88	733.5	30.88	784.3	26	— 3.3	63	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.43	442.7	29.64	752.8	— 7	—21.7	100	Calm	0	0	.....	.....	10n	.....	Calm	0.44	11.2	Light snow	
Pilot Point, Texas	29.34	745.2	30.25	768.3	26	— 3.3	63	SE	10	4.5	.....	0	2s	.....	Calm	0	0	Fair	
Ploche, Nevada	23.98	509.1	29.75	755.6	23	— 5.0	73	N	10	4.5	.....	0	1s	.....	Calm	0	0	Clear	
Pittsburg, Pennsylvania	29.40	746.7	30.28	769.1	20	— 6.7	85	SE	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Port Huron, Michigan	29.44	747.8	30.16	766.1	10	—12.2	79	S	11	4.9	.....	10cs	0	Calm	.....	0	0	Cloudy	
Portland, Maine	30.16	766.1	30.22	767.6	10	—12.2	79	W	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Portland, Oregon	30.34	770.6	30.41	772.4	37.5	3.1	95	NW	2	0.9	.....	0	Fog	.....	Calm	0	0	Clear	
Portsmouth, N. Carolina	.....	.....	.....	.....	32	0.0	79	NW	25	11.2	.....	.....	10s	.....	N	0.31	7.9	Cloudy	
Prescott, Arizona	24.61	625.1	29.97	761.2	26	— 3.3	63	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	30.25	768.3	30.26	768.6	50	10.0	85	NE	8	3.6	.....	.....	10s	.....	N	0	0	Cloudy	
Red Bluff, California	29.87	758 7	30.22	767.6	49.0	9.4	51	N	15	6.7	.....	0	0	.....	.....	0	0	Clear	
Rio Grande City, Texas	29.84	757.9	30.07	763.8	37	2.8	81	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Rochester, New York	29.81	749.5	30.19	766.8	8	—13.3	78	SW	2	0.9	.....	5c	2s	W	Calm	0	0	Cloudy	
Roseburg, Oregon	29.80	756.9	30.39	771.9	39	3.9	95	Calm	0	0	.....	3c;ck	Fog	Calm;NE	Calm	0	0	Fair	
Sacramento, California	30.06	763.5	30.13	765.3	51	10.6	59	N	16	7.2	.....	0	0	.....	.....	0	0	Clear	
St. Louis, Missouri	29.63	752.6	30.25	768.3	20	— 6.7	70	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	
St. Paul, Minnesota	29.11	739.4	30.00	762.0	13	—10.6	81	W	12	5.4	.....	0	5ks	.....	W	0	0	Fair	
Salt Lake City, Utah	25.69	652.5	30.02	762.5	22	— 5.6	45	Calm	0	0	.....	0	0	.....	.....	0.14	3.6	Clear	
San Antonio, Texas	29.40	746.7	30.14	765.5	28	— 2.2	77	N	3	1.3	.....	0	0	.....	.....	0	0	Clear	
San Diego, California	29.90	759.4	29.98	761.5	46	7.8	84	NE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Sandusky, Ohio	29.50	749.3	30.23	767.8	18	— 7.8	14	S	12	5.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Sandy Hook, New Jersey	30.26	768.6	30.30	769.6	18	— 7.8	84	N	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
San Francisco, California	30.05	763.3	30.12	765.0	55	12.8	53	N	17	7.6	.....	0	2s	.....	N	0	0	Clear	
Santa Fé, New Mexico	23.04	585.2	29.58	751.3	21	— 6.1	85	Calm	0	0	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
Savannah, Georgia	30.22	767.6	30.32	770.1	33	0.6	95	NW	12	5.4	.....	.....	10s	.....	NW	0.97	24.6	Cloudy	
Shreveport, Louisiana	30.00	762.0	30.27	768.8	26	— 3.3	88	E	3	1.3	.....	0	0	.....	.....	0.02	0.5	Clear	
Silver City, New Mexico	24.07	611 4	30.49	774.4	25	— 3.9	75	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Smithville, North Carolina	30.21	767.3	30.25	768.3	30	— 1.1	100	N	6	2.7	.....	.....	10s	.....	Calm	0.60	15.2	Cloudy	
Socorro, New Mexico	25.44	646.2	29.50	749.3	12	—11.1	61	NW	2	0.9	.....	.....	10n	.....	Calm	0.33	8.4	Light snow	
Springfield, Illinois	29.50	749.3	30.24	768 1	17	— 8.3	75	S	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Springfield, Massachusetts	30.15	765 8	30.29	769.4	4	—15.6	48	N	3	1.3	.....	.....	10s	.....	.....	0	0	Cloudy	
Stockton, Texas	26.91	683.5	29.91	759.7	32	0.0	79	SW	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
St. Vincent, Minnesota	29.42	747.3	30.34	770.6	—12	—24.4	75	NW	20	8.9	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Thatcher's Island, Mass	30.18	766.6	30.24	768.1	—17	— 8.3	83	NW	13	5.8	.....	.....	10s	.....	NW	0	0	Cloudy	
Toledo, Ohio	29.47	748.5	30.21	767.3	18	— 7.8	85	S	10	4.5	.....	0	2s	.....	Calm	0	0	Clear	
Tucson, Arizona	27.45	697.2	30.00	762.0	32	0.0	69	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	30.17	766.3	30.73	780 5	10	—12.2	68	SE	4	1.8	.....	0	Fog	.....	W	0	0	Clear	
Uvalde, Texas	29.12	739.6	30.01	762.2	25	— 3.9	87	NE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Vicksburg, Mississippi	30.05	763.5	30.31	770.6	28	— 2.2	77	E	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Visalia, California	29.71	754 6	30.10	764.5	42.5	5.8	87	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C	29.20	767.1	30.32	770.1	16	— 8.9	100	NE	3	1.3	.....	.....	10n	.....	Calm	0.16	4.1	Light snow	
Wickenburg, Arizona	.....	.....	.....	.....	30	— 1.1	68	NW	.....	.....	1	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	30.21	767.3	30.27	768.8	31	— 0.6	89	N	10	4.5	.....	.....	10s	.....	.....	0.31	7.9	Cloudy	
Winnemucca, Nevada	25.84	656.3	30.20	767.1	28	— 2.2	65	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass	30.16	766.1	30.20	767.1	15	— 9.4	65	N	11	4.9	.....	.....	10s	.....	W	0	0	Cloudy	
Yankton, Dakota	29.93	760.2	30.40	772.1	0	—17.8	70	NW	12	5.4	.....	0	0	.....	.....	0.08	2.0	Clear	
Yuma, Arizona	29.90	759.4	30.05	763.3	46	7.8	54	NE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	21.99	558.5	.....	.....	53.5	11.9	79	Calm	0	0	.....	2cs	2s	.....	.....	0	0	Fair	Thomas Herran.
Havana, Cuba, W. I	30.15	765.8	30.20	767.1	72	22 2	75	N	6.0	2.7	.....	.....	10n	.....	NNE	0.92	23.4	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	29.11	739.4	29.17	740.9	14.0	—10	.....	W	.....	.....	6	.....	4	.....	.....	0	0	.....	
Kingston, Jamaica, W. I	30.09	764.3	30.10	764.5	68.0	20.0	88	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	James Gall.
Navassa, W. I	30.00	762.0	30.08	764.0	76	24.4	95	E	7	3.1	.....	0	0	.....	.....	0	0	Clear	F. M. Everett.
Paramaribo, S. A	30.01	762.2	30.01	762.2	78	25.6	82	SE	.....	.....	2	3c	5k	E	.....	0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.92	760.0	80	26.7	85	Calm	.....	.....	0	.....	10ks	.....	Calm	0	0	Light fog	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Earl Flint.
Santiago de Cuba, W. I	.....	.....	.....	.....	72	22	.....	E	.....	.....	3	0	1ks	.....	E	0.08	2.	.....	Robert Mason.
St. Thomas, W. I	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
York Factory, B. A	29.14	740.2	29.19	741.4	3.7	—15.7	.....	W	.....	.....	4	.....	1	.....	.....	0	0	.....	
	29.98	761.5	30.03	762.7	—16.0	—26.7	70	NW	18	8.0	.....	2c	2s	NW	NW	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandra																			Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. S. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. J. F. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda																			Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.95	760.7	79	26.1	70	NNW			2		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Callao Bay, Peru	29.96	761.0	67	19.4	89	SSE			2		5							D. clouds	Comm. E. E. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 26° 10′, E. 119° 55′	30.36	771.1	49.1	9.5	66	NNE			4		10							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 18° 28′, E. 39° 56′	30.01	762.2	75	24.4	91	ENE			1		3	N				2	N	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 38° 42′, W. 9° 06′	30.23	767.8	54	12.2	74	NE			3		0							Blue sky	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda, W. I.																			
H. M. S. Orontes	30.10	764.5	70	21.1	90	S			4		7	S						D. clouds	Capt. J. A. Fisher.
H. M. S. Pegasus																			Capt. R. G. Kinahan.
H. M. S Pelican																			Capt. T. G. Jones.
H. M. S. Penguin																			Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. A. C. Paget.
H. M. S. Rambler																			Capt. H. H. Grenfell.
H. M. S. Ready																			Capt. Hon. A. C. Littleton
H. M. S. Rifleman																			Capt. H. H. Edwards.
H. M. S. Rocket																			Capt. P. H. W. Mayow.
H. M. S. Ruby																			
H. M. S. Salamis																			Capt. C. E. Foot.
H. M. S. Sea Gull																			Capt. A. Fitz George.
H. M. S. Seraphis, N. 43° 34′, W. 9° 20′																			Comm. M. Byles.
H. M. S. Shannon	30.32	770.1	55	12.8	80	NE			3-4		8	NE				2	NE	D. clouds	Capt. G. P. Lewis.
H. M. S. Superb																			Capt. J. D'Arcy.
H. M. S. Tenedos																			Capt. L. H. Ward.
H. M. S. Thetis																			Capt. C. G. Fane,
H. M. S. Thunderer																			Capt. P. W. Stephens.
H. M. S. Triumph																			Capt. P. H. Colomb.
H. M. S. Turquoise																			Capt. A. H. Markham.
H. M. S. Tweed																			Capt. M. B. Medlycott.
H. M. S. Tyne																			
H. M. S. Urgent																			Capt. J. E. Stokes.
H. M. S. Wild Swan																			Comm. W. S. Brown.
H. M. S. Wolverine																			Capt. S. H. P. Dacres.
H. M. S. Woodlark																			Comm. J.C. Wilson, A.D.C.
H. M. S. Zephys																			Capt. R. D. Cumming.
																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Limn, Porto Praya, C. Verd Id's.	29.95	760.6	76.5	24.7	85	ESE			1		9			0	0	1	SE	D. clouds	S. C. da Silva Costa, Comd't.
Sado, Mossamedes, Benguela	29.91	759.8	73.6	23.1	80	WNW			2		2	NW		0	0	1	NW	D. clouds	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.	Force	Amount and kind.		Direction							
									Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.47	733.9	41	5.0	74	NE	6	2.7		10		N	0.09	2.3			Cloudy	
N. Yard, Portsmouth, N. H	30.26	768.6	6	—14.4	?	NW	10	4.5		10		NW	0	0			Cloudy	
Naval Hospital, Yokohama, Japan	30.08	764.0	38	3.3	50	N			3		0		0	0			Clear	
Adams, Callao Peru	30.01	762.2	67	19.4	95	SSE			1		8		SE		Mod.	SW	Fair	
Alaska, N. Yard, Mare I'd, Cal*	30.08	764.0	55	12.8	50	NNW			5		0		0	0			Clear	
Alert, Hong-Kong, China	30.14	765.5	58	14.4	70	E			2		10		Calm	0	0	Smooth	Cloudy	
Alliance, N. 29° 15′, W. 88° 25′	30.32	770.1	50	10.0	79	NE			1		2		NE	Light		Smooth	Clear	
Ashuelot, Tientsin, China	30.40	772.1	22	— 5.6	100	Calm			0		0						Clear	
Colorado, New York, N. Y	30.39	771.9	16	— 8.9		NW	2	0.9			10		Calm	0	0		Overcast	
Constitution, N. Yard, League I'd., Pa			16	— 8.9		Calm	0	0			10						Snowing	
Franklin, Off N. Yard, Norfolk, Va	30.16	766.1	23	— 5.0		NNW	16	7.2			10		N				Sleeting	
Galena, N. 36° 36′, W. 37° 30′	30.05	763.3	59	15.0	70	N			2		5				Mod.	W	Fair	
Independence, N. Yard, Mare I'd, Cal	30.11	764.8	56	13.3	63	NW	15.6	7.0			0			0	0		Clear	
Jamestown, Sitka, Alaska*	29.88	758.9	44	6.7	92	SE			2		10		SE	0.43	10.9		Cloudy	
Kearsarge, Curacoa, W. I	30.04	763.0	77	25.0	86	E			2		5		ESE			Smooth	Fair	
Lackawanna, Ancon, Peru†	30.13	765.3	70	21.1	90	SW			2		10		SW	0	0		Cloudy	
Marion, S. 51° 25′, W. 66° 25′	29.71	754.6	49	9.4	93	WNW			2		2		NW	0	0	Smooth	Clear	
Michigan, Erie, Pennsylvania	30.19	766.8	16	8.9		SSW			3		10		SW				Cloudy	
Minnesota, New York, N. Y	30.31	769.9	18	— 7.8		NNW			1-2		10						Threatening	
Monocacy, Shanghai, China	30.50	774.7	34	1.1	79	NE			1		0						Clear	
New Hampshire, Port Royal, S. C	30.28	769.1	35	1.7	80	NW	13	5.8			10		NW	0.10	2.5		Overcast	
Nepsic, Villafranca, France	30.19	766.8	54	12.2	32	NNE			3		10					Smooth	Overcast	
Onward, Chimbote Bay, Peru†	29.93	760.2	72	22.2	80	S			3		0					Long	N;W	Clear
Palos, Shanghai, China	30.51	774.9	33	0.6	89	NNE			1		0						Clear	
Passaic, Washington, D. C	30.33	770.4	16	— 8.9	100	NE			1		10		Calm				Snowing	
Pensacola, San Francisco, Cal	30.12	765.0	56	13.3	63	NNW			4-5		0						Clear	
Portsmouth, Washington, D. C	30.30	769.6	17	— 8.3	100	Calm			0		10						Snowing	
Powhatan, New York, N. Y	30.38	771.6	12	—11.1		N			1		10						Overcast	
Quinnebang, Alexandria, Egypt	30.34	770.6	64	17.8	62	ENE			2		2		NE			Smooth	Fair	
Richmond, Shanghai, China	30.48	774.2	36	2.2	80	NE			1		0			0	0		Clear	
Saratoga, Baltimore, Md	30.28	769.1	15	— 9.4	100	N			2		10		Calm	Mod'ate	snow		Snowing	
Shenandoah, Montevideo, Uruguay*	29.89	759.2	72	22.2	90	ESE			3		10		ESE			Smooth	Cloudy	
St. Louis, League Island, Pa	30.28	769.1	15	— 9.4	100	Calm	0	0			10						Raining	
Swatara, Yokohama, Japan†	30.14	765.5	40	4.4	56	N			2		0					Mod.	N	Blue sky
Tennessee, N. 11° 44′, W. 60° 27′	30.05	763.3	81	27.2	74	NE	19	8.5			2		NE	0.09	2.3	Long	ENE	Showery
Trenton, Villafranca, France*	30.13	765.3	54	12.2	32	N			3-6		10			0	0		Squally	
Vandalia, N. Yard, New York	30.27	768.8	23	— 5.0	86	NE			1		10		Calm				Cloudy	
Wabash, Boston, Massachusetts	30.29	769.4	5	—15.0	50	NNW	3	1.3			10		WSW	0	0		Cloudy	
Wachusetts, Panama, Panama	29.57	751.1	76	24.4	91	NNW			2		2		N	0	0	Smooth	Fair	
Wyoming, Naples, Italy	30.13	765.3	56	13.3	69	N			1		2		NE			Smooth	Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.							
										Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡ S. 24° 33′, E. 59° 55′	30.05	763.3	84.7	29.3	64	Calm			0		3							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡ N. 38° 40′, W. 16° 06′	30.16	766.1	57.7	14.3	71	ESE			4		7							D. clouds	Capt. H. Youlden.
City of Agra, ‡ S. 54° 30′, W. 152° 00′	30.04	763.0	45.0	7.2	92	NNE			4		10							Overcast	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Coppename, N. 44° 55′, W. 13° 40′	30.40	772.1	51.6	10.9	86	SE			4		7							Drizzling	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡ S. 22° 26′, E. 78° 00′	30.03	762.7	76	24.4	73	E			5		7							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡ N. 40° 46′, W. 68° 16′	30.15	765.8	33	0.6	70	E			4		9					3	E	Overcast	Capt. A. Campbell.
S. S. Fleu[illegible]Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross, N. 50° 05′, W. 18° 10′	30.18	766.6	52.5	11.4	96	S			7		9					8	s;wsw	Overcast	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ S. 5° 58′, E. 87° 45′	29.82	757.4	79.5	26.4	90	W			6		6							Showery	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland ‡																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 13° 27′, E. 48° 34′	29.96	761.0	81.0	27.2	73	E			4		5							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia, N. 45° 41′, W. 54° 47′	29.95	760.7	39	3.9	86	NNW			6		10			0	0	Mod'ate	WNW	Dull	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Britanic																			Capt. H. Perry.
S. S. Celtic, N. 51° 42′, W. 23° 25′	29.73	755.1	52	11.1		SW			7		10		SW	Sho	wers	H'vy	SSW	Clear	Capt. Benj. Gleadell.
S. S. Germanic																			Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Hermann, N. 50° 01′, W. 18° 32′	30.07	763.8	54.5	12.5		SSW			7		8		SSW	0	0	Cross	SSW	Squally	Capt. H. Baur.
S. S. Köln, Off Cape Henry, Va	30.18	766.6	26.6	— 3.0		N			5-6		10		N	Hail;	snow	Smooth	N	Cloudy	
S. S. Leipzig ‡																			Capt. F. Pfeiffer.
S. S. Ohlo																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolh Fredholm, ‡ S. 25° 20′, W. 41° 43′ *†	30.20	767.0	79.2	26.2	84	NE			8		6							Squally	Capt. Albert Fredholm.
Ship Peru, ‡ N. 15° 50′, W. 67° 53′	30.08	764.0	79.0	26.1	93	ENE			5	3ck								D. clouds	Capt. O. F. Sköterbrand.

UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	30.28	769.1	46	7.8	92	SW			3		10		SW					Cloudy..	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 40° 33′, W. 69° 47′ ...†	30.04	763.0	30	— 1.1	48	E			3		2?		E	0	0	Smooth	E	Cloudy?	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 43° 15′, W. 58° 22′...*†	30.17	766.3	24	— 4.4	87	NW			3		10		NW	0	0	Small	NW	Cloudy	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, ‡ Philadelphia, Pa.....†	30.18	756.6	17	— 8.3		E			1		10		S	Snow				Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 36° 50′, W. 166° 55′.....†	29.83	757.7	57	13.9	52	WSW			6		8		W	Hail		High	SW	Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 44° 47′, E. 166° 52′...*†	29.39	746.5	52	11.1	66	SW			4		10		SW			Slight	SW	Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 27° 20′, E. 125° 36′	30.33	770.4	60	15.6	82	N			4		10		NE	0.03	0.8	Mod'ate	NE	Cloudy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia, N. 40° 15′, W. 124° 32′	30.18	766.6	54.5	12.5	67	NNW			6		0					Mod'ate	NW	Clear	Capt. Fred. Bolles
S. S. Oregon, Portland, Oregon.....†	30.34	770.6	38.5	3.6	90	NNW			1		10							Foggy	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Pedro, Cal.....†	29.90	759.4	49	9.4	93	NW			1		0					Mod'ate	W	Clear	Capt. J. N. Ingalls.
S. S. Idaho																			C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. State of California, San Francisco, Cal.....†	30.12	765.0	56	13.3	46	NE			2		5		N					Fair	Capt. G. Debney.
S. S. Victoria, N 38° 50′, W. 123° 52′....†	30.15	765.8	52	11.1	86	NW			2		0					Large	NW	Clear	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York																			Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking																			Capt. G. G. Berry.
S. S. City of Sidney, S. 34° 22, E. 169° 20′.....†	29.52	749.8	65	18.3	68	WSW			4		5		W	0	0	Long	NW	Fair	Capt. H. C. Dearborn
S. S. City of Tokio																			A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ Panama, Panama .....†	29.95	760.7	75	23.9	86	NW			2		2		NW	0	0			Fair	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada																			
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland ..‡																			Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland ..... ‡																			Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 46° 24′, W. 39° 31′	29.90	759.4				SW			3		10		SW	Snow	show'rs	Smooth	WSW	Cloudy	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Brunswick, Ga	30.27	758.8	38	3.3	81	WNW	6	2.7			8d		NW	0.43	10.9			Cloudy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, ‡ Arroyo, P. R.....†.	30.32	770.1	78	25.6		ENE			4		2		E	0	0	Smooth		Clear	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va†	30.19	756.8	23	— 5.0	100	NW	3	1.3			10n			0.1	2.			Hailing	
Sch'r Hattie V. Kelsey, ...																			Capt. J. L. Randall.
Ship Jumna																			Capt. James S. Gawin
Bark Sunbeam, ‡ Lisbon, Portugal.....†	30.17	766.3	48	8.9	100	NE			3		0			0	0			Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 3, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower	Rain-fall or melted snow in the past 24 hours.		Weather	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.85	758.3	53.8	14.6	65	E			4		5			0	0	Fair	Dr. Ollive.
Nemours			30.00	762.1	56.3	13.5	96	E			0		0			0	0	Clear	Raynard.
Algiers			30.00	762.1	48.9	9.4	74	SSE			2		4			Inap.	Inap.	Cloudy	Nicolas.
La Calle			30.08	764.0	57.2	14.0	67	SSE			5		7			0	0	Very cloudy	Fonfrède.
Tunis			30.10	764.4															Jacques.
Sfax			30.15	765.9															Gau.
Saida			30.03	762.7	47.1	8.4	59	SE			4		0			0	0	Clear	Dumas.
Tebessa			30.08	764.0	51.4	10.8	41	S			6		2			0	0	Fair	Watrin.
Gerville																			Lonchamp.
Laghouat			30.12	765.1	48.2	9.0	53	E			1		1			0	0	Very fair	Herbin.
Biskra			30.11	764.8	62.2	16.8	51	E			5		0			0	0	Clear	Baudasse.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.02	762.5	30.11	764.8	60.0	15.6	81	S	6	2.7			10			0.15	3.8	Dull	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			30.40	772.1	68	20.0		SE			3		4k			0	0	Cloudy	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.91	759.6	30.51	774.9	36.5	2.5	89	Calm			0		10			0.102	2.6	Rain & snow	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.75	755.6	30.58	776.7	22.3	—5.4	98	NNW	0	0			10			0	0		Dr. Wiersbicki.
Eperies	29.58	751.3	30.51	774.9	34.9	1.6	63	Calm			0		0			0	0		Julius Mikolik.
Gratz‡	29.18	741.2	30.49	774.5	36.5	2.5	79	N			3		0			0	0		Andreas Rospini.
Hermannstadt	29.01	736.8	30.50	774.6	45.3	7.4	68	SE			2		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.95	735.4	30.37	771.5	31.3	—0.4	90	ESE			2		0			0	0		The Staff.
Lemberg	29.44	747.7	30.49	774.5	29.5	—1.4	88	SW			1		10			0	0		Dr. T. Stanecki.
Pola	30.18	766.5	30.29	769.4	48.7	9.3	87	ENE			4		10			0.059	1.5		I. R. Hydrographic Office
Szathmar	30.06	763.5	30.52	775.2	41.0	5.0	84	S			2		8			0	0		Beicht Peter, S. J.
Szegedin	30.19	766.9	30.48	774.3	42.4	5.8	88	Calm			0		10			0	0		Karl Stancel.
Trieste	30.23	767.8	30.33	770.4	45.9	7.7	59	ENE			5		10			0.028	0.7	Cloudy	P. Busin.
Vienna	29.75	755.6	30.54	775.8	29.7	—1.3	80	Calm			0		9			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 11, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.00	762.0	30.10	764.5	40.0	4.4	78	SSW	9	4.0			3			0	0	Misty	W. Boswell.
Armagh, Observatory	30.00	762.0	30.24	768.1	44.5	6.9	76	S	13	5.8			10					Gloomy	S. Call.
Bidston, Liverpool Obs'y			30.33	770.4	42.5	5.8	77	SSE	7	3.1			10					Overcast	John Hartnup.
Bolton, Sharples	29.78	756.4	30.33	770.4	40.0	4.4	84	SW	3	1.3			10					Overcast	Thomas Mackereth.
Bradford, Yorkshire	29.89	759.2	30.29	769.4	42.4	5.8	79	SW			1		10			0	0	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.96	761.0	29.99	761.7	80.0	26.7	82	NE			3		4					Cloudy	Pvt. J. Surgenor, A. H. C.
Cardington			30.35	770.9	42.0	5.6	91	S			0		10					Foggy	John McLaren.
Chatham, School M. E.	30.26	768.6	30.40	772.1	42.1	5.6	83	Calm			0		8					Gloomy	Cpl. Gwinn, R. E.
Falmouth, Observatory	30.10	764.5	30.33	770.4	46.8	8.2	66	SSE			2		10					Overcast	The Staff.
Fort Napier, Natal	27.57	700.3	29.79	756.7	85.0	29.4	55	NW			1		8					Overcast	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.58	751.3	29.81	757.2	87	30.6	92	SW			0		5					D. clouds	C. E. Keane.
Galway, Queen's College			30.12	765.0	47	8.3	77	S			2		6					D. clouds	J. O'Donaghadue.
Gibraltar, Mediterranean	29.89	759.2	29.94	760.5	55.2	12.9	93	E			3		2					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.00	762.0	30.21	767.3	44.8	7.1	76	SW			3		10k					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	30.20	767.1	30.38	771.6	42.4	5.8	85	E			1		10					Overcast	The Staff.
Guernsey	30.12	765.0	30.34	770.6	41.0	5.0	60	ENE			2		0					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.35	770.9	30.38	771.6	43.2	6.2	79	SSE	2	0.9			10					Misty	The Met'g'l Office.
Leicester, Museum	30.10	764.5	30.37	771.4	42.7	5.9	88	SW			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	30.08	764.0	30.16	766.1	64.0	17.8	87	E			1		4					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.18	766.6	73.5	23.1	88	NE			3		5					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.83	757.7	30.37	771.4	41.6	5.3	96	SSE			2		10					Overcast	Robert Pate.
Oxford, Radcliffe Obs'y	30.14	765.5	30.39	771.9	42	5.6	83	ESE			1		10					Foggy	The Staff.
Plymouth	30.26	768.6	30.33	770.4	45.2	7.3	76	SE			1		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.92	760.0	44.8	7.1	78	SW	14	6.3			2					D. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.37	771.4	30.44	773.2	51.0	10.6	86	NE			2		10					Overcast	Serg't W. H. Lyne.
Sheffield	30.06	763.5	30.35	770.9	46.8	8.2	82	SSW			1		8			0	0	Overcast	W. F. Cooper.
Silloth Rectory	30.20	767.1	30.23	767.8	43.0	6.1	79	SW			4		10			0.012	0.30	Overcast	Rev. F. Redford, A. M.
Stonyhurst, Observatory			30.34	770.6	40.0	4.4	80	WSW	6	2.7			10					Overcast	Rev. S. J. Perry.
Strathfield Turgiss	30.15	765.8	30.38	771.6	42.7	5.9	81	W			0-1		8					D. clouds	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	30.30	769.6	30.32	770.1	48	8.9	70	SE			2		6					D. clouds	W. Newcombe.
Valencia, Observatory	30.18	766.6	30.21	767.3	49.2	9.6	78	SE	24	10.7			10					D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	29.93	760.2	29.97	761.2	10.6	—11.9		Calm	0	0		0	8s			0	0	Cloudy	Hon. J. Ferguson.
Chatham, N. B.*	29.84	757.9	29.91	759.7	7	—13.9	91	Calm	0	0		5ck	2s	Calm	Calm	0	0	Fair	G. A. Blair.
Charlottetown, P. E. Island	29.85	758.2	29.90	759.4	5	—15.0	100	W	1	0.4		5c	2s			0	0	Fair	H. J. Cundall, C. E.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario	29.77	756.1	29.97	761.2	24.7	— 4.1	93	NW			1		10n			0.10	2.5	Cloudy	James Smith, M. A.
Dalhousie, N. B	29.78	756.4	29.82	757.4	8.5	—13.1		SW			1	0	0			0	0	Clear	H. A. Johnson.
Father Point, Quebec*	29.85	758.4	29.88	758.9	18	— 7.8	84	N	8	3.6			10n	Calm		Inap.	Inap.	Threatening	J. McWilliams.
Fredericton, N. B	29.93	760.2	30.00	762,0	0.1	—17.8	100	Calm	0	0			10s			0	0	Cloudy	Prof. Harrison.
Fort Garry, Manitoba*	29.46	748.3	30.44	773.2	—24	—31.1	100	W	4	1.8		0	0			0	0	Clear	James Stewart.
Granton, Ontario	29.01	736.8	30.18	766.6	23.0	— 5.0	100	W			1		10n			Inap.	Inap.	Snowing	James Grant.
Halifax, N. S.*	29.83	757.7	29.97	761.2	19	— 7.2	85	W	8	3.6			10ks	W		0	0	Cloudy	A. Allison.
Hamilton, Ontario	29.70	754.4	30.12	765.0	26.5	— 3.1	95	SW			4		10cs	0		0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.66	753.4	30.02	762.5	27	— 2.8	87	SW	9	4.0			10n	NW		0.02	0.5	Light snow	S. Woods, M. A.
Little Glace Bay, N. S	29.81	757.2	29.85	758.2	15.5	— 9.2	93	NW	1	0.4			10n			0	0	Cloudy	C. H. Rigby.
Montreal, Quebec*	29.78	756.4	29.99	761.7	21	— 6.1	93	W	12	5.4			10n			0.06	1.5	Light snow	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A.
Parry Sound, Ontario*	29.37	746.0	30.14	765.5	7	—13.9	73	N	16	7.2		2k	5ks	N	N	0.02	0.5	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.27	743.4	30.06	763.5	25.3	— 3.7	81	W			1	0	8ks			0	0	Fair	J. F. Jeffers, M. A.
Port Dover, Ontario	29.41	747.0	30.14	765.5	25	— 3.9	87	SW	9	4.0			10n		SW	0	0	Threatening	H. Morgan.
Port Stanley, Ontario	29.48	748.8	30.16	766.1	26	— 3.3	93	W	16	7.2			10n		W	Inap.	Inap.	Light snow	M. Payne.
Quebec, Quebec*	29.62	752.3	29.97	761.2	11	—11.7	80	NW			3	0	5s		NW	0.02	0.5	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.64	752.8	30.15	765.8	5	—15.0	70	W	5	2.2			8s		W	0.10	2.5	Cloudy	W. H. McIntyre.
St. Andrews	29.95	760.7	30.00	762.0	12	—11.1	84	W	1	0.4		Haze	2s			0	0	Clear	
St. John's, N. B	29.82	757.4	30.00	762.0	9.0	—12.8	100	W	6	2.7		1c	0			0	0	Clear	G. Murdock, C. E.
Saugeen, Ontario*	29.32	744.7	30.08	764.0	24	— 4.4	88	NW	11	4.9			10s			0.05	1.3	Light snow	K. Stewart.
Stratford, Ontario	28.80	731.5	30.16	766.1	22.8	— 5.1	95	W	7	3.1			10s			0.05	1.3	Snowing	C. J. Macgregor, M. A.
Sydney, C. B*	29.83	757.7	29.87	758.7	16	— 8.9	85	SW	6	2.7			10s			0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.69	754.1	30.10	764.5	24	— 4.4	84	SW	10	4.5			10s			0	0	Clear	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario	28.99	736.3	30.12	765.0	24.1	— 4.4	95	Calm	0	0			10s			0.10	2.5	Snowing	Prof. Wolverton.
Yarmouth, N. S.*	29.92	760.0	29.99	761.7	23	— 5.0	78	NW	4	1.8		2ck	0	W		0	0	Fair	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. John's, Newfoundland	29.93	760.2	30.11	764.8	20	— 6.7	100	NW					0			0	0	Fair	John Delany.
St. Pierre, N. F			29.71	754.6	21.9	— 5.6		W			2					0	0		N. F. Land, Comd't.
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.74	755.4	29.78	756.4	82.0	27.8	40	NW	12.0	5.4		10	10n					Rainy	The Staff, for D. Gill.
Cape St. Francis Lt. House	29.72	754.9			71.6	22.0	80	SW	11.0	4.9			1k			0	0	Blue sky	John Duthie.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.39	771.8	30.41	772.4	36.1	2.3	82	ENE	3.1	1.4			10			0		Clear	M. Marc Dechevrens, S.J.

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

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.23	666.2	29.95	760.7	61.2	16.2	98	NE			1	1d				0	0	Clear	Frederico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.27	768.9	30.32	770.1	40.6	4.8	94	WSW	13	6			10					Foggy	
Fanöe	30.32	770.1	30.34	770.6	40.6	4.8	87	WSW			4		10						
Godthaab, Greenland	29.02	737.2	29.07	738 3	17.4	—8.1	94	NW			4		10					Snowing	
Stykkisholm, Iceland	29.33	745.0	29.37	746.1	27.0	—2.8	96	SW			6		8						
Thorshavn	29.43	747.4	29.47	748.3	47.8	8.8	84	SW	45	20			10						
Vestervig	30.15	765.7	30.24	768.1	40.3	4.6	94	WSW			2		1						
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.41	747.0	30.08	764.0	45.0	7.2	66	N			1	clr		NE	NE	0	0		M. Labroue, Director.
Alençon	29.72	755.0	30.28	769.0	34.9	1.6	96	N			1		5kn	N	N	0	0	Cloudy	M. Nicot, Director.
Arras, Engineer School	30.09	764.2	30.36	771.2	25.7	—3.5	93	NE	0.9	0.4									M. Klein, Commandant.
Avignon, Normal School	30.03	762.7	30.11	764.7	36.3	2.4	69	N			3		10			0	0	Covered	M. Giraud, Director.
Bar-sur-Seine	29.73	755.2	30.33	770.3	28.9	—1.7	76	E			1		10			0	0	Covered	M. Saillard, Director.
Beauvais, Normal School	30.08	764.1	30.37	771.3	29.3	—1.5	90	S			1		2		E	0	0	Slightly cl'dy	M. Frère Eugene Marie.
Besançon, Normal School	29.30	744.3	30.26	768.5	29.1	—1.6	97	NE			3		2n		W	0	0	Slightly cl'dy	M. Gobin, Director.
Bordeaux, Observatory	29.90	759.4	30.17	766.4	39.6	4.2	70	NNE			1		2			0	0	Slightly cld'y	M. Rayet, Director.
Bourges, Normal School	29.68	753 9	30.28	769.0	28.4	—2	96	N			1		10n		NE	0	0	Covered	M. Postel, Director.
Brest, Naval Observatory	30.09	764.3	30.33	770.4	43.2	6.2	67	SE			1		1		SE	0	0		M. de Rermaree, Dir.
Caen, Normal School	30.18	766.6	30.30	769.5	34.2	1.2	76	W			1		5		E	0	0	Cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.00	761.9	30.33	770.3	30.6	—0.8		WNW			1		10			0	0	Covered	M. Jadot, Director.
Charleville, Normal School																			M. Baumier, Director.
Clermont-Ferrand Obs'y	28.81	731.8	30.25	768.3	31.3	—0.4	60	NE			1		0			0	0	Hazy	M. Alluard, Director.
Cluny, Normal School	29.35	745.5	30.23	767.9	27.3	—2.6	74	NE			2		10		NE	0	0	Covered	M. de Villemontée, Dir.
Commercy, Normal School	29.41	746.9	30.32	770.2	29.3	—1.5	95	S			4		k			0	0		Dr. Coulet, Director.
Gap, Normal School	27.55	699.7	30.13	765.4	44.6	7	91	N			3		s		SE	0	0		M. Jeanjrard, Director.
Gréasque, du. Rhone	28.97	735.9	30.11	764.9	46.8	8.2	44	E			2		10		SE	0	0		M. Kina, Director.
Grenoble, Normal School	29.42	747.2	30.23	767.9	30.7	—0.7		ESE			1		5n			0	0	Cloudy	M. Ablard, Director.
Guéret, Normal School	28.60	726.4	30.26	768.6	35.8	2.1	90	SE			1		0			0	0	Clear	M. Rivoir, Director.
Lamballe, Normal School	30.00	762.0	30.29	769.4	32.0	0.0	99	E			1		0		E	0	0	Dense fog	M. Ollifrault, Director.
Lescar, Normal School	29.56	750.7	30.26	768.7	31.3	—0.4	88	N			1		2		NE	0	0	Slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	30.24	768.2	30.35	770.8	35.6	2.0	67	ENE			2		0			0	0	Clear	Lt. T Carré, Director.
Lyon Obs'y, Park Station	29.17	740.9	30.26	768.6	25.5	—3.6	95	NE			1		Mist			0	0	Misty	M. André, Director.
Mans, Normal School	30.03	762.7	30.35	770.9	38.5	3.6	93	ESE			1		10			0	0	Covered	M. Piboen, Director.
Marseille, Observatory	29.78	756.4	30.05	763.3	47.8	8.8	58	SE			0-1		10		SE	0.051	1.30		M. Stephan, Director.
Montlouis l'instituteur	24.72	627.8	29.95	760.8	25.2	—3.8	89	N	15.0	6.7			10	NW		0.157	4.0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.98	761.4	30.09	764.2	44.2	6.8	53	NE			4		10					Raining	M. Galzin, Director.
Nancy, Normal School	29.49	749.0	30.29	769.3	28.4	— 2.0	92	E			1	10ck		E		0	0	Covered	M. Hasse.
Nantes, Observatory	30.22	767.5	30.38	771.6	33.1	0.6	92	SE			1		7k		NE	0	0		M. Larocque, Dir.
Nice	30.04	763.0	30.07	763.8	50.4	10.2	52	N			8		10	N	N			Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.95	760.7	30.06	763.4	44.1	6.7	58	SW	3.8	1.7			10		NE	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.36	568.0			14.9	—9.5							10		NNE	0.055	1.4	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.19	741.4	30.32	770.1	31.6	—0.2		Calm			0	103				0	0	Covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.14	638.6			25.5	—3.6	66	E			3		2			0	0		M. Alluard, Director.
Rochefort, Naval Obs'y	30.23	767.8	30.25	768.6	35.6	2.0	96	NE			1		0			0	0	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.02	762.6	30.25	768.3	32.7	0.4	81	NNE			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.95	709.8	30.20	767.0	32.0	0.0	66	NE			2		10		S			Sleeting	M. Richard, Director.
Rouen, Normal School	30.26	768 7	30.35	770.9	33.1	0.6	92	ESE			1		1		E	0	0	Clear	M. Platrier, Director.
Saint Lô, Normal School	30.24	768.0	30.39	772.0	35.8	2.1	62	Calm			0		0			0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.17	766.3	30.34	770.5	29.1	—1.6	86	ENE			1		10						M. Renou, Director.
Toulouse, Observatory	29.46	748.3	30.19	766.8	34.0	1.1	94	NW			1		5			0	0	Cloudy	M. Baillaud, Director.
Tours	29.97	761.2	30.28	769.2				NNE			1		10			0	0	Covered	M. de Tastes.
Versailles, Observatory	29.82	757.3	30.31	769.8	28.4	—2.0	87	E			1		10			0	0	Covered	Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.48	748.7	30.35	770.9	27.1	—2.7	87	N			4		0			0	0		Prof. Dr. Hoh.
Berlin	30.29	769.3	30.47	773.9	34.2	1.2	74	SE			1		0			0	0		Prof. Dr. Arndt.
Breslau	30.00	761.9	30.54	775.6	25.2	—3.8	95	SE			2		10			0	0	Foggy	Royal University Obs'y.
Carlsruhe	29.94	760.5	30.40	772.2	29.5	—1.4	85	NE			4		0			0	0		Albert Senz.
Cassel	29.77	756.2	30.39	771.9	26.2	—3.2	93	NE			2		10			0	0		Dr. H. Möhl.
Frankfort on the Main	30.13	765.2	30.52	775.2	31.8	—0.1	74	NE			2		0			0	0		Physical Society.
Friedrichshafen	28.84	732.5	30.37	771.4	27.3	—2.6	94	NE			5		6	NE		0	0		Chief Telegrapher Wilhelm.
Hamburg	30.38	771.6	30.45	773.4	36.0	2.2	94	WSW			3		10			0	0		Dr. R. Kleeman.
Kiel	30.40	772.1	30.41	772.5	38.8	3.8	92	SW			2		10			0.003	0.08		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.03	762.8	30.48	774.2	28.8	—1.8	80	ESE			1		2			0	0	Hazy	Prof. Dr. Bruhns.
Magdeburg	30.24	768.0	30.48	774.2	30.9	—0.6	92	Calm			0		0			0	0	Foggy	Dr. Assmanns.
Memel	30.20	767.1	30.25	768.3	39.0	3.9	93	W			6-7		10n					Light rain	Reinbrecht & Issermann.
Munich	28.45	722.6	30.33	770.4	26.4	—3.1	91	NE			1		7	NE		0	0		Central Station.
Neufahrwasser	30.35	771.0	30.37	771.4	37.8	3.2	90	SSW			2		10			0	0	Hazy	A Lothes.
Neustadt, Palatinate	29.75	755.7	30.28	769.2	30.6	—0.8		NE			2		0			0	0		Dickmether.
Stuttgart	29.35	745.4	30.30	769.5	30.2	—1.0	74	N			1		2	SW		0	0		Prof. Dr. Schoder.
Thorn	28.75	730.3	30.30	769.6	26.2	—3.2	96	NE			2		10			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	30.39	771.8	30.41	772.4	38.3	3.5	88	WSW			3		10s			0	0		Prof. Kemlein.
Wustrow																			Prof. S. Reimer.

‖ Observation taken 20 minutes late.

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

GREEK SERIES.

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

Athens	30.01	762.3	30.41	772.3	59.4	15.2		S		0.5			10					Covered	Alexander Waurlisch.

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	30.02	762.5	30.07	763.9	72.1	21.7	36	E	7.0	3.1			7	WSW		0	0	D. clouds	
Deesa	29.51	749.5	29.99	761.8	72.1	21.7	34	N	9.5	4.2			6	W		0	0	D. clouds	
Bombay	29.96	761.0	30.00	761.9	77.9	25.5	61	NNW	16.0	7.2			6	SSW		0	0	D. clouds	
Poona, Yarrowda	28.07	712.9	29.91	759.8	82.8	28.2	27	WNW	13.0	5.8			0			0	0	Blue sky	
Belgaum	27.41	696.2	29.93	760.3	79.9	26.6	27	SSE	2.0	0.9			2	SW		0	0	D. clouds	
Lahore	29.32	744.7	30.10	764.6	59.4	15.2	60	Calm	2.8	1.2			2			0	0	Misty	
Roorkee	29.17	740.8	30.11	764.9	58.8	14.9	79	S	2.9	1.3			9			0.24	6.1		
Agra	29.43	747.4	30.01	762.3	66.9	19.4	69	E	6.7	3.0			6		E	0	0		
Nagpur	28.92	734.4	29.96	761.0	79.2	26.2	42	SSW	4.4	2.0			5	W		0.03	0.8	D. clouds	
Jubbulpore	28.61	726.8	30.00	762.0	74.3	23.5	48	Calm	4.7	2.1			5			0.01	0.3	D. clouds	
Lucknow	29.67	753.6	30.07	763.7	57.3	14.1	72	NNE	2.9	1.3			10			0.03	0.8	Overcast	
Allahabad	29.73	755.1	30.06	763.4	62.8	17.1	76	E	3.6	1.6			0			0.18	4.6	Blue sky	
Patna	29.86	758.5	30.05	763.4	62.1	16.7	89	ENE	1.0	0.4			10	ENE	ENE	0	0	Overcast	
Hazaribagh	28.00	711.3	30.10	764.6	59.6	15.3	83	ENE	6.3	2.8			9			0.19	4.8	Showery	
Cuttack	29.93	760.2	30.01	762.3	77.9	25.5	70	NE	0.4	0.2			3			0	0	D. clouds	
Calcutta, Alipore	30.03	762.7	30.05	763.3	71.0	21.7	71	NNW	1.0	0.4			7		W	0	0	D. clouds	
Goalpara	29.66	753.3	30.08	764.0	64.4	18.0	60	E	3.1	1.4			0			0	0	Blue sky	
Chittagong	29.92	760.0	30.02	762.4	68.8	20.4	55	NNE	2.8	1.2			0			0	0	Blue sky	
Sibsagar	29.80	757.0	30.16	766.0	58.5	14.7	91	NE	2.1	0.9			2			0.02	0.5	Blue sky	

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.94	760.5	30.37	771.3	43.9	6.6	56	NE	7.4	3.3			2			0	0		Prof. Giovanni Clodig.
Milan	29.80	757.0	30.35	770.8	36.0	2.2	69	NE	2.5	1.1			9			0	0		Prof. Schiaparelli.
Padua	30.21	767.2	30.32	770.1	43.2	6.2	63	NNE	8.7	3.9			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.44	747.7	30.39	771.8	36.0	2.2	79	SSW	0.7	0.3			10			0.433	11.0		Prof. P. F. Denza.
Genoa	30.04	762.9	30.24	768.0	44.6	7.0	59	N	15.4	6.9			10	S		0.094	2.4		Prof. G. M. Garibaldi.
Mondovi	28.39	721.1	30.41	772.3	32.4	0.2	96	W			4		10			0	0		Prof. D. C. Bruno.
Pesaro	30.22	767.5	30.27	768.8	42.8	6.0	92	NW	4.3	1.9			10	W		0.358	9.1		Prof. Luigi Guidi.
Florence	29.92	760.0	30.18	766.6	52.9	11.6	53	NE			6		10	E		0	0		Cav. F. Meucci.
Leghorn	30.06	763.6	30.15	765.8	48.9	9.4	74	ENE	21.0	9.4			10			0.071	1.8		Prof. P. Monte.
Rome	29.98	761.5	30.16	766.0	54.0	12.2	65	SE	15.0	6.7			6			0.295	7.5		Prof. P. S. Ferrari.
Lecce	30.04	763.1	30.30	769.7	56.7	13.7	31	SE	9.4	4.2			10	S		0.827	21.0		Prof. C. de Giorgi.
Cosenza	29.35	745.5	30.26	768.5	53.2	11.8	60	Calm	0	0			8	NNE		0.189	4.8		Prof. D. Conti.
Cagliari	29.82	757.4	30.02	762.4	55.9	13.3	51	S			4		9	SW		0.402	10.2		Prof. A. Pacinotti.
Palermo	29.95	760.7	30.20	767.1	64.0	17.8	48	ESE	3.8	1.7			3			0.220	5.6		Prof. G. Cincciatore.
Syracuse	30.15	765.7	30.19	766.8	60.3	15.7	80	NW	12.5	5.6			9	SW		0.079	2.0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R.	29.66	753.4	30.19	766.8	59.7	15.4	79	S	6.9	3.1			10k	SSW		0.142	3.6		Prof. F. Brioschi.
Stelvio	22.27	565.7			21.4	— 5.9	52	E					3			0	0		P. F. Denza.
Valdobbia	22.21	564.2			17.6	— 8.0	94	E					10						

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	30.31	769.9	30.32	770.1	35.9	2.2	85	NE	7.2	3.2			0			0	0	Clear	K. Sasaki.
Kioto	30.13	765.3	30.32	770.1	30.0	— 1.1	78						0			0	0	Clear	
Nagasaki, I. M. Obs'y	30.14	765.5	30.35	770.9	39.4	4.1	88	Calm	0	0			0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	30.20	767.1	30.27	768.8	31.7	— 0.2	66	NNE	3.5	1.6		0	0			0	0	Clear	The Staff.
Wakayama	30.26	768.6	30.32	770.1	34.5	1.4	80	NNE	3.9	1.7			0			0	0	Clear	S. Iwahashi.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.84	757.9	29.03	762.8	75.5	25.3	71	S	6.5	2.9			10			0.07	1.8	Drizzling	A. N. Figoy.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.76	755.9	30.02	762.5	69.0	20.6	65	ESE			2		10n		S	0	0	Covered	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	30.41	772.5	30.41	772.5	37.9	3.3		E			2					0	0		
Groningen	30.37	771.3	30.42	772.7	37.4	3.0		S			1					0	0		
Helder	30.41	772.3	30.41	772.3	39.7	4.3		S			1					0	0		
Hellevoetsluis	30.39	772.0	30.39	772.0	38.8	3.8	72	E			1					0	0		
Utrecht	30.39	771.8	30.43	773.0	39.0	3.9	68	SSE			1		2			0	0	Lightly cl'dy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs. p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.99	761.8	30.06	763.4	40.3	4.6	94	SSE	9.8	4.4			10			0.157	4.0		
Christiania	29.81	757.1	29.96	760.9	37.6	3.1	81	NNE	4	2			8			0	0		
Gjæsvær	28.72	729.6	28.75	730.2	25.9	— 3.4		W			7		10					Snowing	
Lodingen	29.09	738.9	29.14	740.1	25.9	— 3.4	96	WSW			8		19			0.197	5.0	Light snow	
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.60	751.7	29.75	755.7	57.2	14.0	86	ESE	9.4	4.2			8			1.260	32.0	Raining	Dr. J. A. Sampaio.
Campo Major	29.00	736.7	30.04	762.9	45.0	7.2	44	NNE	7.4	3.3			4			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.81	757.1	29.89	759.3	61.9	16.6	55	NE	3.8	1.7			9			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.72	755.0	30.10	764.5	43.0	6.1	63	NE	17.4	7.8			0			0	0		The Staff.
Ponta Delgada, Azores	29.75	755.6	29.82	757.4	58.3	14.6	84	S	21.0	9.4			10			0.272	6.9	Raining	
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinsk	29.19	741.5	30.41	772.5	— 4.4	—20.2	93	SW	18	8			0						Capt. Lasarew.
Archangel	29.14	740.2	29.16	740.7	20.8	— 6.2	93	WSW	13	6			2cs						Capt. Sseliwerstow.
Astrakhan	30.47	773.9	30.39	771.8	30.7	— 0.7	68	NW	13	6			10ks			Blank	Blank		Capt. Wisganow.
Barnaul	29.98	761.6	30.56	776.1	— 3.5	—19.7	77	SW	4	2			10						Meteorological Obs'y.
Dorpat	29.71	754.5	29.96	760.9	34.9	1.6	96	WSW	11	5			10n						Observatory.
Ekaterinburg	28.68	728.5	29.72	754.8	8.2	—13.2	91	SSE	4	2			10					Snowing	Meteorological Obs'y.
Kasan	29.40	746.8	29.68	753.9	24.3	— 4.3	94	SSW	13	6			10					Snowing	Observatory.
Kertch	30.49	774.4	30.51	774.9	34.9	1.6	85	N	7	3			9						Lagorio.
Kieff	29.72	755.0	30.40	772.2	28.6	— 1.9	76	W	11	5		0	8cs;ks						Observatory.
Krotkowo, N. 63°47', E. 48°34'																			Cand. Fatjanow.
Lugan	30.13	765.2	30.34	770.6	30.6	— 0.8	77	WSW	31	14			8						Meteorological Obs'y.
Moscow	29.30	744.3	29.87	758.8	34.2	1.2	91	SE	4	2			10s						Meteorological Obs'y.
Nertchinsk	27.92	709.2	30.61	777.4	—20.2	—29.0	86						0						Meteorological Obs'y.
Nikolaiev	30.51	774.9	30.58	776.7	29.8	— 1.2	92	W	9	4			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.80	757.0	29.89	759.2	— 9.4	—23.0	76	W	9	4			0						Lieut. Iwanow.
Nukuss	30.25	768.3	30.49	774.5	37.8	3.2	66	SSW	2	1			1ks						Dr. Dobrochotow.
Pekin, China	30.18	766.6	30.32	770.2	23.5	— 4.7	46	Calm	0	0			0						Physical Observatory.
St. Petersburg	29.74	755.3	29.75	755.7	33.8	1.0	92	WNW	16	7			6ks						Central Physical Obs'y.
Tashkend, Laboratory	28.89	733.8	30.59	776.9	26.6	— 3.	74	Calm	0	0			0						Teich, A. M.
Tiflis	28.92	734.5	30.37	771.3	49.6	9.8	36	W	9	4			2cs						Physical Observatory.
Warsaw	30.05	763.3	30.50	774.7	32.7	0.4	70	WSW	9	4		5c							Astronomical Obs'y
Wilna	29.85	758.2	30.29	769.4	35.2	1.8	93	WSW	4	2			10					Heavy cld's	Berg, Assistant.
Yeniseisk	30.21	767.4	30.54	775.7	—3.8	—19.9	85	Calm	0	0			0						M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.20	767.1	45.6	7.6	78	W			3		10k			0	0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.92	760.0	47	8.3	92	SSW			6		10			0	0		J. Youngclause.
North Unst, Shetland Isl'ds			29.74	755.4				W			7		10			Blank	Blank		Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y †‡	29.88	758.9	29.99	761.7	44.6	7.	80	NE	11.4	5.1			10			0.225	5.72	Raining	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.14	765.6	30.20	767.1	40.3	4.6	80	SE	1.2	0.54		2c	3	SW		0.008	0.2	Cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.09	688.0			30.6	— 0.8	92	E	4.9	2.18			2			0	0	Light clouds	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.74	704.5	30.03	762.8	44.4	6.9	60	NE	4.7	2.1		0	10			0	0	Covered	The Staff.
Murcia, Met. Obs'y ‡	29.78	756.4	29.94	760.4	43.7	6.5	84	NW	3.4	1.5		5	5	SE		0	0	Covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.18	741.2	30.10	764.6	44.6	7.0	63	NE	3.8	1.7			0			0	0	Clear	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.09	764.2	30.15	765.9	71.3	21.8	91	E	3.8	1.7		1c	1k	E	WSW	0.646	16.4	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.90	759.5	29.95	760.8	81.0	27.2	62	NE	4.2	9.2			1s			0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.86	758.4	29.96	761.0	44.6	7.0	55	NE	5.8	2.6		0	9		N	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.00	762.0	30.09	764.3	77.4	25.2	90	E	14.5	6.49		4ck	3kn	E	E	0.285	7.25	Cloudy	Enrique Gaden, Chief Engineer.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.26	743.3	29.30	744.3	27.7	— 2.4	100	SW			4		0			0	0		
Umea	29.50	749.3	29.55	750.6	34.5	1.4	74	W			2		9			0	0		
Hernosand	29.67	753.7	29.72	755.0	37.9	3.3	82	SW			2		5			0	0		
Stockholm	29.76	755.8	29.93	760.3	38.5	3.6	83	W			4		8			0	0		
Wisby	30.00	762.0	30.06	763.5	39.2	4.0	87	WSW			4		5			0	0		
Sub-Series.																			
Upsala	29.81	757.1	29.89	759.3	36.7	2.6	88	SW	10.1	4.5			6	NW		0	0		Nils Ekholm
SWISS SERIES.																			
Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.80	731.4	30.30	769.7	28.6	— 1.9	84	NE			3		10			0	0	Covered	The Observatory.
Zurich	28.61	726.6	30.34	770.7	26.6	— 3.0	78	E			2		5			0	0	Slightly cl'dy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. +3.7 mm.; Ther. — 3°.3 cent.; Hum. +4 per cent.																			
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.51	774.9	48.2	9.0	87	N	9	4.0			10		N	0	0		The Observatory.
Valona			30.32	770.2	58.8	14.9		W			2		10			0	0	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.32	770.1	62.1	16.7	56	NE			2		0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	30.07	763.8	30.17	766.3	5	—15.0	75	SW	2	0.9		8cs	0	NW		0	0	Fair	
Alpena, Michigan	29.53	750.0	30.23	767.8	11	—11.7	80	NW	15	6.7			8s		NW	0.02	0.5	Cloudy	
Atlanta, Georgia	29.13	739.9	30.36	771.1	27	— 2.8	88	Calm	0	0			Fog		Calm	0	0	Dense fog	
Atlantic City, New Jersey	30.24	768.1	30.26	768.6	15	— 9.4	64	W	8	3.6		Haze	Haze	Calm	Calm	0.22	5.6	Dense haze	
Augusta, Georgia																			
Baltimore, Maryland	30.25	768.3	30.30	769.6	12	—11.1	100	Calm	0	0			Fog		Calm	0.01	0.3	Dense fog	
Barnegat, New Jersey	30.20	767.1	30.22	767.6	13	—10.6	81	W	8	3.6		0	0			0.03	0.8	Clear	
Benton, Montana	27.22	691.4			27	— 2.8	76	W	18	8.0		0	0			0	0	Clear	
Bismarck, Dakota	28.34	719.8	30.19	766.8	— 2	—18.9		Calm	0	0			10s		Calm	Inap.	Inap.	Cloudy	
Boise City, Idaho	27.53	699.2	30.49	774.4	22	— 5.6	86	W	2	0.9			10s		Calm	0	0	Cloudy	
Boston, Massachusetts	29.94	760.5	30.11	764.8	17	— 8.3	51	W	5	2.2			10s		Calm	0	0	Cloudy	
Brackettville, Texas	29.00	736.6	30.11	764.8	34	1.1	61	W	6	2.7			10s		Calm	0	0	Cloudy	
Brownsville, Texas	30.01	762.2	30.05	763.3	48	8.9	100	N	8	3.6			10s		Calm	0	0	Cloudy	
Buffalo, New York	29.38	746.2	30.11	764.8	26	— 3.3	88	SW	16	7.2			10s		Calm	0	0	Cloudy	
Burlington, Vermont	29.78	756.4	30.09	764.3	18	— 7.8	68	S	11	4.9			10s		SW	0	0	Cloudy	
Cairo, Illinois	30.00	762.0	30.42	772.7	28	— 2.2	77	N	6	2.7		Haze	2s	N	Calm	0	0	Fair	
Campo, California	27.62	701.5	30.18	766.6	29	— 1.7	56	NE	8	3.6		5c	0	N		0	0	Fair	
Camp Thomas, Arizona	27.38	695.4			24	— 4.4	87	Calm				0	0			0	0	Clear	
Cape Henry, Virginia	30.31	769.9	30.33	770.4	27	— 2.8	76	SW	10	4.5		0	0			0.01	0.3	Clear	
Cape May, New Jersey	30.24	768.1	30.27	768.8	*25	— 3.9	87	W	6	2.7		0	0			0.08	2.0	Clear	
Castroville, Texas	29.31	744.5	30.04	763.0	39	3.9	82	NW	10	4.5			10s		Calm	0	0	Threatening	
Cedar Keys, Florida	30.28	769.1	30.31	769.9	39	3.9	91	E	10	4.5			10s		E	0	0	Cloudy	
Champaign, Illinois	29.47	748.5	30.36	771.1	9	—12.8	57	NW	16	7.2		0	0			0	0	Clear	
Charleston, S. Carolina	30.34	770.6	30 40	772.1	33	0.6	89	NW	3	1.3			10s		Calm	0	0	Threatening	
Charlotte, N. Carolina	29.48	748.8	30.36	771.1	25	— 3.9	100	W	3	1.3			Fog		Calm	0	0	Dense fog	
Chattanooga, Tennessee	29.55	750.6	30.43	772.9	23	— 5.0	86	Calm	0	0		2cs	Fog	W	Calm	0	0	Fair	
Cheyenne, Wyoming	24.01	609.8	29.95	760.7	11	—11.7	40	Calm	0	0		0	0			Inap.	Inap.	Clear	
Chicago, Illinois	29.55	750.6	30.32	770.1	9	—12.8	68	W	7	3.1		0	0			0	0	Clear	
Chincoteague, Virginia	30.28	769.1	30.30	769.6	28	— 2.2	100	SW	14	6.3		2k	0	SW		0.01	0.3	Clear	
Cincinnati, Ohio	29.66	753.4	30.36	771.1	26	— 3.3	88	S	3	1.3		0	Sm'e		Calm	0	0	Clear	
Cleveland, Ohio	29.46	748.3	30.23	767.8	28	— 2.2	77	SW	10	4.5			10s;fg		SW	0	0	Cloudy	
Coleman City, Texas	28.41	721.6	30.21	767.3	25	— 3.9	75	N	24	10.7			10s		Calm	0	0	Cloudy	
Columbus, Ohio	29.39	746.5	30.29	769.4	25	— 3.9	75	S	2	0.9		5k	Fog	SW	Calm	0	0	Fair	
Concho, Texas	28.26	717.8	30.06	763.5	26	— 3.3	88	N	16	7.2			10s		Calm	0	0	Cloudy	
Corsicana, Texas	29.72	754.9	30.22	767.6	36	2.2	90	N	12	5.4			10n		Calm	0.39	0.9	Light rain	
Davenport, Iowa	29.69	754.1	30.42	772.7	1	—17.2	71	W	1	0.4		0	0			0	0	Clear	
Dayton, Washington T'y	28.59	726.2	30.39	771.9	23	— 5.0	100	SW	3	1.3			10n		Calm	0.10	2.5	Light snow	
Deadwood, Dakota	25.34	643.6			7	—13.9	77	SW	2	0.9		0	0			0.01	0.3	Clear	
Decatur, Texas	29.08	738.6	30.34	770.6	27	— 2.8	100	N	14	6.3			10n		Calm	Inap.	Inap.	Light snow	
Delaware Breakwater, Del.	30.24	768.1	30.26	768.6	22	— 5.6	86	SW	12	5.4		0	0			0.01	0.3	Clear	
Denison, Texas	29.49	749.0	30.34	770.6	29	— 1.7	89	N	8	3.6			10n		Calm	0.07	1.8	Heavy snow	
Denver, Colorado	24.82	630.4	30.04	763.0	0	—17.8	70	SE	8	3.6		0	0			0.01	0.3	Clear	
Des Moines, Iowa	29.50	749.3	30.51	774.9	— 1	—18.3	68	NW	5	2.2		0	0			0	0	Clear	
Detroit, Michigan	29.48	748.8	30.18	766.6	25	— 3.9	87	W	9	4.0			10s		Calm	0	0	Cloudy	
Dodge City, Kansas	27.64	702.0	30.17	766.3	12	—11.1	61	Calm	0	0		0	0			0	0	Clear	
Dubuque, Iowa	29.62	752.3	30.41	772.4	2	—16.7	72	Calm	0	0			10s		Calm	Inap.	Inap.	Cloudy	
Duluth, Minnesota	29.64	752.8	30.43	772.9	— 8	—22.2	100	W	3	1.3		0	0			0	0	Clear	
Eagle Pass, Texas	29.39	746.5	30.16	766.1	40	4.4	65	NW	7	3.1		10cs	0	Calm		0	0	Cloudy	
Eagle Rock, Texas	25.48	647.2	30.13	765.3	14	—10.0	82	N	2	0.9			10s		Calm	0	0	Cloudy	
Eastport, Maine	29.93	760.2	30.00	762.0	14	—10.0	64	SW	6	2.7		0	8s		SW	0	0	Fair	
Edinburg, Texas					50	10.0	79	N			1		10s		N	0	0	Cloudy	
El Paso, Texas	26.32	668.5			28	— 2.2	66	SE	2	0.9			10s		Calm	0.23	5.8	Cloudy	
Erie, Pennsylvania	29.41	747.0	30.16	766.1	28	— 2.2	77	SW	10	4.5			10s		Calm	0	0	Cloudy	
Escanaba, Michigan	29.59	751.6	30.31	769.9	13	—10.6	81	NW	11	4.9			10s		Calm	0.04	1.0	Cloudy	
Florence, Arizona	28.65	727.7	30.25	768.3	34	1.1	79	E	1	0.4		0	0			0	0	Clear	
Fort Apache, New Mexico	25.07	636.8	30.51	774.9	18	— 7.8	53	NE	2	0.9		0	0			Inap.	Inap.	Clear	
Fort Assiniboine, Montana	27.16	689.8			12	—11.1	61	SW	16	7.2		0	0			0	0	Clear	
Fort Bennett, Dakota	28.60	726.4			8	—13.3	78	SE	7	3.1		5cs	0	Calm		0	0	Fair	
Fort Buford, Dakota	28.05	712.7	30.09	764.3	5	—15.0	75	Calm	0	0		10cs	0	Calm		0	0	Cloudy	
Fort Custer, Montana	26.78	680.2			4	—15.6	74	S	6	2.7		0	0			0	0	Clear	
Fort Davis, Texas	25.18	638.8	30.14	765.5	20	— 6.7	100	N	12	5.4			10n		Calm	0.08	2.0	Heavy snow	
Fort Elliott, Texas	27.45	697.2	29.97	761.2	10	—12.2	38	N	8	3.6		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.79	756.7	30.38	771.6	19	— 7.2	70	N	5	2.2			10s		Calm	0	0	Cloudy	
Fort Grant, Arizona	25.22	640.6	30.02	762.5	27	— 2.8	77	N	5	2.2		0	0			0	0	Clear	
Fort Griffin, Texas	29.00	736.6	30.38	771.6	23	— 5.0	86	N	16	7.2			10s		Calm	0	0	Cloudy	
Fort Keogh, Montana	27.54	699.5			10	—12.2	79	Calm	0	0			10s		Calm	0	0	Cloudy	
Fort Macon, North Carolina	30.34	770.6	30.35	770.9	30	— 1.1	89	N	4	1.8			10s		Calm	0	0	Cloudy	
Fort Missoula, Montana	26.99	685.5			21	— 6.1	100	Calm	0	0			10s		N	0.05	1.3	Cloudy	
Fort McKavett, Texas	27.87	707.9	29.92	760.0	27	— 2.8	88	N	10	4.5			10s			0	0	Threatening	
Fort Shaw, Montana	26.40	670.6			30	— 1.1	68	Calm	0	0		0	0			0	0	Clear	
Fort Sill, Indian Territory	29.04	737.6	30.25	768.3	17	— 8.3	67	N	12	5.4			10s		Calm	0	0	Cloudy	
Fort Stevenson, Dakota	28.27	718.0			— 3	—19.4	65	NE	4	1.8		0	0			0	0	Clear	
Fort Verde, Arizona					26	— 3.3	52	NW			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.36	720.3	30.00	762.0	33	0.6	89	N	14	6.3			10n		NE	0.03	0.8	Light rain	
Galveston, Texas	29.98	761.5	30.02	762.5	48	8.9	100	E	21	9.4			10s		E	1.44	36.6	Threatening	
Grand Haven, Michigan	29.54	750.3	30.24	768.1	22	— 5.6	72	N	5	2.2		8k	0	N		0.10	2.5	Fair	
Hatteras, North Carolina	30.32	770.1	30.34	770.6	31	— 0.6	79	NW	4	1.8		0	0			0	0	Clear	
Helena, Montana	25.94	658.9			28	— 2.2	77	SW	12	5.4		2cs	0	Calm		0	0	Fair	
Henrietta, Texas	29.29	744.0	30.30	769.6	28	— 2.2	88	N	13	5.8			10s		Calm	0	0	Cloudy	
Indianapolis, Indiana	29.46	748.3	30.30	769.6	24	— 4.4	68	NW	1	0.4		0	1s;sm'e		Calm	0	0	Clear	
Indianola, Texas	30.05	763.3	30.08	764.0	42	5.6	100	N	12	5.4			10n		Calm	0.72	18.3	Light rain	
Jacksboro, Texas	29.10	739.1	30.31	769.9	27	— 2.8	64	N	9	4.0			10s		N	0	0	Cloudy	
Jacksonville, Florida	30.32	770.1	30.37	771.4	37	2.8	81	N	6	2.7			10s		Calm	0	0	Cloudy	
Keokuk, Iowa	29.72	754.9	30.47	773.9	— 2	—16.7	72	W	5	2.2		0	0			0	0	Clear	
Key West, Florida	30.17	766.3	30.20	767.1	64	17.8	94	NE	12	5.4		0	0			0	0	Clear	
Kittyhawk, North Carolina	30.34	770.6	30.37	771.4	28	— 2.2	77	N	9	4.0		0	0			0	0	Clear	
Knoxville, Tennessee	29.35	745.5	30.45	773.4	19	— 7.2	93	Calm	0	0		0	0			0.18	4.6	Clear	
La Crosse, Wisconsin	29.57	751.1	30.41	772.4	— 3	—19.4	66	N	4	1.8		0	5s		Calm	0	0	Fair	
La Mesilla, New Mexico	26.20	665.5	30.35	770.9	26	— 3.3	75	N	4	1.8		0	0			0	0	Cloudy	
Laredo, Texas	29.68	753.9	30.03	762.7	44	6.7	92	NW	10	4.5			10s		Calm	0.04	1.0	Cloudy	
Leavenworth, Kansas	29.54	750.3	30.50	774.7	6	—14.4	76	NW	2	0.9			10s		Calm	0	0	Cloudy	
Lewiston, Idaho	29.54	750.3	30.23	767.8	31	— 0.6	89	Calm	0	0		0	0			0	0	Clear	
Little Rock, Arkansas	29.99	761.7	30.33	770.4	36	2.2	80	E	3	1.3			10s		Calm	Inap.	Inap.	Cloudy	
Los Angeles, California	29.89	759.2	30.25	768.3	38	3.3	54	N	6	2.7		0	0			0	0	Clear	
Louisville, Kentucky	29.73	755.1	30.33	770.4	27	— 2.8	76	S	3	1.3		5c	1s;sm'e	Calm		0	0	Cloudy	
Lynchburg, Virginia	29.59	751.6	30.35	770.9	12	—11.1	61	Calm	0	0		0	0			0	0	Clear	
Madison, Wisconsin	29.24	742.7	30.34	770.6	5	—15.0	75	NW	6	2.7		0	0			0.02	0.5	Clear	
Marquette, Michigan	29.54	750.3	30.32	770.1	13	—10.6	81	NW	10	4.5			10s		NW	0.15	3.8	Cloudy	
Mason, Texas	28.47	723.1	30.32	770.1	34	1.1	79	N	14	6.3		0	5s		N	0	0	Fair	
Memphis, Tennessee	30.01	762.2	30.37	771.4	33	0.6	79	SE	3	1.3		0	5s;sm'e		S;Calm	0	0	Fair	
Milwaukee, Wisconsin	29.59	749.3	30.30	769.6	16	— 8.9	83	NW	7	3.1			10n		Calm	Inap.	Inap.	Light snow	

JANUARY 3, 1881.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.22	767.6	30.30	769.6	36	2.2	80	NE	12	5.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Montgomery, Alabama	30.15	765.8	30.40	772.1	29	— 1.7	89	NE	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Morgantown, W. Virginia	29.27	743.4	30.36	771.1	17	— 8.3	83	Calm	0	0	.....	2cs	Haze	W	.....	0	0	Fair	
Moorhead, Minnesota	29.35	745.5	30.50	774.7	—25	—31.7	53	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Mt. Washington, N. H.	23.31	592.1	29.67	753.6	4	—15.6	87	NW	60	26.8	.....	.....	Fog	.....	NW	0	0	Light fog	
Nashville, Tennessee	29.82	757.4	30.39	771.9	32	0.0	79	S	1	0.4	.....	5cs	Fog	SW	Calm	0	0	Dense fog	
New Haven, Connecticut	30.03	762.7	30.15	765.8	10	—12.2	90	W	2	0.9	.....	.....	Fog	.....	.....	0	0	Dense fog	
New London, Connecticut	30.19	764.5	30.15	765.8	15	— 9.4	65	NW	1	0.4	.....	1c	0	Calm	.....	0	0	Clear	
New Orleans, Louisiana	30.[illegible]	765.3	30.20	767.1	45	7.2	84	E	16	7.2	.....	.....	10s	.....	E	0	0	Cloudy	
Newport, Rhode Island	30.07	763.8	30.13	765.3	22.5	— 5.3	66	SW	10	4.5	.....	0	0	.....	.....	0	0	Clear.	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	30.12	765.0	30.15	765.8	29	— 1.7	78	W	7	3.1	.....	0	0	.....	.....	0	0	Clear	
New York, New York	30.01	762.2	30.20	767.1	18	— 7.8	84	SW	8	3.6	.....	2cs	0	Calm	.....	0	0	Fair	
Norfolk, Virginia	30.26	768.6	30.33	770.4	26	— 3.3	75	Calm	0	0	.....	0	Fog	.....	Calm	0	0	Clear	
North Platte, Nebraska	27.24	691.9	30.11	764.8	3	—16.1	73	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Olympia, Washington T'y	30.22	767.6	30.26	768.6	43.0	6.1	92	S	10	4.5	.....	.....	10n	.....	Calm	0.17	4.3	Light rain	
Omaha, Nebraska	29.22	742.2	30.49	774.4	— 2	—18.9	84	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Oswego, New York	29.74	755.4	30.07	763.8	30	— 1.1	68	SW	12	5.4	.....	.....	10s	.....	W	0	0	Cloudy	
Pensacola, Florida	30.30	769.6	30.33	770.4	35	1.7	90	NE	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Philadelphia, Pa	30.18	766.6	30.24	768.1	15	— 9.4	82	W	4	1.8	.....	.....	Fog	.....	Calm	Inap.	Inap.	Dense fog	
Phœnix, Arizona	29.07	738.4	31.02	787.9	28	— 2.2	66	SE	1	0.4	.....	8ck	0	S	.....	0	0	Cloudy	
Pike's Peak, Colorado	17.41	442.2	29.62	752.3	—12	—24.4	50	NW	14	6.3	.....	0	0	.....	.....	0.03	0.8	Clear	
Pilot Point, Texas	29.48	748.8	30.38	771.6	30	— 1.1	78	N	9	4.0	.....	.....	10n	.....	Calm	0.04	1.0	Sleeting	
Pioche, Nevada	24.17	613.9	29.94	760.5	20	— 6.7	70	NW	2	0.9	.....	0	1s	.....	Calm	0	0	Clear	
Pittsburg, Pennsylvania	29.41	747.0	30.28	769.1	27	— 2.8	88	SW	6	2.7	.....	.....	10s	.....	SW	0	0	Cloudy	
Port Huron, Michigan	29.46	748.3	30.16	766.1	25	— 3.9	87	W	9	4.0	.....	.....	10n	.....	Calm	0.01	0.3	Light snow	
Portland, Maine	29.98	761.5	30.03	762.7	13	—10.6	62	W	7	3.1	.....	0	3s	.....	Calm	0	0	Fair	
Portland, Oregon	30.32	770.1	30.40	772.1	39	3.9	91	NW	1	0.4	.....	.....	10s	.....	SE	0.06	1.5	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	30	— 1.1	78	SW	4	1.8	.....	5k	0	W	.....	0	0	Fair	
Prescott, Arizona	24.82	630.4	30.18	766.6	19	— 7.2	85	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	30.21	767.3	30.23	767.8	50	10.0	88	NE	15	6.7	.....	2c	0	W	.....	0	0	Fair	
Red Bluff, California	30.02	762.5	30.38	771.6	40.0	4.4	82	N	3	1.3	.....	0	1s	.....	Calm	0	0	Clear	
Rio Grande City, Texas	29.89	759.2	30.12	765.0	50	10.0	88	NW	9	4.0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Rochester, New York	29.44	747.8	30.09	764.3	28	— 2.2	77	W	2	0.9	.....	.....	10s	.....	NW	0	0	Cloudy	
Roseburg, Oregon	29.83	757.7	30.42	772.7	40	4.4	91	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Sacramento, California	30.29	769.4	30.37	771.4	44	6.7	84	E	1	0.4	.....	0	0	.....	.....	0	0	Clear.	
St. Louis, Missouri	29.78	756.4	30.41	772.4	21	— 6.1	86	W	11	4.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
St. Paul, Minnesota	29.45	748.0	30.41	772.4	— 7	—21.7	80	NW	2	0.9	.....	0	5k	.....	NW	0	0	Fair	
Salt Lake City, Utah	25.89	657.6	30.22	767.6	23	— 5.0	74	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
San Antonio, Texas	29.39	746.5	30.13	765.3	38	3.3	91	NE	8	3.6	.....	.....	10s	.....	NE	0.09	2.3	Cloudy	
San Diego, California	30.19	766.8	30.26	768.8	41	5.0	57	NE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Sandusky, Ohio	29.51	749.5	30.22	767.6	30	— 1.1	78	SW	9	4.0	.....	10k	0	W	.....	Inap.	Inap.	Cloudy	
Sandy Hook, New Jersey	30.16	766.1	30.19	766.8	17	— 8.3	67	SW	12	5.4	.....	0	0	.....	.....	0	0	Clear	
San Francisco, California	30.29	769.4	30.36	771.1	49	9.4	78	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Santa Fé, New Mexico	23.20	589.3	29.74	755.4	7	—13.9	77	N	4	1.8	.....	0	0	.....	.....	0.08	2.0	Clear	
Savannah, Georgia	30.30	769.6	30.40	772.1	35	1.7	90	NE	3	1.3	.....	.....	10s	.....	Calm	0	0	Threatening	
Shreveport, Louisiana	29.98	761.5	30.24	768.1	37	2.8	100	E	6	2.7	.....	.....	10n	.....	Calm	0.42	10.7	Light rain	
Silver City, New Mexico	24.24	615.7	30.71	780.0	24	— 4.4	74	NW	8	3.6	.....	0	0	.....	.....	Inap.	Inap.	Clear.	
Smithville, North Carolina	30.34	770.6	30.38	771.6	30	— 1.1	100	Calm	0	0	.....	.....	Fog	.....	.....	0	0	Dense fog	
Socorro, New Mexico	25.32	643.1	29.39	746.5	10	—12.2	58	NW	1	0.4	.....	0	0	.....	.....	0.22	5.6	Clear	
Springfield, Illinois	29.68	753.9	30.44	773.2	10	—12.2	68	NW	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Springfield, Massachusetts	29.99	761.7	30.14	765.5	4	—15.6	48	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Stockton, Texas	27.10	688.3	30.10	764.5	23	— 5.0	100	N	8	3.6	.....	.....	10s	.....	Calm	0.03	0.8	Threatening	
St. Vincent, Minnesota	29.43	747.5	30.38	771.6	—21	—29.4	100	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Thatcher's Island, Mass	30.03	762.7	30.09	764.3	19	— 7.2	69	W	15	6.7	.....	.....	10s	.....	W	0	0	Cloudy	
Toledo, Ohio	29.48	748.8	30.21	767.3	30	— 1.1	89	SW	10	4.5	.....	.....	10ks	.....	SW	0	0	Cloudy	
Tucson, Arizona	27.67	702.8	30.22	767.6	30	— 1.1	68	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	30.10	764.5	30.64	778.2	23.5	— 4.7	80	W	6	2.7	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
Uvalde, Texas	29.17	740.9	30.04	763.0	37	2.8	90	N	6	2.7	.....	.....	10n	.....	Calm	Inap.	Inap.	Light rain	
Vicksburg, Mississippi	30.06	763.5	30.33	770.4	38	3.3	91	E	8	3.6	.....	.....	10s	.....	Calm	0.22	5.6	Cloudy	
Visalia, California	29.95	760.7	30.34	770.6	43.5	6.4	96	SE	5	2.2	.....	.....	Fog	.....	Calm	0	0	Dense fog	
Washington, D. C.	30.18	766.6	30.31	769.9	3	—16.1	87	W	2	0.9	.....	2cs	Fog	Calm	Calm	Inap.	Inap.	Fair	
Wickenburg, Arizona	.....	.....	.....	.....	29	— 1.7	69	NW	.....	.....	1	2c	2s	Calm	Calm	0	0	Fair	
Wilmington, N. Carolina	30.33	770.4	30.38	771.6	30	— 1.1	89	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Winnemucca, Nevada	25.93	658.6	30.29	769.4	26	— 3.3	75	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass	30.08	764.0	30.12	765.0	27	— 2.8	76	W	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Yankton, Dakota	29.05	737.9	30.55	776.0	— 7	—21.7	59	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Yuma, Arizona	30.09	764.3	30.24	768.1	51	10.6	28	N	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	21.97	558.0	.....	.....	53.5	11.9	79	Calm	0	0	.....	2cs;k	0	.....	.....	0	0	Fair	Thomas Herran.
Havana, Cuba, W. I.	30.12	765.0	30.17	766.3	73	22.8	85	Calm	0	0	.....	0	4ks	.....	Calm	0.97	24.6	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	28.99	736.3	29.05	737.9	11 1	—11.6	.....	W	.....	.....	6	.....	5	.....	.....	0	0	.....	
Kingston, Jamaica, W. I.	30.06	763.5	30.07	763.8	67.3	19.6	95	Calm	0	0	.....	0	2ks	.....	.....	0	0	Fine	Maxwell Hall.
Navassa, W. I.	29.97	761.2	30.05	763.3	77	25.0	73	NE	9	4.0	.....	5k	2s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	79	26.1	87	E	.....	.....	3	4c	5k	E	.....	0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.92	760.0	79	26.1	85	Calm	.....	.....	0	0	2s	.....	Calm	0	0	Hazy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	82	28	.....	ESE	.....	.....	4	0	1ks	.....	ESE	0.020	0.5	.....	Earl Flint.
Santiago de Cuba, W. I.	30.10	764.5	30.12	765.0	75	23.9	81	NE	.....	.....	.....	0	8ks	.....	.....	0 18	4.6	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	29.01	736.8	29.07	738.4	3.2	—16	.....	W	.....	.....	2	.....	0	.....	.....	0	0	.....	
York Factory, B. A.	29.64	752.8	29.69	754.1	—22.0	—30.0	.....	NW	16	7.2	.....	2k	4s	NW	NW	0	0	Cloudy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandre																			Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda																			Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.95	760.7	79	26.1	70	N			3		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Callao Bay, Peru	30.00	762.0	66.5	19.2	97	Calm			0		9							Foggy	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 26° 10′, E. 119° 55′	30.32	770.1	54.1	12.3	78	NNE			3		10							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 14° 41′, E. 42° 18′	29.99	761.7	74	23.3	90	SSE			3-4		7	S				3	S	Squally	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 38° 42′, W. 9° 00′	30.09	764.3	47	8.3	70	NE			4-5		0							Blue sky	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda, W. I.	30.11	764.8	65	18.3	74	NW			5		7	NNW						Misty	Capt. J. A. Fisher.
H. M. S. Orontes, N. 36° 02′, E. 14° 27′	30.26	768.6	63.5	17.5	90	NE			2		7	NE				4	E	D. clouds	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Seraphis, N. 39° 38′, W. 9° 44′	30.20	767.1	64	17.8	55	SE			2-3		0					1	SE	Blue sky	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark																			Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	29.94	760.5	75.7	24.3	88	SE			1		8			0	0	1	SE	D. clouds	S. C da Silva Costa, Comd't.
Sado, Mossamedes, Benguela	29.91	759.7	74.8	23.8	74	WNW			2		4			0	0	1	NW	D. clouds	G. A de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.25	768.3	46	7.8	51	NE	10	4.5	.....	.....	10	.....	.....	0.79	20.1	.....	.....	Stormy	.....
N. Yard, Portsmouth, N. H.	30.04	763.0	15	— 9.4	?	SW	7	3.1	.....	.....	8	.....	SW	0	0	.....	.....	Cloudy	.....
Naval Hospital, Yokohama, Japan	30.13	765.3	34	1.1	71	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	Clear.	.....
Adams, Callao Peru	30.02	762.5	68	20.0	90	SW	.....	.....	0–1	.....	10	.....	SW	.....	.....	Mod.	SW	Cloudy	.....
Alaska, N. Yard, Mare I'd, Cal*	30.31	769.9	48	8.9	78	E	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	Cle r.	.....
Alert, Hong-Kong, China	30.10	764.5	63	17.2	67	Calm	.....	.....	0	.....	0	.....	.....	0	0	Sm'h	.....	Hazy	.....
Alliance, Off Pensacola, Fla	30.30	769.6	40	4.4	91	NE	.....	.....	3	.....	10	.....	.....	F	og	Sm'h	.....	Cloudy	.....
Ashuelot, Tientsin, China	30.37	771.4	26	— 3.3	?	SSW	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	Clear.	.....
Colorado, New York, N. Y.	30.16	766.1	20	— 6.7	85	SW	3	1.3	.....	.....	2	.....	Calm	0	0	.....	.....	Fair	.....
Constitution, N. Yard, League I'd., Pa	.....	.....	10	—12.2	.....	W	1	0.4	.....	.....	2	.....	.....	.....	.....	.....	.....	Clear	.....
Franklin, Off N. Yard, Norfolk, Va	30.26	768.6	25	— 3.9	.....	SSW	6	2.7	.....	.....	0	.....	.....	0	0	.....	.....	Clear	.....
Galena, N. 36° 37′, W. 35° 36′	29.78	756.4	61	16.1	77	N	.....	.....	3	.....	5	.....	.....	.....	.....	Sm'h	.....	Fair	.....
Independence, N. Yard, Mare I'd, Cal	30.31	769.9	45	7.2	84	ESE	6.0	2.7	.....	.....	0	.....	.....	0	0	.....	.....	Clear.	.....
Jamestown, Sitka, Alaska*	29.40	746.7	43	6.1	92	ESE	.....	.....	6	.....	10	.....	.....	0.06	1.5	.....	.....	Squally	.....
Kearsarge, Curacoa, W. I.	30.01	762.2	77	25.0	86	E	.....	.....	1	.....	2	.....	.....	.....	.....	Sm'h	.....	Fair.	.....
Lackawanna, Ancon, Peru†	30.14	765.5	70	21.1	90	W	.....	.....	0–1	.....	10	.....	W	0	0	.....	.....	Cloudy	.....
Marion, S. 52° 26′, W. 68° 25′	29.97	761.2	50	10.0	72	SSW	.....	.....	4	.....	2	.....	WSW	Bla	nk	Mod.	SSW	Fair	.....
Michigan, Erie, Pennsylvania	30.12	765.0	30	— 1.1	.....	SW	.....	.....	4	.....	10	.....	SW	.....	.....	.....	.....	Cloudy	.....
Monocacy, Shanghai, China	30.42	772.4	38	3.3	81	ENE	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	Clear	.....
New Hampshire, Port Royal, S. C.	30.33	770.4	35	1.7	100	NNW	4	1.8	.....	.....	10	.....	NNW	0	0	.....	.....	Overcast	.....
Nepsic, Villafranca, France	30.04	763.0	56	13.3	51	NNW	.....	.....	4	.....	10	.....	.....	.....	.....	Sm'h	.....	Raining	.....
Onward, Chimbote Bay, Peru†	29.95	760.7	73	22.8	72	SSE	.....	.....	5	.....	5	.....	N	.....	.....	Long	N;W	Fair	.....
Palos, Shanghai, China	30.44	773.2	37	2.8	90	ENE	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	Clear	.....
Passaic, Washington, D. C.	30.32	770.1	3	—16.1	73	NE	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	Clear.	.....
Pensacola, N. 36° 11′ W. 122° 20′	30.29	769.4	55	12.8	80	SE	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	Clear	.....
Portsmouth, Washington, D. C.	30.27	768.8	5	—15.0	100	Calm	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	Foggy	.....
Powhatan, New York, N. Y.	30.21	767.3	27	— 2.8	.....	WNW	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	Clear	.....
Quinnebaug, Alexandria, Egypt	30.33	770.4	67	19.4	60	NE	.....	.....	2	.....	2	.....	N	.....	.....	Sm'h	.....	Fair	.....
Richmond, Shanghai, China	30.44	773.2	40	4.4	82	ENE	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	Clear.	.....
Saratoga, Baltimore, Md	30.26	768.6	11	—11.7	100	Calm	.....	.....	0	.....	.....	.....	.....	0	0	.....	.....	Misty	.....
Shenandoah, Montevideo, Urugnay*	29.83	757.7	72	22.2	95	SE	.....	.....	3	.....	10	.....	.....	.....	.....	Mod.	SE	Cloudy	.....
St. Louis, League Island, Pa	30.25	768.3	7	—13.9	100	W	4	1.8	.....	.....	0	.....	.....	0	0	.....	.....	Clear	.....
Swatara, N. 34° 45′, E. 139° —...†	30.14	765.5	51	10.6	72	NW	.....	.....	1	.....	2	.....	.....	.....	.....	Mod.	N	Blue sky	.....
Tennessee, N. 10° 42′, W. 61° 46′	30.01	762.2	81	27.2	74	ENE	6	2.7	.....	.....	5	.....	Calm	0	0	Sm'h	.....	Fair	.....
Trenton, Villafranca, France*	30.03	762.7	55	12.8	50	N	.....	.....	4–6	.....	10	.....	.....	2 h'rs	h'vy	.....	.....	Rainy	.....
Vandalia, N. Yard, New York	30.20	767.1	23	— 5.0	85	W	.....	.....	2	.....	1	.....	Calm	.....	.....	.....	.....	Clear	.....
Wabash, Boston, Massachusetts	30.13	765.3	12	—11.1	80	WSW	2	0.9	.....	.....	2	.....	W	0	0	.....	.....	Hazy	.....
Wachusetts, Panama, Panama	29.54	750.3	78	25.6	85	NW	.....	.....	3	.....	2	.....	N	Lt. s	hwr's	Sm'h	.....	Clear	.....
Wyoming, Naples, Italy	30.16	766.1	62	16.7	77	SSE	.....	.....	2	.....	10	.....	S	.....	.....	Sm'h	.....	Overcast	.....

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡ S. 24° 34′, E. 59° 39′	30.01	762.2	81.2	27.3	67	SSW			1		5							D. clouds	Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Barque Chin Yang, ‡ N. 37° 12′, W. 17° 05′	30.01	762.2	58.7	14.8	61	ESE			2		10							Overcast	Capt. H. Youlden.
City of Agra, ‡ S. 54° 41′, W. 148° 30′	30.10	764.5	45.5	7.5	92	N			4		10							Overcast	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Coppename, N. 43° 03′, W. 14° 57′	30.12	765.0	54.8	12.7	73	SE			4		7							Showery	Capt. A. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡ S. 23° 00′, E. 75° 00′	30.05	763.3	76	24.4	73	SE			5		8							Showery	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡ N. 42° 01′, W. 62° 14′	30.00	762.0	29	— 1.7	89	N			5		9					5	N	Overcast	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross, N. 50° 40′, W. 11° 36′	30.19	766.8	54.2	12.3	97	SSE			5		4					6	W	D. clouds	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ S. 2° 40′, E. 89° 30′	29.80	756.9	79.5	26.4	90	WSW			7		8							Showery	Capt. J. Raeburn, R. N. R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland ‡																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shuh Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 12° 25′, E. 44° 21′	29.94	760.5	81.0	27.2	81	ESE			4		8							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia, N. 41° 23′, W. 61° 16′	30.03	762.7	38	3.3	90	NW			6		10		WNW	Rain	&sleet	Smooth	NW	Dull	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Britanic, N. 40° 48′, W. 66° 24′ †	30.10	764.5	40	4.4		WNW			3		1		NW			Smooth		Blue sky	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, N. 50° 41′, W. 30° 42′ †	29.89	759.2	50	10.0		SW			4		5?		SW	Showers		Mod.	W	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, N. 50° 09′, W. 11° 24′	30.18	766.6	52.7	11.5		S			3		10		S	0	0	Mod.	SSW	Fair	Capt. H. Baur.
S. S. Köln																			Capt. F. Pfeiffer.
S. S. Leipzig																			Capt. G. Meyer.
S. S. Ohio																			
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡ S. 26° 19′, W. 40° 56′ ...†	30.22	767.5	78.8	26	84	NE			3		4							Squally	Capt. Albert Fredholm.
Ship Peru, ‡ N. 16° 44′, W. 71° 39′	30.02	762.4	78.3	25.7	90	NE			6		6kn							Squally	Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. Liverpool, England	30.22	767.6	46	7.8	92	SSE			2		10		S					Cloudy	Capt. J. W. Shackford.
S. S. Indiana, ‡ Delaware Bay, Del.†	30.12	765.0	22	— 5.6	72	NW			3		2		W	0	0	Sm'h	NW	Fine	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 44° 58′, W. 51° 53′...*†	29.81	757.2	31	— 0.6	89	Calm			0		10			0	0	Sm'll	NW	Cloudy	Wm. Shakford, 1st Off'r.
S. S. Pennsylvania, ‡ Philadelphia, Pa.†	30.17	766.3	20	— 6.7		W			2		2		W	0	0			Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 36° 50′, W. 169° 12′ ....†	29.49	749.0	60	15.6	82	SSE			5		10			Rain		High	SW	Overcast	Capt. H. Davison.
S. S. Gaelic, N. 44° 47′, W. 159° 57′..*†	29.71	754.6	52	11.1	66	SSE			5		10		S			Sl't	SE	Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 29° 40′, E. 130° 15′	30.35	770.9	62	16.7	83	N			3		5		NNE	0	0	Sl't	E	Fine	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia, N. 44° 45′, W. 124° 15′....†	30.33	770.4	50	10.0	79	NE			1		10		NNW			Sl't	NNW	Overcast	Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon.†	30.33	770.4	39.0	3.9	91	Calm			0		10							Cloudy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, Santa Barbara, Cal.....†	30.20	767.1	46	7.8	84	NE			1		0					Mod.	W	Clear	Capt. J. N. Ingalls.
S. S. Idaho																			C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. State of California, San Francisco, Cal.....†	30.36	771.1	49	9.4	85	Calm			0		2		N					Clear	Capt. G. Debney.
S. S. Victoria, N. 42° 25′, W. 124° 30′....†	30.36	771.1	51	10.6	93	N			2		0					L'ge	NW	Clear	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, N. 11° 30′, W. 163° —′	29.90	759.4	80	26.7	82	NE			4		1		NE	0	0	Mod.	NE	Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking																			Capt. G. G. Berry.
S. S. City of Sidney, S. 35° 09′, E. 174° 30′.....†	29.66	753.4	62	16.7	72	W			3		2		W	0	0	Sm'h		Clear	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 30° 15′, E 128° 30′.....†	30.44	773.2	55	12.8	68	NW			1		0			0	0	Sm'h	WSW	Clear	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ Panama, Panama.....†	29.95	760.7	76	24.4	86	NW			2		2		NW	0	0			Clear	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada																			
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland.....‡																			Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland.....‡																			Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 47° 42′, W. 33° 14′	29.87	758.7				SE			6		8		SE	Showers		Mod.	SE	Cloudy	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Brunswick, Ga	30.33	770.4	68	3.3	90	N	2	0.9		0	Fog			0	0			Foggy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, ‡ Arroyo, P. R.†	30.29	769.4	78	25.6		ENE			4		2		E	Showers		Sm'h		Squally	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va.†	30.27	768.8	24	— 4.4	87	NW	1	0.4			0			0	0			Clear	
Sch'r Hattie V. Kelsey																			Capt. J. L. Randall.
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Spain.....†..	30.10	764.5	44	6.7	100	NNE			6		0			0	0			Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

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

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

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

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

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

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BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 4, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.85	758.2	58.8	14.9	60	E			3		2			0	0	Fair	Dr. Ollive.
Nemours			29.89	759.3	57.6	14.2	75	E			0		0			0	0	Clear	Raynard.
Algiers			29.88	759.0	50.4	10.2	87	WSW			3		10			0.732	18.6	Covered	Nicolas.
La Calle			30.01	762.2	64.2	17.9	53	SSW			6		7			0	0	Very cloudy	Fonfrède.
Tunis			30.08	763.9															Jacques.
Sfax			30.18	766.5															Gau.
Saida			29.91	759.8	39.4	4.1	97	NE			0		7			0	0	Very cloudy	Dumas.
Tebessa			30.11	764.9	60.1	15.6	48	S			4		5			0	0	Cloudy	Watrin.
Gerville																			Lonchamp.
Laghouat			30.04	763.1	66.2	19.0	40	S			6		4			0	0	Cloudy	Herbin.
Biskra			30.09	764.3	56.6	14.8	76	E			4		10			0	0	Covered	Baudasse.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.89	759.2	29.98	761.5	61.5	16.4	90	W	6	2.7			1			0	0	Very fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			30.30	769.6	69	20.6		NE			3		5ks			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.75	755.6	30.33	770.3	36.9	2.7	93	S			2		10			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.47	748.4	30.28	769.1	28.8	— 1.8	94	NNW	1.8	0.8			2			0.008	0.2		Dr. Wiersbicki.
Eperies	29.37	746.0	30.30	769.5	34.9	1.6	78	Calm			0		108			0	0		Julius Mikolik.
Gratz‡	28.95	735.3	30.26	768.5	35.1	1.7	84	SSW			2		0			0	0		Andreas Rospini.
Hermannstadt	28.87	733.4	30.37	771.5	36.7	2.6	91	ESE			2		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.76	730.4	30.17	766.4	29.8	— 1.2	98	Calm			0		10			0	0		The Staff.
Lemberg	29.26	743.1	30.30	769.5	34.2	1.2	85	S			2		5			0	0		Dr. T. Stanecki.
Pola	30.09	764.3	30.21	767.2	53.4	11.9	92	E			3		10			0.394	10.0		I. R. HydrographicOffice
Szathmar	29.91	759.6	30.36	771.1	40.6	4.8	90	SE			1		10			0	0	Light rain	Beicht Petér, S. J.
Szegedin	30.04	763.0	30.33	770.4	40.6	4.8	90	Calm			0		10			0	0		Karl Stancel.
Trieste	30.16	766.1	30.26	768.7	50.0	10.0	87	Calm			0		10			0.480	12.2	Raining	P. Busin.
Vienna	29.45	748.1	30.20	767.1	36.1	2.3	87	SSE			2		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 11, 1882.

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

BRITISH SERIES.

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

Aberdeen	30.22	767.6	30.32	770.1	39.6	4.2	79	W	6	2.7			1			0	0	Misty	W. Boswell.
Armagh, Observatory	30.09	764.3	30.33	770.4	43.0	6.1	97	SSW	1	0.9			10					Foggy	S. Call.
Bidston, Liverpool Obs'y			30.30	769.6	45.0	7.2	85	WSW	4	1.8			10					Raining	John Hartnup.
Bolton, Sharples	29.73	755.1	30.27	768.8	43.5	6.4	98	WSW	3	1.3			10					Overcast	Thomas Mackereth.
Bradford, Yorkshire	29.86	758.4	30.26	768.6	44.8	7.1	90	SE			1		7			0	0	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	78.0	25.6	86	NE			3		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			30.30	769.6	41.0	5.0	91	N			0		10					Foggy	John McLaren.
Chatham, School M. E.	30.14	765.5	30.27	768.8	39.1	3.9	91	NE			1		0					Gloomy?	Cpl. Gwinn, R. E.
Falmouth, Observatory	30.04	763.0	30.28	769.1	41.9	5.5	75	NNE			2		10					Foggy	The Staff.
Fort Napier, Natal	27.39	695.7	29.61	752.1	85.4	29.7	95	NE			1		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.58	751.3	29.81	757.2	88	31.1	84	SW			0		3					Blue sky	C. E. Keane.
Galway, Queen's College			30.25	768.3	47	8.3	85	SW			2		4					Blue sky	J. O'Donaghadue.
Gibraltar, Mediterranean	29.93	760.2	29.98	761.5	56.6	13.7	94	NW			3		0					Blue sky	2nd Cpl. C. Baldwin.
Glasgow, Observatory	30.11	764.8	30.31	769.9	41.1	5.1	97	SW			1							Dense fog	D. G. MacLean.
Greenwich, Royal Obs'y	30.08	764.0	30.26	768.6	41.2	5.1	82	NE			1		10					Overcast	The Staff.
Guernsey	29.94	760.5	30.16	766.1	45.0	7.2	73	NE			3		7					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.22	767.6	30.26	768.6	41.7	5.4	78	E	7	3.1			10					Misty	The Met'g'l Office.
Leicester, Museum	29.96	761.0	30.22	767.6	42.8	6.0	84	N			1		10					Misty	J. E. Carryer.
Malta, Mediterranean	30.12	765.0	30.19	766.8	66.0	18.9	74	SE			2		3					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			30.10	764.5	73.5	23.1	84	NE			3		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.75	755.6	30.29	769.4	41.9	5.5	91	NNE			1-2		9					Light fog	Robert Pate.
Oxford, Radcliffe Obs'y	30.02	762.5	30.28	769.1	40	4.4	91	NE			2		10					Misty	The Staff.
Plymouth	30.18	766.6	30.26	768.6	41.6	5.3	78	NW			1		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.26	768.6	43.9	6.6	92	W	16	7.2			0					Blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.31	769.9	30.38	771.6	49.4	9.7	89	NE			2		10					Drizzling	Serg't W. H. Lyne.
Sheffield	29.98	761.5	30.27	768.8	45.9	7.7	85	NNW			1		10			0	0	Misty	W. F. Cooper.
Silloth Rectory	30.30	769.6	30.33	770.4	43.4	6.3	82	Calm			0		4			0	0	D. clouds	Rev. F. Redford, A. M.
Stonyhurst, Observatory			30.29	769.4	43.3	6.3	92	N	1	0.4			10					Overcast	Rev. S. J. Perry.
Strathfield Turgiss	30.04	763.0	30.26	768.6	41.3	5.2	82	NE			0-1		10					Overcast	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	30.20	767.1	30.28	769.1	43	6.1	75	NE			2		10					Gloomy	W. Newcombe.
Valencia, Observatory	30.28	769.1	30.31	769.9	46.4	8.0	84	NE	2	0.9			4					Misty	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B	30.22	767.6	30.26	768.6	—13.5	—25.3		Calm	0	0		0	0			0	0	Clear	Hon. J. Ferguson.
Chatham, N. B.*	30.20	767.1	30.27	758.8	—20	—28.9	93	Calm	0	0		0	0			0	0	Clear	G. A. Blair.
Charlottetown, P. E. Island	30.15	765.8	30.19	766.8	5	—15.0	98	NW	6	2.7			10s			0.002	0.05	Cloudy	H. J. Cundall, C. E.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario	30.13	765.3	30.36	771.1	—21.0	—29.4	100	W			1		10s			0.10	2.5	Cloudy	James Smith, M. A.
Dalhousie, N. B.	30.25	768.3	30.29	769.4	— 6.0	—21.1		Calm			0	0	0			0	0	Clear	H. A. Johnson.
Father Point, Quebec*	30.28	769.1	30.31	769.9	— 3	—19.4	87	SW	5	2.2			10n		Calm	0	0	Threatening	J. McWilliams.
Fredericton, N. B.	30.28	769.1	30.35	770.9	—10.9	—23.8	100	NW	2	0.9		0	0			0	0	Clear	Prof. Harrison.
Fort Garry, Manitoba*	28.71	729.2	29.62	752.3	2	—16.7	97	SW	14	6.3			10n		S	0	0	Cloudy	James Stewart.
Granton, Ontario	29.06	738.1	30.27	768.8	11.0	—11.7	100	NE			1		10n			0	0	Cloudy	James Grant.
Halifax, N. S.*	30.09	764.3	30.24	768.1	6	—14.4	90	NW	12	5.4		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario	29.84	757.9	30.27	768.8	12.7	—10.7	83	NW			1		10ks			0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.97	761.2	30.36	771.1	— 3	—19.4	72	NE	6	2.7		10cs	0		Calm	0.06	1.5	Fair	S. Woods, M. A.
Little Glace Bay, N. S.	30.04	763.0	30.08	764.0	12.8	—10.7	92	NE	4	1.8		8k	0		N	0	0	Cloudy	C. H. Rigby.
Montreal, Quebec*	30.16	766.1	30.39	771.9	— 7	—21.7	92	SE	8	3.6		0	2s			0.03	0.8	Fair	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A.
Parry Sound, Ontario*	29.48	748.8	30.27	768.8	— 3	—19.4	66	E	10	4.5		5k	5ks		SW	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.50	749.3	30.35	770.9	0.4	—17.6	55	E			1		10ks			0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.49	749.0	30.25	768.3	14	—10.0	93	Calm	0	0		10k	0		W	0.02	0.5	Cloudy	H. Morgan.
Port Stanley, Ontario	29.53	750.0	30.24	768.1	14	—10.0	85	E	4	1.8			10n		E	Inap.	Inap.	Cloudy	M. Payne.
Quebec, Quebec*	30.00	762.0	30.38	771.6	—13	—25.0	49	NW			1	0	0			0	0	Clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.82	757.4	30.37	771.4	—27	—32.8	100	Calm	0	0		0	0			0	0	Clear	W. H. McIntyre.
St. Andrews	30.27	768.8	30.32	770.1	— 3	—19.4	79	NW	2	0.9		0	0			Inap.	Inap.	Clear	
St. John's, N. B.	30.14	765.5	30.33	770.4	— 3.0	—19.4	100	NW	4	1.8		0	0			0	0	Clear	G. Murdock, C. E.
Saugeen, Ontario*	29.43	747.5	30.22	767.6	8	—13.3	91	S	14	6.3			10s			0.03	0.8	Cloudy	K. Stewart.
Stratford, Ontario	28.83	732.3	30.24	768.1	8.9	—12.8	96	Calm	0	0			10s			0.02	0.5	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	30.04	763.0	30.08	764.0	14	—10.0	84	NW	12	5.4		0	8ks		NW	0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.85	758.2	30.27	768.8	13	—10.6	91	N	5	2.2			10n			Inap.	Inap.	Cloudy	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario	29.07	738.4	30.24	768.1	12.6	—10.8	94	E	4	1.8			10s			0	0	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*	30.16	766.1	30.23	767.8	11	—11.7	60	NE	2	0.9		2k	0		NE	0.14	3.6	Fair	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. John's, Newfoundland	29.78	756.4	29.96	761.0	19	— 7.2	100	NW	2	0.9		0	0			0	0	Fair	John Delany.
St. Pierre, N. F.			29.77	756.1	17.6	— 8.0		NW			2					0	0		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.89	759.2	29.93	760.2	65.0	18.3	94	NNW	10.4	4.6		4	4k;ks			0.32	8.1		The Staff, for D. Gill.
Cape St. Francis Lt. House	29.74	755.4			70.8	21.3	76	SW	15.3	6.8			1s			0.020	0.51	Fine	John Duthie.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.27	768.8	30.29	769.4	40.6	4.8	87	NE	3.1	1.4		9ck				Inap.	Inap.	Covered	M. Marc Dechevrens, S.J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.19	665.2	29.91	759.7	57.2	14.0	78	NE			2					0	0	Clear.	Frederico Maison.

DANISH SERIES.

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

Copenhagen	30.08	763.9	30.12	765.1	39.2	4.0	85	W	16	7			10					Foggy	
Faröe	30.20	767.1	30.22	767.6	40.8	4.9	87	WSW			4		3						
Godthaab, Greenland	29.08	738.6	29.12	739.7	18.1	—7.7	66	SSE			2		7						
Stykkisholm, Iceland	29.70	754.3	29.74	755.4	[illegible]	1.6	94	S			7		10					Raining	
Thorshavn	30.03	762.7	30.06	763.6	41.7	5.4	83	Calm	0	0			5						
Vestervig	30.02	762.5	30.11	764.9	41.5	5.3	96	W			2		1						

FRENCH SERIES.

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

Agen, Normal School	29.38	746.2	30.06	763.5	33.1	0.6	78	NW			1		8n			0	0	Al. covered.	M. Labroue, Director.
Alençon	29.69	754.0	30.24	768.0	29.5	—1.4	92	NE			1		8kn		SW	0	0	Very cloudy	M. Nicot, Director.
Arras, Engineer School	29.91	759.7	30.18	766.6	31.8	—0.1	89	Calm	0	0									M. Klein, Commandant.
Avignon, Normal School	29.90	759.5	29.98	761.5	34.2	1.2	96	N			2		10		ESE	0.453	11.5	Raining	M. Giraud, Director.
Bar-sur-Seine	29.54	750.3	30.13	765.3	28.4	—2.0	75	E			1		10			0	0	Covered	M. Saillard, Director.
Beauvais; Normal School	29.92	759.9	30.20	767.1	28.4	—2	92	NE			1		0			0	0	Clear	M. Frère Eugene Marie.
Besançon, Normal School	29.14	740.2	30.09	764.2	29.5	—1.4	75	NE			4		10n		E	0	0	Covered	M. Gobin, Director.
Bordeaux, Observatory	29.72	755.0	30.00	761.9	35.1	1.7	83	S			1		2		NE	0	0	Slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.50	749.3	30.09	764.3	27.7	—2.4	100	N			3		10n		N	0	0	Covered	M. Postel, Director.
Brest, Naval Observatory	29.95	760.8	30.20	767.0	41.0	5.0	74	NNE			1		6		N	0	0		M. de Rermaree, Dir.
Caen, Normal School	30.06	763.6	30.16	766.0	34.9	1.6	96	Calm			0								M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.85	758.1	30.18	766.6	29.1	—1.6		WSW			1		10			0	0	Covered	M. Jadot, Director.
Charleville, Normal School																			M. Baumier, Director.
Clermont-Ferrand Obs'y	28.67	728.2	30.11	764.9	25.7	—3.5	98	NE			1		10			0	0	Foggy	M. Alluard, Director.
Cluny, Normal School	29.22	742.2	30.10	764.6	27.7	—2.4	57	N			1		10		N	0	0	Covered	M. de Villemontée, Dir.
Commercy, Normal School	29.24	742.6	30.19	766.9	26.6	—3	91	E			4		k		E	0	0		Dr. Coulet, Director.
Gap, Normal School	27.43	696.6	29.98	761.4	47.5	8.6	34	NE			4		nk		S	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.85	732.7	29.99	761.7	48.7	9.3	92	NE			1		8		SE	0.209	5.3	Raining	M. Kina, Director.
Grenoble, Normal School	29.30	744.1	30.11	764.7	31.1	—0.5		ESE			1		ckn			0	0		M. Ablard, Director.
Guéret, Normal School	28.43	722.0	30.11	764.7	24.8	—1	91	SE			1		10		NW	0	0	Covered	M. Rivoir, Director.
Lamballe, Normal School	29.86	758.5	30.15	765.8	34.7	1.5	96	SE			1		0		SE	0	0	Light fog	M. Olliriault, Director.
Lescar, Normal School	29.41	747.1	30.11	764.8	39.2	4	83	N					10			0	0	Covered	M Chauvin, Director.
Lorient, Naval Observatory	30.04	762.9	30.14	765.5	39.9	4.4	52	NNE			4		0			0	0	Clear	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.99	736.4	30.08	763.9	27.9	—2.3	85	N			1		Mist		N	0	0	Clear	M. André, Director.
Mans, Normal School	29.78	756.4	30.10	764.6	31.1	—0.5	96	NE			1		10			0	0	Misty	M. Piboon, Director.
Marseille, Observatory	29.65	753.0	29.92	759.9	53.2	11.8	85	E			1		9		SE	0.406	10.30		M. Stephan, Director.
Montlouis l'Instituteur	24.60	624.9	29.84	757.9	27.9	—2.3	90	N	5.6	2.5			9	W		0.235	6.0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.85	758.3	29.97	761.1	38.7	3.7	93	N			4		10			0.535	13.6	Raining	M. Galizin, Director.
Nancy, Normal School	29.33	745.0	30.13	765.4	26.6	—3.0	92	N			1		10			0	0	Foggy	M. Husso.
Nantes, Observatory	30.04	762.9	30.20	767.0	36.3	2.4	93	NE			2		10			0	0	Gloomy	M. Larocque, Dir.
Nice	29.89	759.3	29.93	760.2	56.8	13.8	60	E			4		10	S	E	0.429	10.9	Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.89	759.1	29.99	761.8	42.4	5.8	72	SW	13.0	5.8			9		NE	0.709	18.0		Dr. Fines.
Pic-du-Midi, Plantade	22.27	595.7			20.7	—6.3							10		NE	0.165	4.2	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.00	736.5	30.13	765.2	29.3	—1.5		Calm			0		10					Snowing	M. Tallieu.
Puy de Dôme O'sy, Summit	25.02	635.6			30.4	—0.9	85	NNE			3		8			0	0		M. Alluard, Director.
Rochefort, Naval Obs'y	30.06	763.4	30.09	764.2	31.1	—0.5	96	E			1		10		E	0	0	Covered	Lt. E. Decaute, Director.
Roche-sur-Yon, N. School	29.85	758.2	30.08	764.0	27.0	—2.8	96	NNE			1		10			0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	27.78	705.6	29.99	761.8	37.0	2.8	75	NE			3		10					Snowing	M. Richard, Director.
Rouen, Normal School	30.10	764.4	30.18	766.6	33.1	0.6	92	NE			1		0			0	0	Clear	M. Platrier, Director.
Saint Lô, Normal School	30.05	763.2	30.21	767.2	37.4	3	75	E			1		0			0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.99	761.7	30.15	765.9	27.0	—2.8	93	N			1		10	ENE	NE				M. Renou, Director.
Toulouse, Observatory	29.34	745.1	30.05	763.5	32.5	0.3	100	NW			1		10			0.260	6.6	Covered	M. Baillaud, Director.
Tours	29.91	759.7	30.11	764.7				NE			1		10			0	0	Covered	M. de Tastes.
Versailles, Observatory	29.64	752.9	30.13	765.4	25.9	3.4	95	NNE			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	29.26	743.1	30.12	765.1	28.9	—1.7	94	NW			6		7ks			0	0		Prof. Dr. Hoh.
Berlin	30.03	762.7	30.21	767.3	34.3	1.3	78	E			1		10			0	0	Foggy	Prof. Dr. Arndt.
Breslau	29.69	754.0	30.22	767.6	36.3	2.4	93	S			2		9			0	0		Royal University Obs'y.
Carlsruhe	29.73	755.1	30.18	766.6	27.7	—2.4	96	ENE			0		10	E		0	0		Albert Senz.
Cassel	29.55	750.5	30.16	766.0	29.5	—1.4	86	E			2		0			0	0		Dr. H. Möhl.
Frankfort on the Main	29.93	760.2	30.33	770.3	28.4	—2.0	82	NE			1		10			0	0		Physical Society.
Friedrichshafen	28.60	726.5	30.12	765.0	28.0	—2.2	83	NE			4		5	SW		0	0		Chief Telegrapher Wilhelm.
Hamburg	30.16	766.1	30.23	767.9	35.6	2.0	87	Calm			0		10			0	0		Dr. R. Kleeman.
Kiel	30.21	767.3	30.22	767.7	38.7	3.7	90	SW			1		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.76	756.0	30.21	767.4	26.6	—3.0	94	S			1		10			0	0	Foggy	Prof. Dr. Bruhns.
Magdeburg	29.98	761.5	30.22	767.6	27.5	—2.5	100	Calm			0		10ks			0	0	Foggy	Dr. Assmams.
Memel	30.03	762.7	30.08	763.9	37.2	2.9	82	W			6		10n			0	0		Reinbrecht & Issermann.
Munich	28.24	717.2	30.10	764.6	25.3	—3.7	100	NE			1		10			0	0	Foggy	Central Station.
Neufahrwasser	30.15	765.9	30.17	766.3	37.0	2.8	86	WNW			3		10			0	0		A Lothes.
Neustadt, Palatinate	29.54	750.4	30.07	763.8	27.9	—2.3		NE			1		0			0	0		Dicknether.
Stuttgart	29.14	740.2	30.09	764.3	26.2	—3.2	89	N			1		0			0	0		Prof. Dr. Schoder.
Thorn	28.55	725.2	30.09	764.2	29.3	—1.5	96	SE			2		10			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	30.17	766.3	30.19	766.9	36.5	2.5	94	SW			3		10s						Prof. Kemlein.
Wustrow																			Prof. S. Reimer.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r.	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.99	761.7	30.38	771.7	59.9	15.5		SE			1.0		0					Clear	Alexander Wourlisch
INDIAN SERIES.																			
Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.12	765.1	30.18	766.4	69.6	20.9	34	NNE	14.0	6.3			4	W		.0	0	D. clouds	
Deesa	29.60	751.8	30.09	764.2	69.1	20.6	35	NNW	10.8	4.8			8	W		0	0	D. clouds	
Bombay	29.96	761.1	30.00	762.1	79.4	26.3	67	NNW	20.0	8.9			0			0	0	Blue sky	
Poona, Yarrowda	28.12	714.3	29.97	761.1	84.3	29.1	26	ESE	2.0	0.9			0			0	0	Blue sky	
Belgaum	27.42	697.5	29.95	760.7	80.3	26.8	26	NE	5.0	2.2			0			0	0	Blue sky	
Lahore	29.36	745.7	30.14	765.5	62.6	17.0	62	Calm	1.5	0.7			6			0	0	Misty	
Roorkee	29.18	741.2	30.12	765.1	61.8	16.6	72	NW	1.5	0.7			5			0	0		
Agra	29.54	750.2	30.13	765.2	65.4	18.6	66	NE	4.0	1.8			7		E	0	0		
Nagpur	28.97	735.9	30.02	762.6	79.2	26.2	50	S	3.3	1.5			2	W		0	0	D. clouds	
Jubbulpore	28.65	727.8	30.04	763.0	74.8	23.8	52	Calm	1.3	0.8			0			0	0	Blue sky	
Lucknow	29.73	755.1	30.12	765.1	64.3	17.9	60	Calm	1.6	0.7			6	NNE		0	0		
Allahabad	29.76	756.0	30.09	764.3	65.4	18.6	78	Calm	6.2	2.8			0			0	0	Blue sky	
Patna	29.90	759.3	30.09	764.2	63.3	17.4	83	W	0.9	0.4			6	W	W	0.08	2.0	D. clouds	
Hazaribagh	28.01	711.5	30.09	764.2	66.3	19.1	76	N	6.5	2.9			0			0.05	1.3	Blue sky	
Cuttack	29.96	761.0	30.04	763.0	79.0	26.1	68	SW	0.7	0.3			0			0	0	Blue sky	
Calcutta, Alipore	30.03	762.7	30.05	763.2	71.7	22.9	83	Calm	0	0			0			0	0	Blue sky	
Goalpara	29.66	753.3	30.08	764.0	65.0	18.3	65	ENE	4.3	1.9			0			0	0	Blue sky	
Chittagong	29.96	760.8	30.05	763.2	69.8	21.0	60	NNE	2.7	1.2			0			0	0	Misty	
Sibsagar	29.78	756.4	30.14	765.5	59.0	15.0	91	NE	2.1	0.9			2			0	0	Blue sky	
ITALIAN SERIES.																			
By authority of the MINISTER OF AGRICULTURE, INDUSTRY AND COMMERCE.																			
Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.86	758.5	30.29	769.3	47.3	8.5	73	N	2.5	1.1			10			0.087	2.2		Prof. Giovanni Clodig.
Milan	29.66	753.3	30.20	767.1	38.5	3.6	97	SE	1.3	0.6			10			0.102	2.6		Prof. Schiaparelli.
Padua	30.13	765.4	30.25	768.3	45.3	7.4	74	ENE	12.5	5.6			10	NE		0.217	5.5		Prof. Dott. Lorenzoni.
Moncalieri	29.27	743.4	30.22	767.5	35.6	2.0	96	NW	1.3	0.6			10			1.595	40.5		Prof. P. F. Denza.
Genoa	29.91	759.8	30.11	764.9	40.8	4.9	74	NE	10.5	4.7			10	SE		0.862	21.9		Prof. G. M. Garibaldi.
Mondovi	28.23	717.1	30.25	768.3	32.7	0.4	94	W			2		10			0	0		Prof. D. C. Bruno.
Pesaro	30.16	766.0	30.21	767.3	45.9	7.7	93	W	16.1	7.2			10			0.431	10.7		Prof. Luigi Guidi.
Florence	29.80	756.9	30.06	763.5	52.9	11.6	55	E			2		10	S		0	0		Cav. F. Meucci.
Leghorn	29.96	761.0	30.05	763.2	47.7	8.7	86	NE	14.3	6.4			10			2.134	54.2		Prof. P. Monte.
Rome	29.92	759.9	30.10	764.4	62.1	16.7	54	ESE	16.1	7.2			10			0.012	0.3		Prof. P. S. Ferrari.
Lecce	30.09	764.3	30.35	770.9	60.3	15.7	82	SSE	13.0	5.8			4	S		0	0		Prof. C. de Giorgi.
Cosenza	29.40	746.7	30.30	769.7	55.4	13.0	61	SE	0.7	0.3			9	E		0	0		Prof. D. Conti.
Cagliari	29.69	754.2	29.89	759.2	61.2	16.2	77	SE			4		10			0	0		Prof. A. Pacinotti.
Palermo	29.89	759.3	30.15	765.7	70.5	21.4	33	SSE	23.0	10.3			10			0	0		Prof. G. Ciaccíatore.
Syracuse	30.24	768.1	30.28	769.2	62.4	16.9	81	ESE	6.3	2.8			9	SE		0	0		Prof. Vincenzo Guiliano.
SUB-SERIES.																			
Naples, S. R.	29.64	752.8	30.16	766.1	61.2	16.2	62	S	3.1	1.4			10ks	S		0	0		Prof. F. Brioschi.
Stelvio	22.18	563.2			20.7	— 6.3	97	ENE					10			0	0		P. F. Denza.
Valdobbia	22.12	561.8			19.8	— 6.8	94	S					10						
JAPANESE SERIES.																			
Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.17	766.3	30.19	766.8	39.1	3.9	81	NNE	7.6	3.4			0			0	0	Clear	K. Sasaki.
Kioto	30.00	762.0	30.19	766.8	33.4	0.8	92						0			0	0	Clear	
Nagasaki, I. M. Obs'y	30.02	762.5	30.23	767.8	41.9	5.5	86	Calm	0	0			10s			0	0	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	30.00	762.0	30.07	763.8	31.1	— 0.5	87	N	3.5	1.6		0	0			0	0	Fair	The Staff.
Wakayama	30.13	765.3	30.18	766.6	37.1	2.8	85	WNW	5.0	2.2			0			0	0	Clear	S. Iwahashi.
MAURITIUS SERIES.																			
Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.81	757.2	30.00	761.9	76.9	24.9	76	SW	6.0	2.7		1	8			0.01	0.3	Cloudy	A. N. Figoy.
MEXICAN SERIES.																			
By authority of the SECRETARY of PUBLIC WORKS.																			
Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.73	755.0	29.99	761.8	61.5	16.4	72	NNE			2	10s	0			0.473	12.00	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES.																			
Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.23	767.9	30.23	767.9	37.4	3.0		NE			3					0	0		
Groningen	30.19	766.7	30.24	768.1	37.8	3.2		E			1					0	0		
Helder	30.25	768.3	30.25	768.3	39.4	4.1		SSE			1					0	0		
Hellevoetsluis	30.22	767.5	30.22	767.5	36.3	2.4	91	ENE			2					0	0		
Utrecht	30.19	766.9	30.24	768.1	37.6	3.1	96	NE			2		2			0	0	Lightly cl'y	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.07	763.7	30.13	765.3	39.6	4.2	80	NNW	10.1	4.5			5			0.004	0.1		
Christiania	29.65	753.3	29.81	757.1	42.6	5.9	44	WSW	9	4			0			0	0		
Gjæsvær	29.06	738.2	29.09	738.8	30.2	— 1.0		NNW			6		10						
Lodingen	29.30	744.2	29.35	745.4	27.7	— 2.4	70	W			2		4			0.197	5.0	Snowing	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.50	749.2	29.65	753.2	61.5	16.4	89	SSE	14.3	6.4			5			0.157	4.0		Dr. J. A. Sampaio.
Campo Major	28.97	735.7	29.99	761.7	47.8	8.8	45	NNE	4.3	1.9			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.91	759.7	30.00	762.0	62.8	17.1	51	SE	6.3	2.8			0			0.063	1.6		Capt. D. A. de Cunha.
Lisbon, Observatory	29.68	753.8	30.05	763.3	43.9	6.6	58	NE	9.8	4.4			1			0	0		The Staff.
Ponta Delgada, Azores	29.67	753.6	29.74	755.4	64.0	17.8	80	S	15.4	6.9			3			0.476	12.1		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinsk	28.76	730.5	29.91	759.7	18.0	— 7.8	100	SW	40	18			10			Blank	Blank		Capt. Lasarew.
Archangel	29.12	739.7	29.14	740.2	19.8	— 6.8	92	SW	13	6			10						Capt. Sselliwerstow.
Astrakhan	30.35	770.8	30.26	768.7	30.9	— 0.6	88	W	16	7			10cp					Heavy cl'ds.	Capt. Wisganow.
Barnaul	29.75	755.7	30.30	769.7	8.1	—13.3	72	SE	9	4			10						Meteorological Obs'y.
Dorpat	29.45	748.1	29.70	754.4	35.1	1.7	88	WSW	16	7			10n						Observatory.
Ekaterinburg	28.37	720.5	29.36	745.8	22.8	— 5.1	90	WSW	4	3			10					Light snow.	Meteorological Obs'y.
Kasan	29.24	742.8	29.52	749.8	32.9	0.5	90	WSW	7	3			10						Observatory.
Kertch	30.41	772.5	30.43	773.0	29.7	— 1.3	90	W	7	3			8					Foggy	Lagorio.
Kieff	29.59	751.6	30.26	768.6	30.4	— 0.9	78	W	9	4			1ks						Observatory.
Krotikowo, N. 63°47', E. 48°34'																			Cand. Fatjanow.
Lugan	29.98	761.6	30.20	767.0	31.3	— 0.4	81	W	22	10			9						Meteorological Obs'y.
Moscow	29.22	742.3	29.79	756.7	34.3	1.3	83	S	7.8	3.5			10s						Meteorological Obs'y.
Nertchinsk	27.84	707.0	30.54	775.8	—25.8	—32.1	85						0						Meteorological Obs'y.
Nikolaiev	30.36	771.2	30.46	773.7	34.0	1.1	70	WSW	4	2			1cs						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.68	753.9	29.77	756.1	—19.8	—28.8	66	Calm	0	0			0						Lieut. Iwanow.
Nukuss	30.24	768.1	30.49	774.4	31.6	— 0.2	81	NW	7	3			10n						Dr. Dobrochotow.
Pekin, China	30.19	766.7	30.33	770.3	28.6	— 1.9	49	Calm	0	0			5k						Physical Observatory.
St. Petersburg	29.45	748.1	29.47	748.5	35.6	2.0	84	WSW	22	10			10n						Central Physical Obs'y.
Tashkend, Laboratory	28.79	731.2	30.47	773.9	30.2	— 1.	80	Calm	0	0			1						Teich, A. M.
Tiflis	28.97	735.9	30.44	773.1	45.1	7.3	61	NW	4	2			8k						Physical Observatory.
Warsaw	29.80	756.9	30.24	768.2	33.4	0.8	77	S	7	3			10ks						Astronomical Obs'y.
Wilna	29.68	753.9	30.12	765.0	34.3	1.3	83	WSW	11	5			10					Heavy cld's	Berg, Assistant.
Yeniseisk	30.28	769.1	30.61	777.6	—15.2	—26.2	81	Calm	0	0			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.33	770.4	40.4	4.4	100	W			2		10s			0	0	Foggy	Andrew Gibb.
Monach Lt. House, Hebrides			30.25	768.3	46	7.8	92	SW			3	3	0	SSW		0	0		J. Youngclause.
North Unst, Shetland Isl'ds			30.20	767.1				W			4	6	4	W		0	0		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.80	756.8	29.90	759.5	48.7	9.3	74	N	2.0	0.9			10			0.376	9.54	Raining	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.01	762.3	30.07	763.8	45.9	7.7	80	N	0.7	0.32		1	8	NW		0	0	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.00	685.9			34.0	1.1	79	NE	5.2	2.31			9			0	0	Almost cov'd	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.69	703.3	29.98	761.6	43.3	6.3	49	NE	6.0	2.7			10			0	0	Covered	The Staff.
Murcia, Met. Obs'y.	29.77	756.1	29.92	760.0	51.8	11.0	66	NW	3.1	1.4		3	4	SE		0	0	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.14	740.2	30.05	763.5	45.3	7.4	66	NE	11.2	5.0			4			0	0	Cloudy	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.99	761.8	30.06	763.5	71.6	22.0	89	ESE	5.8	2.6		1c	7k;ks	WSW	SW	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.84	758.0	29.89	759.3	81.0	27.2	81	SW	5.5	2.5			4ck		E	0	0	Partly clo'dy	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.88	759.1	29.99	761.6	50.4	10.2	62	N	2.1	0.9		0	0			0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.97	761.1	30.06	763.4	76.6	24.8	94	E	11.2	5.00		4cks	3kn	E	E	0.157	4.00	Cloudy	Enrique Gaden, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.26	743.1	29.30	744.1	8.6	—13.0	100	Calm			0		10			0	0		
Umea	29.15	740.4	29.20	741.7	29.5	— 1.4	88	SW			2		8			0.004	0.1		
Hernosand	29.24	742.6	29.29	743.9	40.8	4.9	58	W			4		7			0	0		
Stockholm	29.48	748.8	29.66	753.3	39.9	4.4	71	W			6		8			0	0		
Wisby	29.75	755.7	29.81	757.2	38.5	3.6	87	WNW			4		10			0	0		
Sub-Series.																			
Upsala	29.50	749.3	29.59	751.5	35.9	2.7	82	WSW	15.4	6.9			3	NW		0	0		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.60	726.4	30.10	764.6	29.7	— 1.3	94	ESE			1		10					Foggy	The Observatory.
Zurich	28.38	720.9	30.12	765.0	27.3	— 2.6	95	W			1		10			0	0	Foggy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —1.3 mm.; Ther. —2°.7 cent.; Hum. +14 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.42	772.6	48.6	9.2	86	NE	9	4.0			10		N	0	0		The Observatory.
Valona			30.36	771	65.7	18.7		W			1		2			0	0	Slightly cld'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.22	767.7	62.4	16.9	59	NE			2	8c				0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force o—10	CLOUDS. Amount and kind. Up'er o—10	Lo'er o—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.32	770.1	30.42	772.7	14	—10.0	82	N	6	2.7			10s		Calm	0	0	Cloudy	
Alpena, Michigan	29.44	747.8	30.14	765.5	13	—10.6	81	S	7	3.1			10s		Calm	0	0	Cloudy	
Atlanta, Georgia	28.93	734.8	30.13	765.3	33	0.6	89	E	10	4.5			10s		Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.32	770.1	30.34	770.6	25	— 3.9	75	NW	4	1.8		10k	Haze	Calm	Calm	0	0	Cloudy	
Augusta, Georgia																			
Baltimore, Maryland	30.30	769.6	30.35	770.9	29	— 1.7	89	Calm	0	0			Fog		Calm	0	0	Dense fog	
Barnegat, New Jersey	30.30	769.6	30.32	770.1	25	— 3.9	75	N	6	2.7			10s		W	0	0	Cloudy	
Benton, Montana	25.83	681.5			30	— 1.1	89	W	21	9.4			10s		Calm	0	0	Cloudy	
Bismarck, Dakota	27.80	706.1	29.66	753.4	21	— 6.1	85	S	2	0.9			10s		Calm	Inap.	Inap.	Cloudy	
Boise City, Idaho	27.37	695.2	30.33	770.4	21	— 6.1	78	NW	2	0.9			10s		Calm	0	0	Cloudy	
Boston, Massachusetts	30.21	767.3	30.38	771.6	13	—10.6	62	NW	11	4.9			10s		Calm	0	0	Cloudy	
Brackettville, Texas	29.04	737.6	30.18	766.6	22	— 5.6	45	NW	2	0.9		0	0			Inap.	Inap.	Clear	
Brownsville, Texas	30.12	765.0	30.17	766.3	38	3.3	63	NW	12	5.4		8cs	0	Calm		0.07	1.8	Fair	
Buffalo, New York	29.49	749.0	30.25	768.3	16	— 8.9	83	E	4	1.8			10s;smc		Calm	0.01	0.3	Cloudy	
Burlington, Vermont	30.13	765.3	30.47	773.9	— 2	—18.9	67	E	3	1.3		5cs	0	N		0.01	0.3	Fair	
Cairo, Illinois	29.74	755.4	30.16	766.1	25	— 3.9	100	NW	6	2.7			10n		Calm	0.11	2.8	Light snow	
Campo, California	27.56	700.0	30.14	765.5	32	0.0	79	E	9	4.0		0	0			0	0	Clear	
Camp Thomas, Arizona	27.40	696.0			21	— 6.1	86	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.28	769.1	30.30	769.6	37	2.8	71	NW	6	2.7			10s		NW	0	0	Cloudy	
Cape May, New Jersey	30.28	769.1	30.31	769.9	28	— 2.2	77	NE	9	4.0		10cs	0	Calm		0	0	Cloudy	
Castroville, Texas	29.37	746.0	30.13	765.3	27	— 2.8	76	NW	6	2.7		0	0			0	0	Clear	
Cedar Keys, Florida	30.04	763.0	30.06	763.5	52	11.1	93	E	11	4.9		0	5s		Calm	0	0	Fair	
Champaign, Illinois	29.29	744.0	30.16	766.1	16	— 8.9	49	NE	6	2.7			10s		NW	0	0	Cloudy	
Charleston, S. Carolina	30.19	766.8	30.25	768.3	37	2.8	90	N	6	2.7			10n		Calm	0.02	0.5	Light rain	
Charlotte, N. Carolina	29.35	745.5	30.21	767.3	30	— 1.1	89	E	6	2.7			10s;fg		Calm	0	0	Cloudy	
Chattanooga, Tennessee	29.28	743.7	30.12	765.0	32	0.0	100	NE	8	3.6			10n		Calm	0.09	2.3	Light rain	
Cheyenne, Wyoming	23.89	606.8	29.83	757.7	27	— 2.8	64	NW	16	7.2		0	0			0	0	Clear	
Chicago, Illinois	29.43	747.5	30.19	766.8	10	—12.2	79	W	1	0.4		0	0			Inap.	Inap.	Clear	
Chincoteague, Virginia	30.30	769.6	30.33	770.4	29	— 1.7	89	NE	5	2.2			10s		NE	0	0	Cloudy	
Cincinnati, Ohio	29.51	749.5	30.19	766.8	28	— 2.2	88	E	2	0.9			10n		Calm	0.05	1.3	Light snow	
Cleveland, Ohio	29.44	747.8	30.21	767.3	22	— 5.6	86	SE	6	2.7			10s;fg		Calm	Inap.	Inap.	Cloudy	
Coleman City, Texas	28.33	719.6	30.14	765.5	17	— 8.3	67	NW	8	3.6		0	0			0.04	1.0	Clear	
Columbus, Ohio	29.31	744.5	30.20	767.1	26	— 3.3	88	N	1	0.4			10n		Calm	Inap.	Inap.	Light snow	
Concho, Texas	28.22	716.8	30.06	763.5	14	—10.0	82	SW	10	4.5		0	0			0.08	2.0	Clear	
Corsicana, Texas	29.70	754.4	30.21	767.3	26	— 3.3	75	NW	8	3.6			10ks		Calm	0.64	16.3	Cloudy	
Davenport, Iowa	29.50	749.3	30.22	767.6	5	—15.0	75	Calm	0	0		0	8s		Calm	0	0	Fair	
Dayton, Washington T'y	28.24	717.3	29.93	760.2	42	5.6	66	S	15	6.7			10s		Calm	0.33	8.4	Cloudy	
Deadwood, Dakota	25.12	638.0			37	2.8	63	SW	6	2.7			10s		Calm	0	0	Cloudy	
Decatur, Texas	28.94	735.1	30.21	767.3	20	— 6.7	85	N	9	4.0		0	0			0.07	1.8	Clear	
Delaware Breakwater, Del.	30.31	769.9	30.33	770.4	28	— 2.2	88	NE	11	4.9			10s		NE	0	0	Cloudy	
Denison, Texas	29.33	745.0	30.19	766.8	21	— 6.1	86	NW	8	3.6			10s		Calm	0.30	7.6	Cloudy	
Denver, Colorado	24.68	626.9	29.90	759.4	21	— 6.1	63	S	4	1.8		0	0			0	0	Clear	
Des Moines, Iowa	29.19	741.4	30.16	766.1	8	—13.3	78	Calm	0	0		0	Haze			0	0	Dense haze	
Detroit, Michigan	29.46	748.3	30.17	766.3	24	— 4.4	74	SE	6	2.7		2ck	2s	NW	Calm	Inap.	Inap.	Fair	
Dodge City, Kansas	27.40	696.0	29.90	759.4	8	—13.3	55	W	10	4.5		0	0			0	0	Clear	
Dubuque, Iowa	29.41	747.0	30.20	767.1	— 3	—19.4	83	Calm	0	0		0	5s		Calm	0	0	Fair	
Duluth, Minnesota	29.19	741.4	29.94	760.5	0	—17.8	85	SW	3	1.3			10s		Calm	0	0	Cloudy	
Eagle Pass, Texas	29.47	748.5	30.26	768.6	27	— 2.8	88	N	2	0.9		0	0			0	0	Clear	
Eagle Rock, Texas	25.41	645.7	30.06	763.5	15	— 9.4	100	N	4	1.8			10n		Calm	0.11	2.8	Light snow	
Eastport, Maine	30.23	767.8	30.31	769.9	1	—17.2	71	N	18	8.0		0	5s		N	Inap.	Inap.	Fair	
Edinburg, Texas					38	3.3	54	N			6		10s		Calm	0	0	Cloudy	
El Paso, Texas	26.34	669.0			22	— 5.6	72	W	2	0.9		0	0			0	0	Clear	
Erie, Pennsylvania	29.44	747.8	30.20	767.1	24	— 4.4	87	NE	1	0.4			10s		Calm	0.02	0.5	Cloudy	
Escanaba, Michigan	29.33	745.0	30.05	763.3	6	—14.4	76	S	6	2.7		0	0			0.03	0.8	Clear	
Florence, Arizona	28.67	728.2	30.27	768.8	26	— 3.3	75	Calm	0	0		0	0			0	0	Clear	
Fort Apache, New Mexico	25.11	637.8	30.55	776.0	19	— 7.2	54	NE	1	0.4		0	0			0	0	Clear	
Fort Assinniboine, Montana	26.76	679.7			40	4.4	100	SW	10	4.5			10n		SW	0.05	1.3	Light rain	
Fort Bennett, Dakota	28.14	714.7			7	—13.9	77	Calm	0	0		0	0			0	0	Clear	
Fort Buford, Dakota	27.60	701.0	29.46	748.3	27	— 2.8	100	Calm	0	0			10n		Calm	Inap.	Inap.	Light snow	
Fort Custer, Montana	26.61	675.9			39	3.9	63	NW	16	7.2			10s		Calm	0	0	Cloudy	
Fort Davis, Texas	25.17	639.3	30.13	765.3	4	—15.6	74	Calm	0	0		0	0			0.32	8.1	Clear	
Fort Elliott, Texas	27.25	692.1	29.69	754.1	17	— 8.3	35	NW	12	5.4		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.55	750.6	30.13	765.3	20	— 6.7	85	NW	4	1.8		0	5s		Calm	0.50	12.7	Fair	
Fort Grant, Arizona	25.25	641.3	30.05	763.3	29	— 1.7	47	N	6	2.7		0	0			0	0	Clear	
Fort Griffin, Texas	28.90	734.0	30.30	769.6	14	—10.0	64	Calm	0	0		0	0			0.14	3.6	Clear	
Fort Keogh, Montana	27.19	690.6			33	0.6	89	SW	1	0.4			10s			0	0	Cloudy	
Fort Macon, North Carolina	30.22	767.6	30.24	768.1	33	0.6	89	N	8	3.6			10s		NW	0	0	Cloudy	
Fort Missoula, Montana	26.62	676.1			20	— 3.3	88	SW	1	0.4			10s		Calm	0.25	6.3	Cloudy	
Fort McKavett, Texas	27.86	707.6	29.97	761.2	15	— 9.4	65	W	7	3.1		0	0			0.04	1.0	Clear	
Fort Shaw, Montana	25.96	659.4			42	5.6	83	SW	26	11.6		10cs	0	Calm		0	0	Cloudy	
Fort Sill, Indian Territory	28.85	732.8	30.05	763.3	18	— 7.8	84	N	3	1.3		2c	0	Calm		0.77	19.6	Clear	
Fort Stevenson, Dakota	27.74	704.6			24	— 4.4	74	SE	2	0.9			10ks		SE	0	0	Cloudy	
Fort Verde, Arizona					24	— 4.4	48	NW			1	5cs	0	SW		0	0	Fair	
Fredericksburg, Texas	28.36	720.3	30.02	762.5	25	— 3.9	87	N	10	4.5		0	0			0	0	Clear	
Galveston, Texas	30.02	762.5	30.07	763.8	38	3.3	91	N	14	6.3			10s		Calm	0.10	2.5	Cloudy	
Grand Haven, Michigan	29.44	747.8	30.13	765.3	25	— 3.9	75	SW	6	2.7			10s		Calm	0	0	Cloudy	
Hatteras, North Carolina	30.23	767.8	30.25	768.3	35	1.7	90	NW	8	3.6			10s		SW	0	0	Cloudy	
Helena, Montana	25.60	650.2			44	6.7	68	SW	13	5.8		0	2s		SW	0	0	Fair	
Henrietta, Texas	29.14	740.1	30.19	766.8	10	—12.2	79	NW	5	2.2		0	0			0.56	14.2	Clear	
Indianapolis, Indiana	29.30	744.2	30.14	765.5	21	— 6.1	71	N	4	1.8			10n		Calm	Inap.	Inap.	Light snow	
Indianola, Texas	30.11	764.8	30.14	765.5	32	0.0	79	NW	35	15.6			10s		Calm	0.09	2.3	Cloudy	
Jacksboro, Texas	28.96	735.6	30.17	766.3	25	— 3.9	75	N	4	1.8			10s		Calm	0.12	3.0	Cloudy	
Jacksonville, Florida	30.12	765.0	30.17	766.3	45	7.2	84	NE	5	2.2			10s		Calm	0	0	Cloudy	
Keokuk, Iowa	29.48	748.8	30.20	767.1	10	—12.2	79	Calm	0	0		0	5s		Calm	0	0	Fair	
Key West, Florida	30.06	763.5	30.09	764.3	75	23.9	90	SE	6	2.7		1cs	1ks	Calm	Calm	Inap.	Inap.	Fair	
Kittyhawk, North Carolina	30.24	768.1	30.26	768.6	37	2.8	90	NW	10	4.5		0	5s		Calm	0	0	Fair	
Knoxville, Tennessee	29.08	738.6	30.13	765.3	33	0.6	89	NE	1	0.4			10s		Calm	0.03	0.8	Cloudy	
La Crosse, Wisconsin	29.28	743.7	30.09	764.3	6	—14.4	76	S	12	5.4		0	0			0	0	Clear	
La Mesilla, New Mexico	26.21	665.7	30.36	771.1	19	— 7.2	85	N	1	0.4		0	0			0	0	Clear	
Laredo, Texas	29.81	757.2	30.18	766.6	30	— 1.1	89	NW	10	4.5		0	0			0	0	Clear	
Leavenworth, Kansas	29.24	742.7	30.16	766.1	11	—11.7	80	SE	1	0.4			10s			0	0	Cloudy	
Lewiston, Idaho	29.27	743.4	29.94	760.5	31	— 0.6	89	W	1	0.4			10s		Calm	0.61	15.5	Cloudy	
Little Rock, Arkansas	29.78	756.4	30.11	764.8	33	0.6	89	NW	5	2.2			10s		Calm	0.23	5.8	Cloudy	
Los Angeles, California	29.83	757.7	30.18	766.6	44	6.7	60	NE	2	0.9		0	0			0	0	Clear	
Louisville, Kentucky	29.54	750.3	30.13	765.3	28	— 2.2	88	N	4	1.8			10n		Calm	0.15	3.8	Light snow	
Lynchburg, Virginia	29.58	751.3	30.30	769.6	32	0.0	79	Calm	0	0			10s			0	0	Cloudy	
Madison, Wisconsin	29.07	738.4	30.16	766.1	5	—15.0	75	SW	4	1.8		0	0			0	0	Clear	
Marquette, Michigan	29.22	742.2	29.99	761 7	9	—12.8	57	SW	3	1.3		0	0			0	0	Clear	
Mason, Texas	28.48	723.4	30.38	771.6	22	— 5.6	86	NW	10	4.5		0	0			0.09	2.3	Clear	
Memphis, Tennessee	29.72	754.9	30.08	764.0	23	— 5.0	100	N	3	1.3			10s		Calm	0.19	4.8	Cloudy	
Milwaukee, Wisconsin	29.38	746.2	30.17	766.3	13	—10.6	81	SW	4	1.8		0	0			0.03	0.8	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction, Upper.	Clouds. Direction, Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.92	760.0	30.00	762.0	49	9.4	100	S	10	4.5			10n		Calm	1.83	46.5	Heavy rain.	
Montgomery, Alabama	29.84	757.9	30.08	764.0	41	5.0	91	NE	12	5.4			10n		Calm	0.28	7.1	Light rain.	
Morgantown, W. Virginia	29.17	740.9	30.22	767.6	28	— 2.2	77	Calm	0	0			10n		Calm	0.03	0.8	Heavy snow	
Moorhead, Minnesota	28.75	730.2	29.79	756.7	0	—17.8	70	S	22	9.8			10s		S	0	0	Cloudy	
Mt. Washington, N. H.	23.65	600.7	30.01	762.2	0	—17.8	54	NE	12	5.4		2c	0	Calm		0.11	2.8	Clear	
Nashville, Tennessee	29.54	750.3	30.09	764.3	35	1.7	90	NE	1	0.4			10n		Calm	0.10	2.5	Light rain	
New Haven, Connecticut	30.20	767.1	30.32	770.1	22	— 5.6	72	N	9	4.0			10s		N	0	0	Cloudy	
New London, Connecticut	30.28	769.1	30.33	770.4	21	— 6.1	71	N	4	1.8		5cs	5s	Calm	N	0	0	Cloudy	
New Orleans, Louisiana	29.86	758.4	29.92	760.0	55	12.8	93	SE	12	5.4			10s		SE	3.48	88.4	Light rain	
Newport, Rhode Island	30.30	769.6	30.35	770.9	20	— 6.7	70	N	5	2.2			10s		Calm	0	0	Cloudy	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.28	769.1	30.32	770.1	26	— 3.3	75	NE	22	9.8		0	0			0	0	Clear	
New York, New York	30.12	765.0	30.31	769.9	29	— 1.7	89	NE	11	4.9			10s;fg		Calm	0	0	Cloudy	
Norfolk, Virginia	30.24	768.1	30.30	769.6	33	0.6	79	NE	4	1.8			10s;sm		E;C	0	0	Cloudy	
North Platte, Nebraska	26.98	685.3	29.76	755.9	8	—13.3	78	NW	12	5.4		0	0			0	0	Clear	
Olympia, Washington T'y	30.07	763.8	30.11	764.8	48.0	8.9	70	W	19	8.5		0	1s		Calm	0.62	15.7	Clear	
Omaha, Nebraska	28.86	733.0	30.07	763.8	8	—13.3	78	S	7	3.1		0	0			0	0	Clear	
Oswego, New York	29.96	761.0	30.31	769.9	13	—10.6	81	E	2	0.9			10s		Calm	0.26	6.6	Cloudy	
Pensacola, Florida	30.02	762.5	30.05	763.3	51	10.6	93	E	6	2.7			10n		Calm	2.18	55.4	Light rain	
Philadelphia, Pa	30.28	769.1	30.34	770.6	32	0.0	89	Calm	0	0		10cs	Fog	Calm	Calm	0	0	Cloudy	
Phœnix, Arizona	29.05	737.9	30.99	787.1	28	— 2.2	66	E	3	1.3		0	0			0	0	Clear	
Pike's Peak, Colorado	17.49	444.2	29.70	754.4	0	—17.8	70	SW	24	10.7			10s		SW	0	0	Cloudy	
Pilot Point, Texas	29.36	945.7	30.27	768.8	21	— 6.1	57	NW	6	2.7			10s		Calm	0.22	5.6	Cloudy	
Ploche, Nevada	24.16	613.6	29.93	760.2	29	— 1.7	78	Calm	0	0		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.38	746.2	30.25	768.3	26	— 3.3	88	Calm	0	0			10n		Calm	0.02	0.5	Light snow.	
Port Huron, Michigan	29.47	748.5	30.18	766.6	18	— 7.8	75	SE	6	2.7			10s		Calm	Inap.	Inap.	Cloudy	
Portland, Maine	30.29	769.4	30.34	770.6	16	— 8.9	66	NE	10	4.5		0	0			0	0	Clear	
Portland, Oregon	30.19	766.8	30.20	768.6	50.5	10.3	79	W	13	5.8		0	5ks		W	0.12	3.0	Fair	
Portsmouth, N. Carolina					35	1.7	80	N	10	4.5		10k	0	Calm		0	0	Cloudy	
Prescott, Arizona	24.84	630.9	30.20	767.1	25	— 3.9	62	NE	1	0.4		0	0			0	0	Clear	
Punta Rassa, Florida	30.06	763.5	30.07	763.8	66	18.9	95	E	9	4.0		8c	0	Calm		0.02	0.5	Fair	
Red Bluff, California	29.96	761.0	30.32	770.1	39.5	4.2	91	W	1	0.4		0	0			0	0	Clear	
Rio Grande City, Texas	30.04	763.0	30.27	768.8	33	0.6	70	NW	15	6.7		0	5s		Calm	0	0	Fair	
Rochester, New York	29.60	751.8	30.27	768.8	17	— 8.3	83	SE	4	1.8			10s		Calm	0.13	3.3	Cloudy	
Roseburg, Oregon	29.81	757.2	30.40	772.1	43	6.1	93	E	2	0.9			10s		Calm	0	0	Cloudy	
Sacramento, California	30.22	767.6	30.30	769.6	43	6.1	92	SE	4	1.8		0	0			0	0	Clear	
St. Louis, Missouri	29.56	750.8	30.19	766.8	10	—12.2	79	N	7	3.1			10n		Calm	Inap.	Inap.	Light snow.	
St. Paul, Minnesota	29.04	737.6	29.95	760.7	— 1	—18.3	68	SE	6	2.7		0	0			0	0	Clear	
Salt Lake City, Utah	25.83	656.1	30.10	766.1	31	— 0.6	48	Calm	0	0			10s		Calm	0	0	Cloudy	
San Antonio, Texas	29.47	748.5	30.22	767.6	28	— 2.2	77	NW	2	0.9		0	0			0	0	Clear	
San Diego, California	30.13	765.3	30.20	767.1	45	7.2	61	Calm	0	0		0	0			0	0	Clear	
Sandusky, Ohio	29.48	748.8	30.20	767.1	25	— 3.9	87	S	5	2.2			10s;fg		Calm	0	0	Cloudy	
Sandy Hook, New Jersey	30.27	768.8	30.31	769.9	28	— 2.2	77	NE	8	3.6			10s		Calm	0	0	Cloudy	
San Francisco, California	30.22	767.6	30.29	769 4	49	9.4	85	Calm	0	0			Fog		Calm	0	0	Clear	
Santa Fé, New Mexico	23.20	589.3	29.74	755.4	9	—12.8	78	N	8	3.6		0	0			0	0	Clear	
Savannah, Georgia	30.15	765.8	30.25	768.3	38	3.3	91	N	3	1.3			10n		Calm	0.12	3.0	Light rain	
Shreveport, Louisiana	29.85	758.2	30.10	764.5	37	2.8	90	NW	6	2.7			10s		Calm	0.14	3.6	Cloudy	
Silver City, New Mexico	24.19	617.0	30.85	783.6	21	— 6.1	71	N	4	1.8		0	0			0	0	Clear	
Smithville, North Carolina	30.22	767.6	30.26	768.6	34	1.1	100	N	6	2.7			10s		Calm	0.01	0.3	Cloudy	
Socorro, New Mexico	25.28	642.1	29.35	745.5	5	—15.0	80	N	1	0.4		0	0			0	0	Clear	
Springfield, Illinois	29.46	748.3	30.19	766.8	10	— 8.9	83	N	6	2.7			10s			0	0	Cloudy	
Springfield, Massachusetts	30.24	768.1	30.38	771.6	17	— 8.3	67	N	7	3.1			10s		N	0	0	Cloudy	
Stockton, Texas	27.08	687.8	30.08	764.0	11	—11.7	80	SW	10	4.5		0	0			0.20	5.1	Clear	
St. Vincent, Minnesota	28.69	728.7	29.53	750.0	6	—14.4	100	S	20	8.9			10s		Calm	0	0	Cloudy	
Thatcher's Island, Mass	30.29	769.4	30.34	770.6	24	— 4.4	74	NE	12	5.4			10s		NE	0	0	Cloudy	
Toledo, Ohio	29.46	748.3	30.18	766.6	26	— 3.3	88	SW	5	2.2			10s		Calm	Inap.	Inap.	Cloudy	
Tucson, Arizona	27.69	703.3	30.24	768.1	29	— 1.7	56	S	5	2.2		0	0			0	0	Clear	
Umatilla, Oregon	29.70	754.4	30.21	767.3	40	4.4	73	W	8	3.6		0	0			0.01	0.3	Clear	
Uvalde, Texas	29.28	743.7	30.18	766.6	24	— 4.4	87	NW	4	1.8		0	0			0.01	0.3	Clear	
Vicksburg, Mississippi	29.77	756.1	30.04	763.0	38	3.3	91	NE	2	0.9			10n		Calm	0.48	12.2	Light rain	
Visalia, California	29.91	759.7	30.29	769.4	41	5.0	95	NW	1	0.4			Fog		Calm	0	0	Dense fog	
Washington, D. C.	30.23	767.8	30.30	771.1	23	— 5.0	100	Calm	0	0			10s;fg		Calm	0	0	Cloudy	
Wickenburg, Arizona					25	— 3.9	87	NW			1	0	0			0	0	Clear	
Wilmington, N. Carolina	30.22	767.6	30.27	768.8	35	1.7	80	NE	2	0.9			10s		Calm	0	0	Cloudy	
Winnemucca, Nevada	25.85	656.6	30.21	767.3	31	— 0.6	69	SW	6	2.7		0	5s		SW	0	0	Fair	
Wood's Holl, Mass	30.28	769.1	30.32	770.1	19	— 7.2	85	N	10	4.5		5cs	0	Calm		0	0	Fair	
Yankton, Dakota	28.62	726.9	30.04	763.0	4	—15.6	74	Calm	0	0		0	0			0	0	Clear	
Yuma, Arizona	30.05	763.3	30.20	767.1	43	6.1	43	NE	1	0.4		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	21.96	558.7			51.0	10.6	71	Calm	0	0		0	1s			0	0	Clear	Thomas Herran.
Havana, Cuba, W. I.	30.04	763.0	30.09	764.3	73	22.8	85	SE	1.2	0.5		4cs	4ks	S	S	0	0	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	29.17	741.0	29.23	742.4	7.5	13.6		W			6		2			0	0		
Kingston, Jamaica, W. I.	30.02	762.5	30.03	762.7	72.0	22.2	78	Calm	0	0			10s		E	0.02	0.05		Maxwell Hall.
Navassa, W. I.	29.95	760.7	30.03	762.7	77	25.0	78	NE	8	3.6		5k	5s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	77	25.0	85	E			2	3c	5k	E		0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.36	745.7	29.92	760.0	78	25.6	89	Calm			0	0	0			0	0	Clear	Francesco J. Cisneros.
Rivas, Nicaragua					73	23		NE			1	0	1ks		NE	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.01	762.2	30.03	762.7	75	23.9	76	NNE	4.8	2.1		0	8ks		NE	0	0		Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	29.23	742.4	29.29	744.0	— 1.6	—16.9		W			2		0			0	0		
York Factory, B. A.	29.21	741.9	29.20	743.2	—34.0	—36.7		S	13	5.8			10n		S	0.10	2.5	Snowing	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandra																			Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Haud.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. S. Hope.
H. M. S Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. J. F. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda																			Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.95	760.7	79	26.1	66	NNE			3		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Callao Bay, Peru	29.96	761.0	65	18.3	94	Calm			0		7							D. clouds	Comm. E. E. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 26° 10′, E. 119° 55′	30.21	767.3	55.8	13.2	79	NE			3		7							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 12° 28′, E. 44° 47′	29.99	761.7	81	27.2	91	ESE			5-6		5	E				5	E	Drizzling	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 38° 42′, W. 9° 05′	30.01	762.2	48	8.9	66	NE			4		0							Blue sky	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda, W. I.	30.14	765.5	66	18.9	74	NNW			3		4	NW						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes, N. 37° 37′, E. 9° 12′	30.10	764.5	62.5	16.9	90	S			4		9	S				3	S	Showery	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis, N. 38° 39′, W. 9° 25′	30.04	763.0	50	10.0	93	E			3		0					2	Sm'e	Blue sky	Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Seraphis, N. 36° 20′, W. 7° 24′	30.01	762.2	65	18.3	63	ENE			2		0							Blue sky	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane,
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J.C. Wilson, A.D.C.
H. M. S. Woodlark																			Capt. R. D. Cumming.
H. M. S. Zephys																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	29.98	761 4	75.2	24.0	91	NE			1		7			0	0	1	SE	D. clouds	S. C. da Silva Costa, Comd't.
Sado, Benguella, Benguela	29.94	760.4	74.5	23.6	74	NW			2		2		NW	0	0	1	NW	D. clouds	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	29.95	760.7	60	15.6	94	SE	6	2.7			10		SE	2.40	61.0			Stormy.	
N. Yard, Portsmouth, N. H.	30.33	770.4	14	—10.0	?	NW	2	0.9		2C		W		0	0			Clear.	
Naval Hospital, Yokohama, Japan	29.94	760.5	38.5	3.6	86	Calm			0		0		W	0	0			Clear.	
Adams, Callao Peru	30.04	763.0	67	19.4	95	SE			1		10		SE			Mod.	SW	Cloudy	
Alaska, N. Yard, Mare I'd, Cal*	30.26	768.6	45	7.2	100	Calm			0		0			0	0			Clear.	
Alert, Hong-Kong, China	30.03	762.7	64	17.8	78	Calm			0		0			0	0			Hazy.	
Alliance, Pensacola, Fla	30.03	762.7	51	10.6	100	ENE			2		10			He	avy	Sm'h		Raining	
Ashuelot, Tientsin, China	30.31	769.9	32	0.0	100	NW			1		10							Cloudy	
Colorado, New York, N. Y.	30.40	772.1	30	— 1.1		NE	1	0.4			10		Calm	0	0			Misty	
Constitution, N. Yard, League I'd., Pa			22	— 5.6		Calm	0	0			10							Overcast	
Franklin, Off N. Yard, Norfolk, Va	30.25	768.3	31	— 0.6		Calm	0	0			8		NW	0	0			Cloudy	
Galena, N. 36° 27′, W. 31° 50′	29.40	746.7	63	17.2	89	SSW			7		10					R'gh	SSW	Cloudy.	
Independence, N. Yard, Mare I'd, Cal	30.28	769.1	43	6.1	96	Calm	0	0			0			0	0			Clear.	
Jamestown, Sitka, Alaska*	29.59	751.6	39	3.9	91	NE			3		10			1.14	29.0			Rainy	
Kearsarge, Curacoa, W. I.	29.98	761.5	77	25.0	86	E			2		5		E			Sm'h		Fair	
Lackawanna, Ancon, Peru†	30.11	764.8	71	21.7	80	SSE			2		8		S	0	0			Fair	
Marion, S. 52° 16′, W. 69° 00′	29.70	754.4	53	11.7	85	SW			1		8			Li	ght	Sm'h		Fair	
Michigan, Erie, Pennsylvania	30.20	767.1	23	— 5.0		NE			2		10		NE					Cloudy	
Minnesota, New York, N. Y.	30.31	769.9	30	— 1.1		NE			2		10							Foggy	
Monocacy, Shanghai, China	30.29	769.4	42	5.6	83	E			1		10							Cloudy	
New Hampshire, Port Royal, S. C.	30.22	767.6	49	4.4	82	N	3	1.3			10		Calm	0.08	2.0			Raining	
Nipsic, Villafranca, France	29.95	760.7	59	15.0	65	ESE			3		10		SE			Sm'h		Raining	
Onward, Chimbote Bay, Peru†	29.91	759.7	73	22.8	76	S			4		2		N			Long	N;W	Fair	
Palos, Shanghai, China	30.32	770.1	60	15.6	?	ENE			1		10							Overcast	
Passaic, Washington, D. C.	30.31	769.9	21	— 6.1	71	SE			1		8		E					Cloudy	
Pensacola, N. 33° 39′ W. 121° 00′	30.22	767.6	56	13.3	87	NW			3		0					Mod.	NW	Clear	
Portsmouth, Washington, D. C.	30.36	771.1	21	— 6.1	100	Calm			0		10							Misty	
Powhatan, New York, N. Y.	30.33	770.4	32	0.0	90	E			2		10							Overcast	
Quinnebaug, Alexandria, Egypt	30.27	768.8	67	19.4	64	NNE			2		8		NNE			Sm'h		Cloudy	
Richmond, N. 31° 08′, E 122° 00′	30.31	769.9	43	6.1	92	ENE			2		10			0	0	Sm'h		Cloudy	
Saratoga, Baltimore, Md	30.32	770.1	28	— 2.2	88	SW			1					Lt. s	now			Misty	
Shenandoah, Montevideo, Urugnay.*	29.92	760.0	71	21.7	95	SSE			4		10					Mod.	SSE	Cloudy	
St. Louis, League Island, Pa	30.28	769.1	22	— 5.6	72	Calm	0	0			10			0	0			Cloudy	
Swatara, Hamada, Japan†	30.08	764.0	47	8.3	77	W			1		0					Mod.	W	Blue sky	
Tennessee, N. 11° 37′, W. 61° 33′	29.99	761.7	82	27.8	71	E	6	2.7			5		ESE	0	0	Sm'h		Fair	
Trenton, Villafranca, France*	29.93	760.2	59	15.0	59	NE			2-4		10			18h'rs	h'vy			Squally	
Vandalia, N. Yard, New York	30.31	769.9	32	0.0	100	NE			2		10		E					Cloudy	
Wabash, Boston, Massachusetts	30.35	770.9	14	—10.0	64	WNW	6	2.7			5		WSW	0	0			Hazy	
Wachusetts, Off Taboga I'd*	29.51	749.5	78	25.6	85	NW			3		2			0	0	Sm'h		Clear	
Wyoming, Naples, Italy	30.14	765.5	63	17.2	62	SE			4		8		SW			Sm'h		Squally	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡ S. 24° 44′, E. 58° 40′	29.99	761.7	77.4	25.2	79	E			2		6							Showery	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡ N. 36° 16, W. 18° 08′	29.96	761.0	61.4	16.3	70	SE			5		5							D. clouds	Capt. N. Youlden.
City of Agra, ‡ S. 54° 38′, W. 142° 03′	30.07	763.8	45.0	7.2	98	NNW			5		10							Raining	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Coppenname, N. 40° 36′, W. 17° 15′	30.04	763.0	56.8	13.8	75	S			4		7							Showery	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra, ‡ S. 23° 55′, E. 72° 11′	30.11	764.8	76.6	24.8	86	ESE			5		6							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡ N. 42° 46′, W. 55° 51′	29.81	757.2	30	— 1.1	89	N			6		9					6	NNW	Snowing	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams
Ship Iron Cross, N. 51° 04′, W. 9° 40′	30.30	769.6	49.8	9.9	95	Calm			0		7					3	W	D. clouds	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ S. 1° 00′, E. 89° 20′	29.82	757.4	76.7	24.8	90	SSW			3		10							Raining	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland ‡																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 15° 26′, E. 41° 53′	29.50	759.4	72.5	22.5	92	SW			4		10							Raining	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
Moravian																			
S. S. Peruvian																			Capt. W. H. Smith, R.N.R.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia, N. 40° 45′, W. 67° 13′	30.02	762.5	43	6.1	87	NNW			6		10		WNW	Sl	eet	R'gh	WNW	Dull	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Britanic, N. 41° 12′, W. 58° 25′ †	29.98	761.5	40	4.4		N			5		5		N			Sl't	N	D. clouds	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, N. 48° 40′, W. 38° 46′ †	29.30	744.2	54	12.2		SSE			2		8		SW	0	0	Sm'h		Cloudy	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Undütsch.
S. S. Hermann, N. 49° 59′, W. 4° 51′	30.23	767.8	44.6	7.0		ENE			4		10		E	0	0	Sm'h	E	Misty	Capt. H. Maur.
S. S. Köln																			
S. S. Leipzig ‡																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolph Fredholm, ‡ S. 27° 14′, W. 39° 40′ *†	30.24	768.0	78.4	25.8	76	NE			6		1							Blue sky	Capt. Albert Fredholm.
Ship Peru, ‡ N. 17° 58′, W. 75° 14′	30.01	762.2	79.0	26.1	82	ENE			4		3k							D. clouds	Capt. O. F. Sköterbrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO.																			
H. B. Welsh, President.																			
S. S. Illinois,																			
Liverpool, England	30.21	767.3	46	7.8	92	NNW			2		10		SW					Misty	Capt. J. W. Shackford.
S. S. Indiana, ‡																			
Philadelphia, Pa.†	30.01	762.2	26	— 3.3	75	E			4		8		E		Snow			Cloudy	Capt. R. W. Sargent.
S. S. Ohio, ‡																			
N. 47° 34′, W. 45° 33′...*†	29.43	747.5	35	1.7	100	N			5		10		N	0	0	Mod.	N	Cloudy	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, ‡																			
Philadelphia, Pa.†	29.89	759.2	28	— 2.2		NE			1		10		NE	0	0			Overcast	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO.																			
J. Birmingham.																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO.																			
Leland Stanford, President.																			
S. S. Belgic, ‡																			
N. 36° 23′, W. 172° 19′....†	29.68	753.9	57	13.9	63	WSW			6		2		W	0	0	High	WSW	Clear	Capt. H. Davison.
S. S. Gaelic,																			
N. 45° 01′, E. 152° 32′...*†	30.08	764.0	53	11.7	67	SSE			6		5?		SSE			R'gh	S	Clear?	Capt. W. H. Kidley.
S. S. Oceanic,																			
N. 32° 25′, E. 134° 37′	30.20	767.1	59	15.0	76	Calm			0					0.04	1.0	Sm'h		Fine	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO.																			
R. Van Oterendorp.																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia																			Capt. Fred. Bolles
S. S. Oregon,																			
Portland, Oregon.....†	30.24	768.1	50.0	10.0	86	NW			2		5		W					Fair	Capt E. Polemann.
PACIFIC COAST S.S. CO.																			
Goodall, Perkins & Co																			
S. S. Ancon,																			
N. 35° 54′, W. 121° 33′...†	30.22	767.6	54	12.2	80	NW			3		0					Long	W	Clear	Capt. J. N. Ingalls.
S. S. Idaho																			C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. State of California,																			
San Francisco, Cal.....†	30.29	769.4	46	7.8	84	Calm			0		2		Calm					Clear	Capt. G. Debney.
S. S. Victoria,																			
N 45° 45′, W. 124° 40′....†	30.36	771.1	49	9.4	93	N			4		8					Long	W	Cloudy	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO.																			
J. B. Houston, President.																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York,																			
N. 6° 30′, W. 164° 30′.....†	29.88	758.9	81	27.2	87	Baff.			2		0			0	0	Mod.	NE	Clear.	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking																			Capt. G. G. Berry.
S. S. City of Sidney,																			
S. 36° 24, E. 175° 29′.....†	29.75	755.6	62	16.7	77	WNW			4		5		W	0	0	Mod.	NW	Fair	Capt. H. C. Dearborn
S. S. City of Tokio,																			
S. 28° 07′, E. 124° 05′ .....†	30.38	771.6	59	15.0	70	NNE			3		10		NE	0	0	Sm'h		Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡																			
N. 7° 12′, W. 80° 19′.....†	29.89	759.2	77	25.0	82	WSW			4		2		Calm	0	0	Sm'h	SW	Clear	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada																			
S. S. Zealandia																			
RED STAR LINE.																			
Jas. A. Wright, President.																			
S. S. Belgenland ‡																			Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland †.																			Capt. W. Geo. Randle.
S. S. Vaderland, ‡																			
N. 48° 44′, W. 27° 32′	29.77	756.1				ESE			7		10			Drizzles		R'gh	ESE	Misty	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller,																			
Brunswick, Ga	30.17	766.3	45	7.2	92	Calm	0	0			10n			0.01	0.3			Raining	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, ‡																			
Arroyo, P. R.....†	30.28	769.1	78	25.6		NE			4		2		E	show	ers	Sm'h		Fair	Capt. W. H. Champlin.
U. S. S. Fish Hawk,																			
Navy Yard, Norfolk, Va†	30.29	769.4	34	1.1	79	N	1	0.4		2n	2s			0.03	0.8			Cloudy	
Sch'r Hattie V. Kelsey,																			Capt. J. L. Randall.
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡																			
Lisbon, Portugal.....†	30.02	762.5	50	10.0	100	NE			3		0			0	0			Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OE THE SECRETARY OF WAR.

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

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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 5, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Velocity.		Force	Clouds. Amount and kind.		Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.02	762.4	58.3	14.6	70	NE			2		1			0	0	Very fair	Dr. Ollive.
Nemours			29.97	761.2	60.3	15.7	64	WNW			2		2			0	0	Very fair	Raynard.
Algiers			29.92	760.0	55.4	13.0	57	WSW			3		4			0.150	3.8	Cloudy	Nicolas.
La Calle			29.95	760.7	54.1	12.3	89	NW			5		10			0	0	Covered	Fonfrède.
Tunis			29.95	760.8															Jacques.
Sfax			30.10	764.5															Gau.
Saida			29.97	761.1	47.1	8.4	70	ESE			2		2			0	0	Fair	Dumas.
Tebessa			30.05	763.3	55.8	13.2	51	W			1		9			0	0	Covered	Watrin.
Gerville																			Lonchamp.
Laghouat			30.03	762.7	50.0	10.0	89	NW			1		1			0	0	Very fair	Herbin.
Biskra			30.01	762.2	61.5	16.4	61	NW			5		0			0	0	Clear	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.99	761.7	30.08	764.0	59.0	15.0	77	S	4	1.8			1			0	0	Very fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			30.20	767.1	70	21.1		NW			3		7k			0	0	Very cloudy	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.49	749.0	30.06	763.5	39.0	3.9	97	SE			1		10			0.165	4.2		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.45	748.0	30.26	768.7	33.4	0.8	85	NNW	3.8	1.7			10			0.004	0.1		Dr. Wiersbicki.
Eperies	29.24	742.8	30.16	766.1	37.0	2.8	93	Calm			0		10	fog		0	0		Julius Mikolik.
Gratz ‡	28.80	731.5	30.10	764.4	37.2	2.9	83	WNW			1		10			0	0		Andreas Rospini.
Hermannstadt	28.72	729.4	30.20	767.1	39.6	4.2	89	ESE			2		10			0.305	7.75		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.65	727.6	30.05	763.2	33.3	0.7	96	ESE			5		10			0	0		The Staff.
Lemberg	29.13	739.9	30.16	766.1	36.0	2.2	93	NW			1		10			Inap.	Inap.		Dr. T. Stanecki.
Pola	29.87	758.8	29.99	761.7	57.2	14.0	59	SE			4		10			0.457	11.6		I. R. HydrographicOffice.
Szathmar	29.68	753.9	30.13	765.4	43.7	6.5	88	SE			2		10			0.020	0.5	Raining	Beicht Peter, S. J.
Szegedin	29.82	757.5	30.11	764.8	43.5	6.4	100	Calm			0		10			0	0		Karl Stancel.
Trieste	29.89	759.2	29.99	761.8	55.9	13.3	91	Calm			0		10			0.776	19.7	Raining	P. Busin.
Vienna	29.40	746.7	30.15	765.7	35.2	1.8	95	ESE			1		10			0.122	3.1		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 12, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.47	773.9	30.58	776.7	31.9	— 0.1	84	WNW	9	4.0			2			0	0	Misty	W. Boswell.
Armagh, Observatory	30.28	769.1	30.52	775.2	40.1	4.5	91	NE	6	2.7			5					D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.44	773.2	43.3	6.3	67	ENE	25	11.2			2					Misty	John Hartnup.
Bolton, Sharples	29.89	759.2	30.45	773.4	41.7	5.4	76	E	7	3.1			7					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	30.02	762.5	30.42	772.7	42.4	5.8	85	E			3		8			0	0	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	78.0	25.6	66	NE			3		3					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			30.30	769.6	42.0	5.6	78	NE			2.0		1					Blue sky	John McLaren.
Chatham, School M. E.	30.14	765.5	30.27	768.8	42.1	5.6	83	NE			3		5					D. clouds	Cpl. Gwinn, R. E.
Falmouth, Observatory	30.01	762.2	30.24	768.1	42.6	5.9	75	NNE			4		10					Overcast	The Staff.
Fort Napier, Natal	27.58	700.5	29.80	756.9	81.2	27.3	92	NE			1		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.59	751.6	29.83	757.7	85	29.4	79	SW			2		4					D. clouds	C. E. Keane.
Galway, Queen's College			30.36	771.1	44	6.7	84	NE			2		3					Blue sky	J. O'Donaghadue.
Gibraltar, Mediterranean	30.05	763.5	30.12	765.0	57.5	14.2	93	W			3		0					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.36	771.1	30.57	776.5	29.0	— 1.7	99	N			1							Dense fog	D. G. MacLean.
Greenwich, Royal Obs'y	30.08	764.0	30.26	768.6	41.3	5.2	80	NE			4		8					D. clouds	The Staff.
Guernsey	29.86	758.4	30.09	764.3	46	7.8	73	NE			5		7					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.24	768.1	30.28	769.1	42.0	5.6	72	NE	26	11.6			8					D. clouds	The Met'g'l Office.
Leicester, Museum	30.09	764.3	30.36	771.1	42.0	5.6	84	NE			2		5					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.94	760.5	30.02	762.5	64.0	17.8	72	SE			2		7					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.00	762.0	72.2	22.3	99	SE			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.94	760.5	30.49	774.4	39.9	4.4	83	ENE			5		9					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	30.07	763.8	30.32	770.1	42	5.6	74	E			5		4					Squally	The Staff.
Plymouth	30.15	765.8	30.23	767.8	42.8	6.0	71	NE			4		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.54	775.7	39.8	4.3	98	W	2	0.9			5					D. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.16	766.1	30.23	767.8	53.0	11.7	74	SW			1	9c						D. clouds	Serg't W. H. Lyne.
Sheffield	30.16	766.1	30.46	773.7	40.9	4.9	96	ENE			2		10			0	0	Overcast	W. F. Cooper.
Silloth Rectory	30.50	774.7	30.54	775.7	40.6	4.8	73	E			2		6			0	0	D. clouds	Rev. F. Redford, A. M.
Stonyhurst, Observatory			30.46	773.7	42.3	5.7	79	ENE	12	5.4			10					Overcast	Rev. S. J. Perry.
Strathfield Turgiss	30.04	763.0	30.27	768.8	41.8	5.4	76	NE			2.5		5					Squally	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	30.16	766.1	30.23	767.8	44	6.7	68	NE			4		5					D. clouds	W. Newcombe.
Valencia, Observatory	30.32	770.1	30.35	770.9	45.9	7.7	82	E	8	3.6			7					D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	30.22	767.6	30.26	768.6	— 3.5	—19.7		Calm	0	0			10n			0	0	Cloudy	Hon. J. Ferguson.
Chatham, N. B.*	30.04	763.0	30.11	764.8	— 2	—18.9	97	Calm	0	0			10n		Calm	Inap.	Inap.	Light snow	G. A. Blair.
Charlottetown, P. E. Island	30.11	764.8	30.15	765.8	— 1	—18.3	100	Calm	0	0			10n			0	0	Cloudy	H. J. Cundall, C. E.
Chicontime, Quebec					5.3	—14.8		SE			2	0	9s			0	0	Cloudy	Rev. V. A. Huart.
Cornwall, Ontario	29.74	755.4	29.95	760.7	8.0	—13.3	91	NE			1		10s			0.02	0.5	Cloudy	James Smith, M. A.
Dalhousie, N. B	30.04	763.0	30.08	764.0	— 4.5	—20.8		W			1	0	0			0	0	Clear	H. A. Johnson.
Father Point, Quebec*	29.94	760.5	29.96	761.0	9	—12.8	51	SW	3	1.3		2cs	2ks	Calm	Calm	0	0	Fair	J. McWilliams.
Fredericton, N. B	30.04	763.0	30.11	764.8	— 0.4	—18.0	100	Calm	0	0			10n			0.025	0.64	Snowing	Prof. Harrison.
Fort Garry, Manitoba*	29.21	741.9	30.15	765.8	—10	—23.3	100	NW	5	2.2		0	0			0	0	Clear	James Stewart.
Granton, Ontario	28.82	732.0	30.02	762.5	9.0	—12.8	100	SE			1	0	Fog			0	0	Foggy	James Grant.
Halifax, N. S.*	30.03	762.7	30.17	766.3	13	—10.6	94	W	1	0.4			Haze			0	0	Hazy	A. Allison.
Hamilton, Ontario	29.57	751.1	30.00	762.0	14.7	— 9.6	91	SW			1	10k	0	SW		0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.61	752.1	29.97	761.2	15	— 9.4	89	NE	5	2.2			10ks		Calm	0.004	1.0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	30.08	764.0	30.12	765.0	11.5	—11.4	90	W	2	0.9		7cs	0	W		0	0	Fair	C. H. Rigby.
Montreal, Quebec*	29.76	755.9	29.98	761.5	8	—13.3	89	S	8	3.6			10s			0.01	0.3	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A.
Parry Sound, Ontario*	29.14	740.1	29.89	759.2	11	—11.7	80	SE	8	3.6		2cs	0	SE		0.14	3.6	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.18	741.1	30.00	762.0	7.3	—13.7	53	N			1		10n			0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.23	742.4	29.97	761.2	19	— 7.2	100	W	2	0.9			Fog			0	0	Foggy	H. Morgan.
Port Stanley, Ontario	29.29	744.0	29.99	761.7	7	—13.9	91	W	2	0.9			10n		W	0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.65	753.1	30.00	762.0	10	—12.2	100	Calm			0		10n		Calm	0.05	1.3	Light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.39	746.5	29.89	759.2	6	—14.4	81	SE	8	3.6			10s		W	0	0	Cloudy	W. H. McIntyre.
St. Andrews	29.99	761.7	30.04	763.0	21	— 6.1	97	E	1	0.4			10n			0.06	1.5	Cloudy	
St. John's, N. B	29.91	759.7	30.09	764.3	13.0	—10.6	100	S	2	0.9			10ks			0	0	Cloudy	G. Murdock, C. E.
Saugeen, Ontario*	29.14	740.1	29.90	759.4	15	— 9.4	88	S	12	5.4		2cs	0			0.01	0.3	Clear	K. Stewart.
Stratford, Ontario	28.63	727.2	30.04	763.0	5.2	—14.9	93	Calm	0	0		0	Fog			0	0	Foggy	C. J. Macgregor, M. A.
Sydney, C. B*	30.13	765.3	30.18	766.6	10	—12.2	96	SW	1	0.4		10cs	0			0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.56	750.8	29.97	761.2	17	— 8.3	92	SW	5	2.2			10n			Inap.	Inap.	Cloudy	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario	28.83	732.3	30.00	762.0	8.0	—13.3	96	SW	5	2.2		0	0			0	0	Clear	Prof. Wolverton.
Yarmouth, N. S.*	30.00	762.0	30.07	763.8	18	— 7.8	82	E	6	2.7		5k	5s	NW	NE	0.08	2.0	Light snow	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. John's, Newfoundland	29.89	759.2	30.07	763.8	14	—10.0	100	NW	1	0.4		0	0			0	0	Fair	John Delany.
St. Pierre, N. F.			29.92	760.0	14.7	— 9.6		NW			2					0	0		N. F. Land, Comd't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.86	758.4	29.90	759.4	73.0	22.8	68	NW	16.6	7.4		6	4k;ks			0	0		The Staff, for D. Gill.
Cape St. Francis Lt. House	29.76	755.9			72.5	22.5	77	SE	13.8	6.2		1c	0			0	0	Blue sky	John Duthie.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.18	766.5	30.20	767.1	37.6	3.1	97	W	3.1	1.4			2			0.024	0.6	Almost clear	M. Marc Dechevrens, S.J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.17	664.7	29.89	759.2	63.5	17.5	94	NE			1	8d				0	0	Cloudy	Frederico Maison.

DANISH SERIES.

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

Copenhagen	30.41	772.5	30.46	773.7	33.8	1.0	70	NE	11	5		0							
Faröe	30.47	773.8	30.48	774.3	34.9	1.6	76	ENE			4	1							
Godthaab, Greenland	29.61	752.1	29.65	753.2	18.1	—7.7		S			7	10						Snowing	
Stykkisholm, Iceland	29.44	747.8	29.48	748.9	44.4	6.9	99	S			8	10						Raining	
Thorshavn	30.34	770.5	30.37	771.4	44.2	6.8	90	WSW	11	5		7							
Vestervig	30.42	772.7	30.52	775.1	33.3	0.7	89	ENE			2	0							

FRENCH SERIES.

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

Agen, Normal School	29.21	742.0	29.90	759.5	26.6	—3	92	NW			1	8n			0.110	2.8	Snowing	M. Labroue, Director.
Alençon	29.45	748.1	30.00	762.1	34.5	1.4	93	N			3	5n		W	0	0	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.83	757.7	30.10	764.6	35.1	1.7	82	E	8.9	4.0		8						M. Klein, Commandant.
Avignon, Normal School	29.84	757.9	29.92	759.9	48.7	9.3	71	SE			1	2n		SSE	0.937	23.8	Partly cl'dy	M. Giraud, Director.
Bar-sur-Seine	29.41	747.0	29.99	761.8	32.4	0.2	95	ESE			1	10			0	0	Covered	M. Saillard, Director.
Beauvais, Normal School	29.76	755.9	30.00	762.0	34.0	1.1	81	NE			3	8		NE	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.05	737.9	29.99	761.7	31.3	—0.4	89	S			3	10		S	0	0	Covered	M. Gobin, Director.
Bordeaux, Observatory	29.58	751.3	29.85	758.3	29.1	—1.6	96	N			1	10					Snowing	M. Rayet, Director.
Bourges, Normal School	29.34	745.1	29.91	759.8	29.8	—1.2	96	NNE			1	10n		NNE			Sleeting	M. Postel, Director.
Brest, Naval Observatory	29.85	758.3	30.10	764.5	44.6	7.0	82	NE			2	9		NE	0	0		M. de Rermarec, Dir.
Caen, Normal School	29.94	760.4	30.04	762.9	39.9	4.4	80	NE			2	5		NE	0	0	Cloudy	M. Bétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.70	754.3	30.11	764.8	33.4	0.8	88	NE			1	10			0	0	Covered	M. Jadot, Director.
Charleville, Normal School	29.48	748.9	30.02	762.5	30.9	—0.6	92	E			1	2			0	0	¼ covered	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.47	723.1	29.89	759.2	29.8	—1.2	82	NE			1	10		S	0.130	3.3		M. Allnard, Director.
Cluny, Normal School	29.08	738.5	29.96	760.9	30.2	—1	92	NE			2	10		NE	0	0	Covered	M. de Villemontée, Dir.
Commercy, Normal School	29.09	738.9	29.99	761.8	31.1	—0.5	85	E			4	n		E	0	0		Dr. Coulet, Director.
Gap, Normal School	27.36	694 9	29.95	760.7	40.3	4.6	97	N			2	10n		S	0.571	14.5	Snowing	M. Jeangirard, Director.
Gréasque, du. Rhone	28.83	732 3	29.97	761.3	46.0	7.8	66	N			1	5		SW	0.291	7.4		M. Kina, Director.
Grenoble, Normal School	29.15	740.5	29.96	760.9	33.1	0.6	94	W			1	1kn			0	0		M. Ablard, Director.
Guéret, Normal School	28.22	716.8	29.89	759.2	25.7	—3.5	91	SE			1	10		NW	0	0	Covered	M. Rivoir, Director.
Lamballe, Normal School	29.74	755.3	30.02	762.5	43.5	6.4	73	ENE			3	5		ENE	0	0	Light haze	M. Ollitrault, Director.
Lescar, Normal School	29.28	743.6	29.97	761.3	37.4	3	89	W			1	10		W	0.256	6.50	Covered	M. Chanvin, Director.
Lorient, Naval Observatory	29.91	759.8	30.02	762.4	44.6	7.0	62	NNE			6	0			0	0	Clear	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.84	732.5	29.91	759.6	32.4	0.2	96	SSE			1	10n		SSE	0.079	2.0	Snowing	M. André, Director.
Mans, Normal School	29.65	753.0	29.97	761.1	34.3	1.3	84	ENE			2	8		E	0	0	Very cloudy	M. Piboeu, Director.
Marseille, Observatory	29.65	753.0	29.92	759.9	51.3	10.7	74	NW			0-1	2		NW	0.362	9.20		M. Stephan, Director.
Montlouis l'Instituteur	24 54	623.2	29.77	756.2	31.1	—0.5	62	SW	7.4	3.3		0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.78	759.4	29.89	759.2	45.3	7.4	80	SW			2	5		W	1.120	28.6	Raining	M. Galzin, Director.
Nancy, Normal School	29.37	745.9	30.16	766.1	30.2	—1.0	100	NE			1	10			0	0	Foggy	M. Hasse.
Nantes, Observatory	29.87	758.6	30.03	762.7	35.2	1.8	74	NW			2	10		SW	0	0	Covered	M. Larocque, Fils.
Nice	29.85	758.2	29.88	759.0	54.0	12.2	80	E			3	10	SW	E	0.413	10.5	Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.76	755.8	29.86	758.5	45.9	7.7	70	SW	3.8	1.7		9		SE	0.150	3.8		Dr. Fines.
Pic-du-Midi, Plantade	22.18	503.4			16.3	—8.7						10		NNW	0.535	13.6	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.89	733.7	30.01	762.3	30.2	—1.0		Calm			0	10			0	0	Covered	M. Tallieu.
Puy de Dôme O. s'y, Summit	24.78	629.3			23.0	—5.0	98	SE			6	10			0.165	4.2	Foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.90	759.5	29.93	760.3	32.4	0.2	96	NE			2	10			0.020	0.5	Covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.74	755.3	29.97	761.1	32.2	0.1	85	N			1	10			0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	27.59	700.8	29.83	757.6	29.1	—1.6	96	NE			2	10		NE	0.575	14.6	Snowing	M. Richard, Director.
Rouen, Normal School	29.95	760.7	30.04	762.9	36.0	2.2	82	NE			1	10		NE	0	0	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.91	759.7	30.07	763.7	41.0	5	87	NE			3	5	E	E	0	0	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.84	758.0	30.01	762.2	32.9	0.5	86	NE			2	9	E	NE				M. Renou, Director.
Toulouse, Observatory	29.19	741.4	29.91	759.7	32.4	0.2	97	NW			1	10			0.079	2.0	Covered	M. Baillaud, Director.
Tours	29.72	754.8	29.91	759.8				NE			4	10			0	0	Covered	M. de Tastes.
Versailles, Observatory	29.50	749.2	29.99	761.7	31.6	—0.2	81	NE			2				0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																		M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	29.21	741.9	30.08	763.9	35.2	1.8	75	NE			7	8k	NE		0	0		Prof. Dr. Hoh.
Berlin	30.15	765.8	30.33	770.4	35.1	1.7	90	NE			2	7			0	0		Prof. Dr. Arndt.
Breslau	29.76	755.9	30.30	769.5	32.7	0.4	90	NNE			1	10			0	0		Royal University Obs'y.
Carlsruhe	29.60	751.9	30.05	763.2	34.2	1.2	82	NE			0	10	E		0	0		Albert Senz.
Cassel	29.61	752.2	30.23	767.8	35.2	1.8	71	E			4	7	NE		0	0		Dr. H. Möhl.
Frankfort on the Main	29.83	757.6	30.22	767.5	33.8	1.0	79	NNE			1	6			0	0		Physical Society.
Friedrichshafen	28.45	722.5	29.93	760.3	33.8	1.0	85	NE			6	10	NE		0	0		Chief Telegrapher Wilhelm.
Hamburg	30.33	770.4	30.40	772.2	35.1	1.7	85	ENE			2	6			0	0		Dr. R. Kleeman.
Kiel	30.34	770.7	30.36	771.1	36.0	2.2	81	ENE			2	0			0.014	0.36		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.85	758.2	30.30	769.5	33.4	0.8	82	NE			1	10			0	0		Prof. Dr. Bruhns.
Magdeburg	30.10	764.4	30.33	770.4	32.5	0.3	94	NE			2	10ks	ENE		0	0	Foggy	Dr. Assmans.
Memel	30.22	767.7	30.27	768.9	35.2	1.8	64	N			5	5k					Squally	Reinbrecht & Issermann.
Munich	28.09	713.5	29.95	760.7	32.9	0.5	96	NF			1	10			0.012	0.3		Central Station.
Neufahrwasser	30.35	770.9	30.37	771.3	37.0	2.8	64	NNW			3	1			0	0		A Lothes.
Neustadt, Palatinate	29.48	748.8	30.00	762.1	33.1	0.6		NE			2	10	ENE		0	0		Dicknether.
Stuttgart	29.00	736.7	29.93	760.3	34.5	1.4	78	N			1	10			0	0		Prof. Dr. Schoder.
Thorn	28.47	723.0	30.00	762.0	33.6	0.9	84	NE			4	10	NE		0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	30.42	772.7	30.45	773.3	35.8	2.1	80	NE			1	3s			0	0		Prof. Kemlein.
Wustrow																		Prof. S. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.91	759.8	30.31	769.9	57.2	14.0	.....	NE	.....	1.0	.....	.....	10	.....	.....	.....	.....	Covered	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.17	766.2	30.22	767.5	69.5	20.8	50	WNW	13.0	5.8	.....	.....	0	.....	.....	0	0	Blue sky	
Deesa	29.64	752.9	30.13	765.2	71.9	22.2	30	N	12.4	5.5	.....	.....	0	.....	.....	0	0	Misty	
Bombay	29.97	761.3	30.01	762.3	78.4	25.8	69	NNW	26.0	11.6	.....	.....	0	.....	.....	0	0	Blue sky	
Poona, Yarrowda	28.14	714.8	29.98	761.5	84.3	29.1	26	E	6.0	2.7	.....	.....	0	.....	.....	0	0	Blue sky	
Belgaum	27.45	697.3	29.99	761.7	78.9	26.1	28	NE	7.0	3.1	.....	.....	1	E	.....	0	0	D. clouds	
Lahore	29.43	747.5	30.21	767.4	61.1	16.2	55	Calm	2.2	1.0	.....	.....	0	.....	.....	0	0	.....	
Roorkee	29.19	741.4	30.13	765.3	63.0	17.2	55	NW	2.1	0.9	.....	.....	2	.....	.....	0	0	.....	
Agra	29.55	750.6	30.14	765.4	70.8	21.6	52	W	2.8	1.2	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28.98	735.9	30.02	762.6	80.7	27.1	48	SE	2.7	1.2	.....	.....	3	.....	NW	0	0	D. clouds	
Jubbulpore	28.66	728.0	30.05	763.3	74.4	23.6	52	Calm	1.7	0.8	.....	.....	0	.....	.....	0	0	Blue sky	
Lucknow	29.75	755.7	30.14	765.6	68.3	20.2	49	NNW	1.9	0.8	.....	.....	0	.....	.....	0	0	Blue sky	
Allahabad	29.76	755.9	30.09	764.2	65.8	18.8	73	Calm	2.1	0.9	.....	.....	0	.....	.....	0	0	Blue sky	
Patna	29.89	759.3	30.08	764.1	62.1	16.7	87	W	0.8	0.4	.....	.....	0	.....	.....	0	0	Blue sky	
Hazaribagh	28.00	711.3	30.08	764.1	64.6	18.1	69	NNW	5.7	2.6	.....	.....	0	.....	.....	0	0	Blue sky	
Cuttack	29.94	760.5	30.02	762.6	79.9	26.6	63	Calm	0.9	0.4	.....	.....	1	.....	.....	0.01	0.3	Blue sky	
Calcutta, Alipore	30.01	762.2	30.03	762.8	70.5	21.4	82	Calm	0	0	.....	.....	0	.....	.....	0	0	Blue sky	
Goalpara	29.60	751.8	30.02	762.5	65.3	18.5	58	Calm	3.1	1.4	.....	.....	3	W	.....	0	0	D. clouds	
Chittagong	29.90	759.4	30.00	761.9	71.0	21.7	67	WNW	2.8	1.2	.....	.....	0	.....	.....	0	0	Blue sky	
Sibsagar	29.72	754.8	30.07	763.9	58.0	14.4	88	NE	1.1	0.5	.....	.....	0	.....	.....	0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.61	752.2	30.04	763.0	50.5	10.3	100	NE	0.7	0.3	.....	.....	10	.....	.....	3.181	80.8	.....	Prof. Giovanni Clodig.
Milan	29.41	746.9	29.95	760.7	39.7	4.3	95	SE	0.7	0.3	.....	.....	10	.....	.....	1.366	34.7	.....	Prof. Schiaparelli.
Padua	29.85	758.3	29.97	761.2	50.9	10.5	95	ENE	9.4	4.2	.....	.....	10	.....	.....	1.484	37.7	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.01	736.9	29.96	761.0	38.3	3.5	95	NW	1.8	0.8	.....	.....	10	.....	.....	0.728	18.5	.....	Prof. P. F. Denza.
Genoa	29.70	754.3	29.90	759.4	46.8	8.2	86	N	9.4	4.2	.....	.....	10	S	.....	1.012	25.7	.....	Prof. G. M. Garibaldi.
Mondovi	27.99	711.0	30.01	762.2	38.8	3.8	87	W	.....	.....	2	.....	10	.....	.....	0.965	24.5	.....	Prof. D. C. Bruno.
Pesaro	29.91	759.6	29.96	760.9	54.9	12.7	81	E	7.4	3.3	.....	.....	10	S	.....	0.071	1.8	.....	Prof. Luigi Guidi.
Florence	29.64	752.8	29.90	759.4	55.4	13.0	78	E	.....	.....	2	.....	10	.....	.....	1.543	39.2	.....	Cav. F. Moucci.
Leghorn	29.76	755.9	29.84	758.0	58.3	14.6	98	SSW	19.9	8.9	.....	.....	0	.....	.....	3.102	78.8	.....	Prof. P. Monte.
Rome	29.79	756.7	29.97	761.2	60.4	15.8	69	S	16.8	7.5	.....	.....	10	.....	.....	0.425	10.8	.....	Prof. P. S. Ferrari.
Lecce	29.92	760.0	30.18	766.6	58.1	14.5	87	S	20.6	9.2	.....	.....	9	S	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.26	743.2	30.17	766.2	58.3	14.6	66	SE	8.7	3.9	.....	.....	10	ESE	.....	0.157	4.0	.....	Prof. D. Conti.
Cagliari	29.64	752.9	29.84	757.9	53.2	11.8	89	N	.....	.....	4	.....	10	.....	.....	0.028	0.7	.....	Prof. A. Pacinotti.
Palermo	29.76	755.9	30.01	762.3	63.3	17.4	49	SSE	15.4	6.9	.....	.....	10	SSE	.....	0.012	0.3	.....	Prof. G. Clacciatore.
Syracuse	30.13	765.3	30.17	766.4	60.1	15.6	76	SE	9.8	4.4	.....	.....	10	SSE	.....	0.039	1.0	.....	Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R.	29.54	750.3	30.06	763.6	57.7	14.3	87	SSW	3.8	1.7	.....	.....	10k	W	.....	0.106	2.7	.....	Prof. F. Brioschi.
Stelvio	22.08	560.7	.....	.....	29.7	— 2.3	81	E	.....	.....	.....	.....	10	.....	.....	11.811	300.0‖	.....	P. F. Denza.
Valdobbia	21.95	558.6	.....	.....	25.0	— 3.9	95	S	.....	.....	.....	.....	10	.....	.....	59.055	1600.0‡	.....	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	29.94	760.5	29.96	761.0	38.9	3.8	81	NNE	6.5	2.9	.....	.....	0	.....	.....	0	0	Clear	K. Sasaki.
Kioto	29.81	757.2	29.99	761.7	33.3	0.7	93	.....	.....	.....	.....	.....	0	.....	.....	0	0	Clear	.....
Nagasaki, I. M. Obs'y	29.78	756.4	29.99	761.7	40.4	4.7	91	Calm	0	0	.....	.....	3cs	.....	.....	0.480	12.19	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.90	759.4	29.97	761.2	39.1	3.9	88	NNE	3.5	1.6	.....	.....	9ks	.....	SE	0	0	Cloudy	The Staff.
Wakayama	29.89	759.2	29.95	760.7	37.6	3.1	84	NW	4.1	1.8	.....	.....	0	.....	.....	0	0	Clear	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.79	757.7	29.98	761.5	79.5	26.4	61	NW	8.5	3.8	.....	0	8	.....	N	0.20	5.1	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. Banda, C. E.
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanaxuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Leal.
Mazatlan	29.73	756.0	29.99	761.8	59.0	15.0	65	NE	.....	.....	2	0	1s	.....	.....	0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff.
Morelia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Fena, M. D.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.23	767.8	30.23	767.8	36.3	2.4	.....	ENE	.....	.....	5	.....	.....	.....	.....	0	0	.....	
Groningen	30.29	769.4	30.35	770.8	35.2	1.8	.....	ENE	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Helder	30.32	770.1	30.32	770.1	39.2	4.0	.....	NE	.....	.....	5	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.28	768.0	30.24	768.0	35.6	2.0	89	ENE	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Utrecht	30.23	767.8	30.29	769.0	34.0	1.1	93	NE	.....	.....	4	.....	8	.....	.....	0	0	Very cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.46	773.6	30.52	775.2	36.3	2.4	93	Calm	0	0	.....	.....	3	.....	.....	0	0	.....	
Christiania	30.36	771.1	30.52	775.2	20.7	— 6.3	90	ESE	0	0	.....	.....	2	.....	.....	0	0	.....	
Gjæsvær	29.82	757.2	29.84	757.8	28.4	— 2.0	.....	NE	.....	.....	6	.....	10	.....	.....	.....	.....	.....	
Lodingen	30.10	764.4	30.14	765.6	30.7	— 0.7	73	W	.....	.....	4	.....	10	.....	.....	0.827	21.0	.....	
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.32	744.7	29.48	748.7	57.9	14.4	74	SW	14.3	6.4	.....	.....	3	.....	.....	0.551	14.0	.....	Dr. J. A. Sampaio.
Campo Major	29.05	737.9	30.08	764.0	46.8	8.2	65	W	4.3	1.9	.....	.....	8	SSW	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.98	761.5	30.07	763.7	63.3	17.4	74	S	8.7	3.9	.....	.....	9	.....	.....	0.008	0.2	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.76	755.8	30.12	765.1	52.3	11.3	65	WNW	6.9	3.1	.....	.....	2	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	29.52	749.9	29.60	751.7	60.8	16.0	67	SW	21.7	9.7	.....	.....	4	.....	.....	0.665	16.9	.....	
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinsk	28.76	730.6	29.91	759.6	21.6	— 5.8	100	SW	56	25	.....	.....	10	.....	.....	Blank	Blank	.....	Capt. Lasarew.
Archangel	29.35	745.4	29.37	745.9	18.7	— 7.4	92	WNW	4	2	.....	.....	10	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	30.28	769.1	30.20	767.0	37.4	3.0	56	WSW	9	4	.....	.....	2s	.....	.....	.....	.....	Light clouds	Capt. Wisganow.
Barnaul	29.50	749.2	30.03	762.7	22.8	— 5.1	87	SSW	22	10	.....	.....	10	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.75	755.6	30.00	762.1	28.9	— 3.4	74	NW	9	4	.....	.....	9k	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	28.29	718.5	29.27	743.4	28.8	— 1.8	92	SW	4	2	.....	.....	10	.....	.....	.....	.....	Snowing	Meteorological Obs'y.
Kasan	29.17	741.0	29.45	748.0	32.5	0.3	90	WSW	9	4	.....	.....	10	.....	.....	.....	.....	.....	Observatory.
Kertch	30.24	768.2	30.26	768.7	37.4	3.0	93	W	4	2	.....	.....	9	.....	.....	.....	.....	.....	Lagorio.
Kieff	29.37	746.1	30.04	763.0	32.2	0.1	98	WNW	4	2	.....	.....	10n	.....	.....	.....	.....	Foggy	Observatory.
Krotkowo, N. 58°47′, E. 48°34′	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.93	760.1	30.14	765.5	28.8	— 1.8	80	W	22	10	.....	.....	8	.....	.....	Blank	Blank	.....	Meteorological Obs'y.
Moscow	29.04	737.6	29.61	752.0	34.7	1.5	77	SSW	7.8	3.5	.....	.....	10s	.....	.....	.....	.....	Light snow.	Meteorological Obs'y.
Nertchinsk	27.87	707.8	30.58	776.6	—25.6	—32.0	85	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	30.12	765.0	30.19	766.8	39.0	3.9	100	SSW	4	2	.....	.....	10n	.....	.....	.....	.....	Foggy	1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.70	754.4	29.79	756.6	—29.2	—34.0	70	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Lieut. Iwanow.
Nukuss	30.21	767.3	30.45	773.5	38.8	3.8	90	WSW	9	4	.....	.....	1k	.....	.....	.....	.....	.....	Dr. Dobrochotow.
Pekin, China	30.08	764.1	30.22	767.7	24.4	— 4.2	32	NW	7	3	.....	2c	.....	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.81	757.1	29.82	757.5	16.3	— 8.7	91	WNW	9	4	.....	.....	3ks	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.95	735.3	30.61	777.6	36.0	2.2	68	Calm	0	0	.....	.....	4	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.88	733.6	30.32	770.2	51.1	10.6	49	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.82	757.4	30.26	768.7	33.4	0.8	83	N	9	4	.....	.....	6ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.70	754.4	30.14	765.6	33.1	0.6	68	NW	9	4	.....	.....	9	.....	.....	.....	.....	Heavy clouds	Berg, Assistant.
Yeniseisk	29.76	755.9	30.08	763.9	6.1	—14.4	89	SE	7	3	.....	.....	10	.....	.....	.....	.....	Snowing	M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	30.59	777.0	29.0	— 1.7	100	SW	.....	.....	1	.....	10s	.....	.....	0	0	Dense fog	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.53	775.4	44	6.7	92	SSE	.....	.....	3	0	0	.....	.....	0	0	.....	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	30.48	774.2	.....	.....	.....	W	.....	.....	2	3	7	SW	.....	0	0	.....	Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y.....†..	29.80	756.9	29.91	759.6	48.6	9.2	62	SW	1.8	0.8	.....	.....	1	.....	.....	0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.92	760 0	29.98	761.5	46.4	8.0	77	NW	3.2	1.44	.....	.....	10	.....	.....	0.043	1.1	Rainy	Prof. Manuel de Naveran·
Burgos, Met. Obs'y	26.98	685.4	.....	.....	33.3	0.7	80	N	6.7	2.99	.....	.....	10	.....	.....	0	0	Covered	Domingo Mantiny Perez·
Madrid, Royal Obs'y	27.74	704.5	30.04	763.0	42.1	5.6	65	W	3.8	1.7	.....	8	1	.....	.....	0	0	Light clouds	The Staff.
Murcia, Met. Obs'y.‡	29.68	753.8	29.83	757.7	55.4	13.0	59	SW	1.1	0.5	.....	1	3	W	.....	0	0	Clouds	Olayo'Diaz, Director.
Santiago, Met. Obs'y	29.15	740.3	30.08	763.9	40.6	4.8	85	NW	0	0	.....	.....	10	.....	.....	0	0	Covered	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.88	758.8	29.94	760.5	71.9	23.2	92	ESE	3.1	1.4	.....	1c	1s	.....	.....	0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.83	757.9	29.89	759.2	81.1	27.3	83	S	11.0	5.0	.....	.....	.....	.....	.....	0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.04	763.1	30.14	765.6	52.3	11.3	71	N	2.8	1.3	.....	0	1	.....	NW	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.97	761.1	30.06	763.4	76.3	24.6	92	E	6.6	2.95	.....	6ks	5kn	E	E	0.049	1.25	Cloudy	Enrique Gades, Chief Engineer.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.97	761.3	30.01	762.3	20.5	— 6.4	84	NW	.....	.....	2	.....	5	.....	.....	0	0	.....	
Umea	30.10	764.6	30.15	765.9	27.3	— 2.6	66	N	.....	.....	4	.....	0	.....	.....	0	0	.....	
Hernosand	30.25	768.3	30.30	769.6	31.1	— 0.5	90	NNW	.....	.....	4	.....	1	.....	.....	0	0	.....	
Stockholm	30.13	768.4	30.31	769.9	31.3	— 0.4	55	NNW	.....	.....	4	.....	0	.....	.....	0	0	.....	
Wisby	30.20	767.0	30.26	768.5	33.1	0.6	68	NNW	.....	.....	4	.....	0	.....	.....	0	0	.....	
Sub-Series.																			
Upsala	30.21	767.3	30.30	769.5	27.0	— 2.8	74	NW	7.8	3.5	.....	.....	0	.....	.....	0	0	.....	Nils Ekholm
SWISS SERIES.																			
Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.48	723.3	29.96	761.0	35.2	1.8	78	NNE	.....	.....	1	.....	10	.....	.....	.....	.....	Foggy	The Observatory.
Zurich	28.24	717.3	29.95	760.7	32.4	0.2	85	E	.....	.....	4	.....	10	.....	.....	0.012	0.3	Foggy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —4.4 mm.; Ther. +0°.4 cent.; Hum. —2 per cent.																			
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.30	769.6	51.4	10.8	70	W	5.6	2.5	.....	.....	10	.....	NW	0	0	.....	The Observatory.
Valona	.....	.....	30.19	766.8	64.8	18.2	.....	W	.....	.....	1	.....	5	.....	.....	0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.17	766.4	62.1	16.7	55	NW	.....	.....	1	.....	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

Albany, New York	29.95	760.7	30.04	763.0	23	— 5.0	86	E	2	0.9			10s		Calm	0.55	14.0	Cloudy	
Alpena, Michigan	29.16	740.7	29.83	757.7	23	— 5.0	86	W	11	4.9			10s		Calm	0.01	0.3	Cloudy	
Atlanta, Georgia	28.63	727.4	29.80	756.9	37	2.8	90	E	7	3.1			Fog		Calm	0.17	4.3	Dense fog	
Atlantic City, New Jersey	29.93	760.2	29.94	760.5	34	1.1	100	N	8	3.6			10n;fg		Calm	0.66	16.8	Light rain	
Augusta, Georgia																			
Baltimore, Maryland	29.93	760.2	29.98	761.5	34	1.1	79	Calm	0	0			10s		Calm	0.57	14.5	Cloudy	
Barnegat, New Jersey	29.92	760.0	29.94	760.5	33	0.6	100	N	20	8.9			10s		Calm	0.51	13.0	Cloudy	
Benton, Montana	27.21	691.1			30	— 1.1	100	W	1	0.4			10n		Calm	0.10	2.5	Light snow	
Bismarck, Dakota	28.13	714.5	29.99	761.7	1	—17.2		N	16	7.2		Haze	2s	Calm	Calm	0.35	8.9	Fair	
Boise City, Idaho	27.39	695.7	30.35	770.9	21	— 6.1	78	SE	1	0.4		0	0			0	0	Clear	
Boston, Massachusetts	29.87	758.7	30.03	762.7	22	— 5.6	100	NW	6	2.7			10s		Calm	0.24	6.1	Cloudy	
Brackettville, Texas	28.64	727.4	29.74	755.4	25	— 3.9	62	Calm	0	0		0	0			0	0	Clear	
Brownsville, Texas	29.90	759.4	29.95	760.7	38	3.3	91	Calm	0	0		0	0			0.03	0.8	Clear	
Buffalo, New York	29.22	742.2	29.96	761.0	20	— 6.7	85	SW	4	1.8			10s		Calm	0.02	0.5	Cloudy	
Burlington, Vermont	29.78	756.4	30.09	764.3	22	— 5.6	72	S	8	3.6			10s		S	0.02	0.5	Cloudy	
Cairo, Illinois	29.49	749.0	29.90	759.4	28	— 2.2	88	SE	1	0.4			10s		Calm	0.02	0.5	Cloudy	
Campo, California	27.37	695.2	29.94	760.5	27	— 2.8	88	SE	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.10	688.3			24	— 4.4	74	Calm				0	0			0	0	Clear	
Cape Henry, Virginia	29.90	759.4	29.92	760.0	34	1.1	100	NW	4	1.8			Fog		Calm	0.12	3.0	Dense fog	
Cape May, New Jersey	29.92	760.0	29.95	760.7	33	0.6	100	N	7	3.1			10s		Calm	0.99	25.1	Cloudy	
Castroville, Texas	29.04	737.6	29.78	756.4	23	— 5.0	73	NW	4	1.8		0	0			0	0	Clear	
Cedar Keys, Florida	29.88	758.9	29.91	759.7	59	15.0	94	S	18	8.0			Fog		Calm	0.09	2.3	Dense fog	
Champaign, Illinois	29.02	737.1	29.86	758.4	21	— 6.1	85	SE	1	0.4			Fog		Calm	0.10	2.5	Foggy	
Charleston, S. Carolina	29.86	758.4	29.92	760.0	46	7.8	100	N	6	2.7			10n		Calm	0.64	16.3	Light rain	
Charlotte, N. Carolina	29.03	737.3	29.87	758.7	34	1.1	100	N	2	0.9			10s;fg		Calm	0.26	6.6	Cloudy	
Chattanooga, Tennessee	29.02	737.1	29.84	757.9	37	2.8	100	NE	6	2.7			10n;fg		Calm	0.43	10.9	Light rain	
Cheyenne, Wyoming	23.68	601.5	29.62	752.3	18	— 7.8	100	N	36	16.1			10n		N	0.01	0.3	Light snow	
Chicago, Illinois	29.14	740.1	29.86	758.4	22	— 5.6	72	W	6	2.7			10s		Calm	0	0	Cloudy	
Chincoteague, Virginia	29.92	760.0	29.94	760.5	35	1.7	100	N	9	4.0			10n		Calm	0.38	9.7	Light rain	
Cincinnati, Ohio	29.24	742.7	29.92	760.0	32	0.0	79	NE	4	1.8			10s		Calm	0.27	6.9	Cloudy	
Cleveland, Ohio	29.20	741.7	29.98	761.5	17	— 8.3	92	SE	4	1.8			10s;fg		Calm	0.09	2.3	Cloudy	
Coleman City, Texas	27.94	709.7	29.67	753.6	24	— 4.4	61	S	12	5.4		0	0			0	0	Clear	
Columbus, Ohio	29.05	737.9	29.92	760.0	27	— 2.8	88	NE	2	0.9			Fog		Calm	0.32	8.1	Dense fog	
Concho, Texas	27.76	705.1	29.51	749.5	24	— 4.4	87	Calm	0	0		0	0			0	0	Clear	
Corsicana, Texas	29.42	747.3	29.91	759.7	27	— 2.8	76	S	4	1.8		0	0			0	0	Clear	
Davenport, Iowa	29.12	739.6	29.78	756.4	22	— 5.6	72	S	2	0.9		0	0			0	0	Clear	
Dayton, Washington T'y	28.55	725.2	30.31	769.9	33	0.6	89	SW	5	2.2			10s		Calm	0	0	Cloudy	
Deadwood, Dakota	25.15	638.8			17	— 8.3	83	NE	7	3.1			10n		Calm	0.20	5.1	Heavy snow	
Decatur, Texas	28.59	726.2	29.83	757.7	21	— 6.1	86	SE	8	3.6		0	0			0	0	Clear	
Delaware Breakwater, Del.	29.92	760.0	29.94	760.5	31	— 0.6	100	N	9	4.0			10n		N	0.67	17.0	Light rain	
Denison, Texas	28.98	736.1	29.83	757.7	17	— 8.3	83	S	5	2.2		0	0			0	0	Clear	
Denver, Colorado	24.44	620.8	29.66	753.4	30	— 1.1	68	NE	5	2.2			10s		Calm	0	0	Threatening	
Des Moines, Iowa	28.79	731.3	29.70	754.4	23	— 5.0	73	SW	3	1.3		0	0			0	0	Clear	
Detroit, Michigan	29.25	742.9	29.96	761.0	19	— 7.2	85	SW	1	0.4			8s		W	0	0	Cloudy	
Dodge City, Kansas	27.42	696.5	29.81	757.2	27	— 2.8	76	W	4	1.8			10s		W	0	0	Cloudy	
Dubuque, Iowa	29.03	737.3	29.77	756.1	19	— 7.2	85	S	4	1.8		0	1s		Calm	0	0	Clear	
Duluth, Minnesota	29.11	739.4	29.84	757.9	14	—10.0	81	SW	10	4.5			10s		Calm	0	0	Cloudy	
Eagle Pass, Texas	29.06	738.2	29.82	757.4	28	— 2.2	88	SE	2	0.9		0	0			0	0	Clear	
Eagle Rock, Texas	25.28	642.1	29.93	760.2	9	—12.8	78	S	8	3.6		2cs	2s	SW	SW	0.02	0.5	Fair	
Eastport, Maine	29.97	761.2	30.04	763.0	28	— 2.2	88	SE	16	7.2			10n		SE	0.11	2.8	Light snow	
Edinburg, Texas					38	3.3	72	Calm				0	0	2ks	Calm	0	0	Fair	
El Paso, Texas	25.97	659.6			32	0.0	50	NW	8	3.6			0			0	0	Clear	
Erie, Pennsylvania	29.18	741.1	29.93	760.2	27	— 2.8	88	S	2	0.9			0			0.08	2.0	Clear	
Escanaba, Michigan	29.10	739.1	29.78	756.4	20	— 6.7	85	SW	7	3.1			10n		Calm	0.04	1.0	Light snow	
Florence, Arizona	28.46	722.9	30.06	763.5	35	1.7	61	N	1	0.4			0			0	0	Clear	
Fort Apache, New Mexico	24.73	628.1	30.18	766.6	22	— 5.6	58	NE	2	0.9			2s		SE	0	0	Fair	
Fort Assinniboine, Montana	27.16	689.8			25	— 3.9	75	NW	8	3.6			10s		Calm	0.25	6.3	Cloudy	
Fort Bennett, Dakota	28.25	717.5			15	— 9.4	82	N	20	8.9			10n		Calm	0.08	2.0	Light snow	
Fort Buford, Dakota	27.99	710.9	29.97	761.2	17	— 8.3	100	NW	4	1.8			10s		Calm	0.42	10.7	Cloudy	
Fort Custer, Montana	26.83	681.5			25	— 3.9	100	Calm	0	0			10s		Calm	0.07	1.8	Cloudy	
Fort Davis, Texas	24.88	631.9	29.84	757.9	30	— 1.1	73	SW	8	3.6		0	0			0	0	Clear	
Fort Elliott, Texas	26.91	683.5	29.28	743.7	18	— 7.8	53	SW	4	1.8			10s		SW	0	0	Cloudy	
Fort Gibson, Indian T'y	29.22	742.2	29.80	756.9	14	—10.0	82	SE	4	1.8		0	0			0	0	Clear	
Fort Grant, Arizona	24.99	634.2	29.79	756.7	41	5.0	42	W	20	8.9		0	0			0	0	Clear	
Fort Griffin, Texas	28.41	721.6	29.76	755.9	16	— 8.9	66	S	3	1.3		0	0			0	0	Clear	
Fort Keogh, Montana	27.49	698.2			21	— 6.1	85	N	1	0.4		10cs	0	Calm		0.12	3.0	Cloudy	
Fort Macon, North Carolina	29.90	759.4	29.91	759.7	47	8.3	100	N	8	3.6			10s		W	0.14	3.6	Cloudy	
Fort Missoula, Montana	26.81	681.0			30	— 1.1	89	N	1	0.4			10s		Calm	0.25	6.3	Cloudy	
Fort McKavett, Texas	27.45	697.2	29.43	747.5	28	— 2.2	88	SW	9	4.0		0	0			0	0	Clear	
Fort Shaw, Montana	26.37	669.8			28	— 2.2	100	Calm	0	0			10n		Calm	0.05	1.3	Light snow	
Fort Sill, Indian Territory	28.45	722.6	29.66	753.4	4	—15.6	74	Calm	0	0		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.12	714.2			70	21.1	88	Calm	0	0			10ks		Calm	0.23	5.8	Cloudy	
Fort Verde, Arizona					26	— 3.3	40	N				2	0			0	0	Clear	
Fredericksburg, Texas	28.05	712.5	29.67	753.6	29	— 1.7	78	W	1	0.4			0			0	0	Clear	
Galveston, Texas	29.87	758.7	29.91	759.7	37	2.8	81	N	3	1.3			8ks		N	0	0	Cloudy	
Grand Haven, Michigan	29.18	741.1	29.86	758.4	24	— 4.4	74	SE	4	1.8			10s		Calm	0	0	Cloudy	
Hatteras, North Carolina	29.88	758.9	29.90	759.4	39	3.9	100	NW	18	8.0			10n		Calm	0.14	3.6	Light rain	
Helena, Montana	25.78	654.8			28	— 2.2	77	SW	11	4.9			10s		Calm	0.03	0.8	Cloudy	
Henrietta, Texas	28.72	729.5	29.73	755.1	9	—12.8	78	S	4	1.8		0	0			0	0	Clear	
Indianapolis, Indiana	29.05	737.9	29.86	758.4	25	— 3.9	87	NE	1	0.4		Haze	Sm'e	Calm	Calm	0.05	1.3	Dense smoke	
Indianola, Texas	29.91	759.7	29.94	760.5	37	2.8	81	N	2	0.9			10s		Calm	0	0	Cloudy	
Jacksboro, Texas	28.58	725.9	29.76	755.9	24	— 4.4	61	SW	5	2.2		0	0			0	0	Clear	
Jacksonville, Florida	29.85	758.2	29.90	759.4	59	15.0	94	NE	5	2.2			Fog			0.45	11.4	Dense fog	
Keokuk, Iowa	29.10	739.1	29.78	756.4	22	— 5.6	79	S	3	1.3			10s		Calm	0	0	Cloudy	
Key West, Florida	29.94	760.5	29.97	761.2	74	23.3	90	S	6	2.7			1k	0	SW	0	0	Clear	
Kittyhawk, North Carolina	29.90	759.4	29.93	760.2	36	2.2	90	N	7	3.1			10n		Calm	0.07	1.8	Light rain	
Knoxville, Tennessee	28.84	732.5	29.87	758.7	36	2.2	100	NE	4	1.8			10n		Calm	0.42	10.7	Light rain	
La Crosse, Wisconsin	28.94	735.1	29.70	754.4	24	— 4.4	87	S	9	4.0			10s		Calm	0	0	Threatening	
La Mesilla, New Mexico	25.87	657.1	30.02	762.5	22	— 5.6	85	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.42	747.3	29.77	756.1	33	0.6	79	S	2	0.9		0	0			0	0	Clear	
Leavenworth, Kansas	28.82	732.0	29.70	754.4	18	— 7.8	68	S	3	1.3		0	0			0	0	Clear	
Lewiston, Idaho	29.52	749.8	30.21	767.3	30	— 1.1	67	E	7	3.1		0	0			0	0	Clear	
Little Rock, Arkansas	29.53	750.0	29.86	758.4	34	1.1	90	SE	4	1.8			10s		Calm	0	0	Cloudy	
Los Angeles, California	29.61	752.1	29.96	761.0	43	6.1	75	N	4	1.8		0	0			0	0	Clear	
Louisville, Kentucky	29.27	743.4	29.85	758.2	31	— 0.6	89	N	2	0.9			10s;fg		Calm	0.15	3.8	Cloudy	
Lynchburg, Virginia	29.22	742.2	29.92	760.0	35	1.7	90	E	4	1.8			10s		Calm	0.16	4.1	Cloudy	
Madison, Wisconsin	29.73	755.1	29.76	755.9	20	— 6.7	85	S	9	4.0			10s		Calm	0	0	Cloudy	
Marquette, Michigan	29.02	737.1	29.75	755.6	23	— 5.0	86	N	8	3.6			10n		Calm	0.09	2.3	Light snow	
Mason, Texas	28.14	714.7	29.99	761.7	23	— 5.0	75	SW	16	7.2		0	0			0	0	Clear	
Memphis, Tennessee	29.53	750.0	29.88	758.9	30	— 1.1	89	Calm	0	0			10s		Calm	0	0	Cloudy	
Milwaukee, Wisconsin	29.05	737.9	29.81	757.2	22	— 5.6	86	S	6	2.7			10s		Calm	0	0	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.78	756.4	29.86	758.4	47	8.3	100	NW	6	2.7	.....	.....	10m;fg	.....	Calm	0.79	20.1	Light rain...	
Montgomery, Alabama	29.60	751.8	29.84	757.9	44	6.7	100	N	1	0.4	.....	.....	10m;fg	.....	Calm	0.16	4.1	Light rain...	
Morgantown, W. Virginia	28.90	734.0	29.91	759.7	36	2.2	80	Calm	0	0	.....	.....	10s	.....	Calm	0.36	9.1	Threatening	
Moorhead, Minnesota	28.89	733.8	29.94	760.5	5	—15.0	87	N	16	7.2	.....	.....	10s	.....	N	0.05	1.3	Cloudy.....	
Mt. Washington, N. H.	23.44	595.4	29.80	756.9	8	—13.3	78	NW	20	8.9	.....	0	10s	.....	NW	0.12	3.0	Cloudy	
Nashville, Tennessee	29.30	744.2	29.85	758.2	34	1.1	90	NW	2	0.9	.....	.....	10s;fg	.....	Calm	0.08	2.0	Dense fog....	
New Haven, Connecticut	29.86	758.4	29.99	761.7	21	— 6.1	85	NE	12	5.4	.....	.....	10s	.....	Calm	0.40	10.2	Cloudy.....	
New London, Connecticut	29.90	759.4	29.95	760.7	27	— 2.8	76	N	8	3.6	.....	.....	10s	.....	Calm	0.43	10.9	Cloudy.....	
New Orleans, Louisiana	29.79	756.7	29.86	758.4	44	6.7	84	NW	8	3.6	.....	.....	10s	.....	Calm	0.29	7.4	Cloudy.....	
Newport, Rhode Island	29.93	760.2	29.99	761.7	26	— 3.3	88	N	10	4.5	.....	.....	10s	.....	Calm	0.45	11.4	Cloudy.....	
New River, N. Carolina	.....	.....	.....	.....	43	6.1	100	N	.....	.....	1	.....	Fog	.....	Calm	.....	.....	Dense fog...	
New Shoreham, Rhode I'd.	29.92	760.0	29.96	761.0	30	— 1.1	89	NE	30	13.4	.....	.....	10s	.....	NE	0.21	5.3	Cloudy.....	
New York, New York	29.80	756.9	29.98	761.5	29	— 1.7	89	N	8	3.6	.....	.....	10s;fg	.....	Calm	0.45	11.4	Cloudy.....	
Norfolk, Virginia	29.88	758.9	29.94	760.5	35	1.7	90	N	4	1.8	.....	.....	Fog	.....	Calm	0.25	6.3	Foggy.....	
North Platte, Nebraska	26.61	675.9	29.15	740.4	35	1.7	95	N	14	6.3	.....	.....	10n	.....	Calm	0.01	0.3	Light rain ..	
Olympia, Washington T'y	30.33	770.4	30.37	771.4	41.0	5.0	91	S	1	0.4	.....	.....	10n	.....	Calm	0.04	1.0	Light rain...	
Omaha, Nebraska	28.41	721.6	29.52	749.8	28	— 2.2	77	S	5	2.2	.....	.....	10n	.....	Calm	Inap.	Inap.	Light rain...	
Oswego, New York	29.63	752.6	29.96	761.0	25	— 3.9	87	S	6	2.7	.....	.....	10s	.....	W	0.13	3.3	Cloudy.....	
Pensacola, Florida	29.78	756.4	29.81	757.2	56	13.3	100	E	2	0.9	.....	.....	10n	.....	Calm	2.18	55.4	Light rain...	
Philadelphia, Pa.	29.92	760.0	29.97	761.2	28	— 2.2	88	NE	11	4.9	.....	.....	10s	.....	Calm	0.55	14.0	Cloudy.....	
Phœnix, Arizona	28.86	733.0	30.76	781.3	30	— 1.1	68	E	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Pike's Peak, Colorado	17.22	437.4	29.43	747.5	— 5	- 20.6	100	NW	28	12.5	.....	.....	10n	.....	Calm	0.17	4.3	Light snow.	
Pilot Point, Texas	29.01	736.8	29.93	760.2	16	- 8.9	66	S	10	4.5	.....	0	0	.....	.....	0	0	Clear.	
Pioche, Nevada	23.98	609.1	29.75	755.6	22	— 5.6	58	N	17	7.6	.....	0	0	.....	.....	0	0	Clear.	
Pittsburg, Pennsylvania	29.09	738.9	29.92	760.0	33	0.6	89	NE	1	0.4	.....	.....	10s	.....	NE	0.50	12.7	Cloudy.....	
Port Huron, Michigan	29.24	742.7	29.95	760.7	18	- 7.8	84	S	10	4.5	.....	10cs	Fog	Calm	.....	0	0	Cloudy.....	
Portland, Maine	29.99	761.7	30.04	763.0	19	— 7.2	85	NW	5	2.2	.....	.....	10s	.....	Calm	0.12	3.0	Cloudy.....	
Portland, Oregon	30.37	771.4	30.44	773.2	39	3.9	91	SE	3	1.3	.....	.....	10n	.....	Calm	0.02	0.5	Light rain...	
Portsmouth, N. Carolina	.....	.....	.....	.....	41	5.0	100	NE	14	6.3	.....	.....	Fog	.....	Calm	0.08	2.0	Dense fog....	
Prescott, Arizona	24.63	625.6	29.99	761.7	37	2.8	63	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	29.91	759.7	29.92	760.0	67	19.4	95	SE	13	5.8	.....	8cs	0	SW	.....	0	0	Fair	
Red Bluff, California	29.80	756.9	30.16	766.1	52.0	11.1	41	N	22	9.8	.....	0	0	.....	.....	0	0	Clear.....	
Rio Grande City, Texas	29.71	754.6	29.94	760.5	36	2.2	81	Calm	0	0	.....	.....	0	.....	.....	0	0	Clear.	
Rochester, New York	29.31	744.5	29.96	761.0	17	— 8.3	83	SW	2	0.9	.....	1cs	8s;fg	W	Calm	0.06	1.5	Cloudy.....	
Roseburg, Oregon	29.89	759.2	30.49	774.4	35	1.7	95	Calm	0	0	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy.....	
Sacramento, California	30.05	763.3	30.12	765.0	42	5.6	100	SE	2	0.9	.....	.....	Fog	.....	.....	0	0	Foggy	
St. Louis, Missouri	29.25	742.9	29.85	758.2	20	— 6.7	85	E	10	4.5	.....	.....	10s	.....	Calm	0.11	2.8	Cloudy.....	
St. Paul, Minnesota	28.79	731.3	29.64	752.8	25	— 3.9	87	N	10	4.5	.....	.....	10n	.....	N	0.03	0.8	Light snow.	
Salt Lake City, Utah	25.64	651.2	29.97	761.2	26	— 3.3	52	Calm	0	0	.....	0	0	.....	.....	0.02	0.5	Clear.....	
San Antonio, Texas	29.15	740.4	29.89	759.2	27	— 2.8	76	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	
San Diego, California	29.91	759.7	29.98	761.5	48	8.9	70	NE	6	2.7	.....	0	0	.....	.....	0	0	Clear.....	
Sandusky, Ohio	29.26	743.2	29.98	761.5	17	— 8.3	83	Calm	0	0	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy.....	
Sandy Hook, New Jersey	29.97	761.2	30.01	762.2	28	— 2.2	77	NE	16	7.2	.....	.....	10s	.....	Calm	0.81	20.6	Cloudy.....	
San Francisco, California	30.03	762.7	30.09	764.3	48	8.9	89	E	1	0.4	.....	0	Fog	.....	Calm	0	0	Clear.....	
Santa Fé, New Mexico	22.87	580.9	29.41	747.0	20	— 6.7	69	Calm	0	0	.....	0	Haze	.....	Calm	0	0	Hazy.....	
Savannah, Georgia	29.80	756.9	29.90	759.4	49	9.4	93	NE	1	0.4	.....	.....	10n	.....	Calm	0.47	11.9	Light rain...	
Shreveport, Louisiana	29.64	752.8	29.89	759.2	33	0.6	89	W	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy.....	
Silver City, New Mexico	24.00	609.6	30.30	769.6	32	0.0	69	NW	7	3.1	.....	0	0	.....	.....	0	0	Clear.	
Smithville, North Carolina	29.89	759.2	29.92	760.0	52	11.1	93	N	5	2.2	.....	.....	10s	.....	Calm	0.95	24.1	Cloudy.....	
Socorro, New Mexico	25.37	644.4	29.44	747.8	6	—14.4	52	N	1	0.4	.....	0	0	.....	.....	0	0	Clear.....	
Springfield, Illinois	29.16	740.7	29.86	758.4	23	— 5.0	86	SE	5	2.2	.....	.....	10s;fg	.....	Calm	Inap.	Inap.	Cloudy.....	
Springfield, Massachusetts	29.89	759.2	30.03	762.7	21	— 6.1	87	N	5	2.2	.....	.....	10s	.....	.....	0.22	5.6	Threatening	
Stockton, Texas	26.62	676.1	29.62	752.3	35	1.7	80	SW	20	8.9	.....	0	0	.....	.....	0	0	Clear.	
St. Vincent, Minnesota	29.15	740.4	30.03	762.7	— 1	—18.3	100	N	16	7.2	.....	.....	10s	.....	Calm	0	0	Cloudy.....	
Thatcher's Island, Mass.	29.98	761.5	30.03	762.7	32	0.0	100	N	12	5.4	.....	.....	10n	.....	N	0.64	16.3	Light snow.	
Toledo, Ohio	29.25	742.9	29.98	761.5	17	— 8.3	83	SW	2	0.9	.....	.....	10s;fg	.....	Calm	0.02	0.5	Cloudy	
Tucson, Arizona	27.47	697.7	30.02	762.5	31	— 0.6	69	S	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Umatilla, Oregon	30.04	763.0	30.57	776.5	26	— 3.3	75	SW	2	0.9	.....	Haze	0	Calm	.....	0	0	Clear.....	
Uvalde, Texas	28.94	735.1	29.82	757.4	22	— 5.6	72	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	
Vicksburg, Mississippi	29.62	752.3	29.89	759.2	35	1.7	90	N	3	1.3	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy.....	
Visalia, California	29.72	754 9	30.10	764.5	41	5.0	91	NW	2	0.9	.....	.....	Fog	.....	Calm	0	0	Dense fog....	
Washington, D. C.	29.85	758.2	29.97	761.2	33	0.6	100	NE	3	1.3	.....	.....	10s;fg	.....	W;C	0.83	21.1	Cloudy.....	
Wickenburg, Arizona	.....	.....	.....	.....	27	— 2.8	76	W	.....	.....	1	2c	0	Calm	.....	0	0	Clear.....	
Wilmington, N. Carolina	29.87	758.7	29.93	760.2	47	8.3	92	N	3	1.3	.....	.....	10s	.....	Calm	0.54	13.7	Cloudy.....	
Winnemucca, Nevada	25.78	654.8	30.14	765.5	24	— 4.4	61	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Wood's Holl, Mass.	29.93	760.2	29.96	761.0	34	1.1	90	NE	6	2.7	.....	.....	10s	.....	NE	0.19	4.8	Cloudy.....	
Yankton, Dakota	28.29	718.6	29.60	751.8	29	— 1.7	100	NE	10	4.5	.....	.....	10n	.....	.....	Inap.	Inap.	Sleeting.....	
Yuma, Arizona	29.78	756.4	29.93	760.2	41	5.0	65	N	1	0.4	.....	0	0	.....	.....	0	0	Clear.....	
Sub-Series.																			
Bogota, U. S. Columbia	21.95	557.5	.....	.....	53.5	11.9	76	E	1	0.4	.....	5ck;k	0	.....	.....	0	0	Fair.....	Thomas Herran.
Havana, Cuba, W. I.	29.92	760.0	29.97	761.2	76	24.4	81	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	Charles Hasselbrink.
Jakobshavn, Greenland	29.65	753.0	29.71	754.6	11.8	—11.2	.....	W	.....	.....	2	.....	7	.....	.....	0	0	.....	
Kingston, Jamaica, W. I.	29.97	761.2	29.98	761.5	76.7	24.8	73	N	1	0.4	.....	0	2ks	.....	.....	0	0	Fine.....	Maxwell Hall.
Navassa, W. I.	29.92	760.0	30.00	762.0	77	25.0	75	NE	13	5.8	.....	2k	5s	E	NE	0	0	Fair.....	F. M. Everett.
Paramaribo, S. A.	29.99	761.7	29.99	761.7	77	25.0	86	E	.....	.....	2	5ck	4k	Calm	.....	0	0	Fair.....	Dr. O. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.36	745.7	29.92	760.0	78	25.6	89	Calm	.....	.....	0	2c	0	Calm	.....	0	0	Light fog ...	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	73	23	.....	ENE	.....	.....	1	0	1ks	.....	ENE	.....	.....	.....	Earl Flint.
Santiago de Cuba, W. I.	29.99	761.7	30.02	762.5	73	22.8	76	Calm	0	0	.....	1c	0	.....	.....	0	0	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	29.62	752.4	29.68	753.9	3.4	—15.9	.....	W	.....	.....	2	.....	1	.....	.....	0	0	.....	
York Factory, B. A.	29.25	742.9	29.31	744.5	—36.0	—37.8	.....	SW	12	5.4	.....	1c	0	SW	.....	0.01	0.3	Fair.....	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandre																			Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda																			Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J.Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.94	760.5	78	25.6	69	NNW			5		0							Squally	Capt. R. D. King.
H. M. S. Falcon,																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Callao Bay, Peru	29.92	760.0	64.5	18.1	97	S			1		10					3	S	Rain & fog	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	30.24	768.1	60.5	15.8	80	SE			1		10	SE				1	SE	Overcast	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 25° 58′, E. 110° 58′	30.14	765.5	55.0	12.8	84	NNE			2–5		9							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 13° 17′, E. 47° 51′	30.06	763.5	82	27.8	96	ENE			5–6		4	ENE				4	ENE	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 38° 42′, W. 9° 06′	30.04	763.0	51	10.6	79	NE			2		0							Blue sky	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda, W. I.	30.07	763.8	65	18.3	73	SW			2		7	W						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes, N. 37° 09′, E. 4° 02′	30.03	762.7	53.5	11.9	88	W			3-4		10	W				4	W	Showery	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis, N. 35° 59′, W. 5° 47′	30.13	765.3	56	13.3	100	SW			4		7	SW				4	SW	D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Seraphis, N. 36° 30′, W. 2° 07′	30.04	763.0	59	15.0	65	ENE			1		0							Blue sky	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark																			Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Polvard
GERMAN NAVAL SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	29.95	760.8	75.6	24.2	90	NE			2		3			0	0	2	SE	D. clouds	S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	29.95	760.7	46	7.8	84	W	3	1.3			10			0.93	23.6			Cloudy	
N. Yard, Portsmouth, N. H.	30.03	762.7	18	— 7.8	37	NW	2	0.9		10c		NW		0	0			Cloudy	
Naval Hospital, Yokohama, Japan	29.83	757.7	44	6.7	76	Calm			0		5		W	0	0			Fair	
Adams, Callao Peru	29.96	761.0	67	19.4	89	SSE			1		10		SW			Mod.	W	Cloudy	
Alaska, N. Yard, Mare I'd, Cal*	30.08	764.0	46	7.8	84	SE			3		0			0	0			Clear	
Alert, Hong-Kong, China	29.98	761.5	68	20.0	65	Calm			0		8		NNE	0	0	Sm'h		Hazy	
Alliance, Pensacola, Fla	29.82	757.4	58	14.4	94	W			1		10			Hea	vy	Sm'h		Raining	
Ashuelot, Tientsin, China	30.16	766.1	27	— 2.8	100	NNW			2		8							Cloudy	
Colorado, New York, N. Y	29.99	761.7	28	— 2.2	100	NNE	3	1.3			10		Calm	1.3	33.			Overcast	
Constitution, N. Yard, League I'd., Pa			29	— 1.7		NNE	2	0.9			10							Overcast	
Franklin, Off N. Yard, Norfolk, Va	29.85	758.2	38	3.3	91	NNW	10	4.5			10		NNW					Cloudy	
Galena, N. 36° 01′, W. 28° 28′	29.55	750.6	67	19.4	64	SW			4		8		SW			Long	SW	Fair	
Independence, N. Yard, Mare I'd, Cal	30.20	767.1	44	6.7	95	E	6.0	2.7			0			0	0			Clear	
Jamestown, Sitka, Alaska*	30.13	765.3	40	4.4	19	Calm			0		10			0.73	18.5			Raining	
Kearsarge, Curacoa, W. I	29.96	761.0	80	26.7	82	E			2		5		E			Sm'h		Fair	
Lackawanna, Ancon, Peru†	30.05	763.3	68	20.0	100	Calm			0		10		S	0	0			Cloudy	
Marion, Sandy Point, Patagonia, S. A	29.55	750.6	53	11.7	80	N			2		8			Hea	vy	Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	29.95	760.7	22	— 5.6		SW			2		10		SW					Cloudy	
Minnesota, New York, N. Y	29.98	761.5	30	— 1.1		NE			2-3		10		NE					Threatening	
Monocacy, Shanghai, China	30.19	756.8	41	5.0	91	W			1		2							Clear	
New Hampshire, Port Royal, S. C	29.90	759.4	46	7.8	92	ENE	3	1.3			10		Calm	0.02	0.5			Raining	
Nipsic, Villafranca, France	29.84	757.9	56	13.3	81	NE			2		10					Sm'h		Overcast	
Onward, Chimbote Bay, Peru††	29.91	759.7	70	21.1	80	S			3		2		N			Long	N;W	Fair	
Palos, Shanghai, China	30.21	767.3	38	3.3	100	WSW			1		0							Clear	
Passaic, Washington, D. C	30.03	762.7	34	1.1	90	NE			1		10		NE					Cloudy	
Pensacola, N. 31° 24′ W. 118° 58′	30.00	762.0	58	14.4	88	WNW			4		8		NW			Mod.	NW	Cloudy	
Portsmouth, Washington, D. C	29.95	760.7	33	0.6	100	NE			1		10							Misty	
Powhatan, New York, N. Y	29.98	761.5	28	— 2.7		NE			2		10							Cloudy	
Quinnebaug, Alexandria, Egypt	30.20	767.1	66	18.9	68	NE			2		2		NE			Sm'h		Fair	
Richmond, N. 28° 50′, E 122° 30′	30.19	766.8	51	10.6	85	NW			5		10		NW	0	0	Sm'h		Cloudy	
Saratoga, Baltimore, Md	29.93	760.2	32	0.0	100	NE			3		10			Mod	erate			Cloudy	
Shenandoah, Montevideo, Uruguay*	30.02	762.5	68	20.0	74	S			4		5		S			Mod.	SSW	Fair	
St. Louis, League Island, Pa	30.00	762.0	29	— 1.7	89	NNE	5	2.2			10			0	0			Cloudy	
Swatara, Hamada, Japan†	29.88	758.9	48	8.9	70	NNW			1		2					Sm'h		D. clouds	
Tennessee, Trinidad, W. I	30.04	763.0	77	25.0	82	Calm	0	0			5		Calm	0	0	Sm'h		Fair	
Trenton, Villafranca, France*	29.82	757.4	56	13.3	81	SE			1		10			20 h'r	s h'vy			Cloudy	
Vandalia, N. Yard, New York	29.97	761.2	37	2.8	90	NNE			2		10		Calm					Cloudy	
Wabash, Boston, Massachusetts	30.02	762 5	24	— 4.4	74	NNW	5	2.2			10		NNW	0	0			Cloudy	
Wachusetts, Taboga near Panama*	29.50	749.3	76	24.4	91	NW			4		2		N	0	0	Sm'h		Fair	
Wyoming, Naples, Italy	30.05	763.3	61	16.1	77	ESE			3		10		SE			Sm'h		Raining	

LINES AND VESSELS.	BAROMETER REDUCED TO SEA-LEVEL.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND.				CLOUDS.				RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		SEA-SWELL.		WEATHER.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mil.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mil.				

BRITISH MERCHANT-MARINE SERIES.

Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.

S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡ S. 24° 57′, E. 57° 14′	29.99	761.7	77.9	25.5	80	ESE			3		3							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡ N. 35° 34′, W. 20° 18′	29.78	756.4	64	17.8	89	SSE			6		10							Raining	Capt. H. Youlden.
City of Agra, ‡ S. 54° 33′, W. 134° 56′	29.90	759.7	45.5	7.5	96	WNW			5		10							Foggy	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 39° 22′, W. 19° 20′	29.79	756.7	59.6	15.3	77	SSE			7		10							Overcast	Capt. A. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡ S. 24° 00′, E. 69° 30′	30.08	764.0	77	25.0	91	ENE			5		7							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡ N. 45° 24′, W. 49° 34′	29.62	752.3	25	— 3.9	87	NNW			6		8					7	N	Snowing	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross, N. 51° 05′, W. 8° 30′	30.30	769.6	49	9.4	96	ENE			5		8					2	ENE, W	D. clouds	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ N. 1° 05′, E. 89° 20′	29.83	757.7	78.2	25.7	87	N			2		7							D. clouds	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 18° 48′, E. 39° 42′	29.85	758 2	79.0	26.1	82	SSW			6		10							Overcast	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			
WHITE STAR LINE. *Ismay, Imrie & Co.*																			Capt. W. H. P. Hains.
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Britanic, N. 41° 28′, W. 50° 45′ †	29.85	758.2	34	1.1		N			5		10		N			Mod.	N	Snow & hail	Capt. H. Perry.
S. S. Celtic, Queenstown, Ireland.. †	30.36	771.1	47	8.3		NE			5		8		NE	0	0	Sm'h		Cloudy	Capt. Benj. Gleadell.
S. S. Germanic, N. 47° 18′, W. 45° 00′ †	29.07	738.4	36	2.2		NW			10		10		NW	Sn Sho	ow wers	H'vy	NNW	Misty	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.

GERMAN MERCHANT-MARINE SERIES.

NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Hermann, N. 50° 44′, E. 0° 35′	30.16	756.1	44.6	7.0		NE			7		5		NE	0	0	Cross	NE	Stormy	Capt. H. Baur.
S. S. Köln																			Capt. F. Pfeiffer.
S. S. Leipzig ‡																			Capt. G. Meyer.
S. S. Ohio																			

SWEDISH MERCHANT-MARINE SERIES.

Barque Adolf Fredholm, ‡ S. 37° 44′, W. 37° 48′ *†	30.22	767.5	77.9	25.5	83	NNE			5		2							Blue sky	Capt. Albert Fredholm.
Ship Peru, ‡ N. 18° 37′, W. 77° 39′	29.97	761.1	78.6	25.9	85	ESE			4		5k							Misty	Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. Liverpool, England	30.33	770.4	45	7.2	92	ENE			4		2		NE					Clear	Capt. J. W. Shackford.
S. S. Indiana, ‡ Philadelphia, Pa.†	29.87	758.7	26	— 3.3	75	E			5		8		E	0	0			Cloudy	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 48° 48′, W. 40° 09′...*†	28.65	727.7	55	12.8	93	E			7		10		E	Hea	vy	H'vy	ENE	Raining	Wm. Shakford, 1st Off'r.
S. S. Pennsylvania, ‡ Philadelphia, Pa.†	29.51	749.5	28	— 2.2		NE			3		10		NE	Sn	ow			Overcast	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 36° 26′, W. 176° 19′ ...†	30.04	763.0	58	14.4	94	W			4		2		W	0	0	High	Con.	Clear	Capt. H. Davison.
S. S. Gaelic, N. 44° 32′, W. 146° 08′..*†	30.29	769.4	60	15.6	88	ESE			4		10		S			Mod.	ESE	Misty	Capt. W. H. Kidley.
S. S. Oceanic, N. 34° 58′, E. 139° 34′	30.03	762.7	53	11.7	67	Calm			0		2			0	0	Sm'h		Fine	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, N. 42° 30′, W. 124° 45′....†	30.45	773.4	49.5	9.7	78	NW			2		5		NW			Sm'h	NW	Pleasant	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal.†	30.02	762.5	48	8.9	85	Calm			0		0							Clear	Capt. J. N. Ingalls.
S. S. Idaho																			C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 35° 20′, W. 120° 54′... †	30.07	763.8	57	13.9	81	SE			5		0					Long	SW	Fair	
S. S. State of California, San Francisco, Cal.†	30.10	764.5	47	8.3	77	Calm			0		2		Calm					Clear	Capt. G. Debney.
S. S. Victoria, Fuca Strait.†	30.32	770.1	47	8.3	100	NNW			2		8					Sm'h		Cloudy	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, N. 2° —′, W. 165° —′.....†	29.83	757.7	80	26.7	91	N			2		0			0	0	Mod.	NE	Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking																			Capt. G. G. Berry.
S. S. City of Sidney, S. 32° 15′, E. 178° 41′.....†	29.95	760.7	69	20.6	85	SE			3		2		SW	0	0	Mod.	WNW	Fair	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 25° 20′, E 119° 47′.....†	30.22	767.6	56	13.3	81	NE			3		10		NE	0	0	Sm'h		Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 8° 09′, W. 83° 28′.....†	29.90	759.4	80	26.7	78	NW			3		5		N	0	0	Sm'h	WSW	Clear	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, N. 35° 22′, W. 121° 24′...†	29.96	761.0	57	13.9	75	E			2		0			0	0	Long	NW	Clear	
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland ‡																			Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland ‡																			Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 49° 05′, W. 22° 56′	30.01	762.2				SE			10		10		SE	Driz	zles	H'vy	SE	Cloudy	Capt. J. C. Jamison.
MISCELLANEOUS.																			Capt. A. Mehaffey.
Sch'r Abby Bentley																			
Sch'r Addie Fuller, Brunswick, Ga	29.90	759.4	62	16.7	77	Calm	0	0			Fog			0.80	20.3			Foggy	Capt J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, ‡ Arroyo, P. R.†	30.33	770.4	78	25.6		NE			2		2		E	0	0	Sm'h		Fair	Capt. W H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va.†	29.99	761.7	40	4.4	82	NW	1	0.4			10n			0.20	5.1			Drizzling	
Sch'r Hattie V. Kelsey																			Capt. J. L. Randall.
Ship Jamna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Spain	30.02	762.5	52	11.1	100	WSW			4		2		W	0	0			Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OE THE SECRETARY OF WAR.

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

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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 6, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.13	765.2	59.5	15.3	77	SW			2		6			0	0	Cloudy	Dr. Ollive.
Nemours			30.11	764.9	59.4	15.2	85	E			0		0			0	0	Clear.	Raynard.
Algiers			30.05	763.3	56.8	13.8	59	SSW			3		0			0.283	7.2	Clear	Nicolas.
La Calle			30.02	762.4	58.3	14.6	78	WNW			2		5			0	0	Cloudy	Fonfréde.
Tunis			29.97	761.3															Jacques.
Sfax			30.09	764.2															Gan.
Saida			30.11	764.9	50.5	10.3	94	SE			3		9			0	0	Clear	Dumas.
Tebessa			30.04	763.0	48.9	9.4	39	Calm			0		3			0	0	Pretty fair	Watrin.
Gerville																			Lonchamp.
Laghouat			30.15	765.9	52.9	11.6	74	SSE			1		1			0	0	Very fair	Herbin.
Biskra			30.07	763.7	58.6	14.8	72	NW			5		4			0	0	Cloudy	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.95	760.7	30.04	763.0	68.3	20.2	63	SE	6	2.7			2			0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			30.40	772.1	70	21.1		SE			2		7k			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.86	756.8	30.38	771.6	32.7	0.4	73	NE			4		10			0.331	8.4	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.78	756.3	30.60	777.1	28.8	— 1.8	94	N	11.2	5.0			6			0	0		Dr. Wiersbicki.
Eperies	29.52	749.7	30.46	773.6	29.1	— 1.6	66	N			5		10ks		S	0	0		Julius Mikolik.
Gratz‡	29.15	740.3	30.47	773.8	34.9	1.6	80	E			2		6			0.012	0.3		Andreas Rospini.
Hermannstadt	28.79	731.3	30.31	769.9	29.7	— 1.3	100	SE			2		10			0.534	13.55	Snowing	Prof. A. Gottschling.
Kremsmunster, Obs'y	29.05	737.9	30.48	774.3	28.8	— 1.8	78	ESE			4		5			0.020	0.5		The Staff.
Lemberg	29.21	741.8	30.25	768.4	27.9	— 2.3	73	NE			2		10			0	0		Dr. T. Stanecki.
Pola	29.92	759.9	30.03	762.8	46.4	8.0	50	ENE			4		10			0	0		I. R. Hydrographic Office.
Szathmar	29.82	757.3	30.28	769.0	34.7	1.5	59	NE			3		10			0.248	6.3		Beicht Peter, S. J.
Szegedin	29.99	761.8	30.29	769.3	32.7	0.4	92	NW			5		6			0.087	2.20		Karl Stancel.
Trieste	29.99	761.7	30.09	764.3	45.5	7.5	57	ENE			5		10			0	0	Cloudy	P. Busin.
Vienna	29.78	756.3	30.54	775.7	29.8	— 1.2	69	N			2		3			0.299	7.6		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory
Furnes																			M. E. de Cée.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 13, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.68	779.3	30.78	781.8	36.0	2.2	61	SSW	5	2.2			4			0	0	Misty	W. Boswell.
Armagh, Observatory	30.34	770.6	30.58	776.7	39.4	4.1	75	ENE	12	5.4			0					Blue sky	S. Call.
Bidston, Liverpool Obs'y			30.53	775.4	39.4	4.1	61	ENE	32	14.3			1					Misty	John Hartnup.
Bolton, Sharples	30.03	762.7	30.59	777.0	37.8	3.2	73	ESE	15	6.7			0					Blue sky	Thomas Mackereth.
Bradford, Yorkshire	30.20	767.1	30.60	777.2	38.1	3.4	82	E			3		2			0	0	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.01	762.2	30.04	763.0	80.0	26.7	74	NE			2		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			30.45	773.4	39.4	4.1	68	NE			2.0		0					Blue sky	John McLaren.
Chatham, School M. E.	30.29	769.4	30.43	772.9	40.1	4.5	73	NE			4		1					D. clouds	Cpl. Gwinn, R. E.
Falmouth, Observatory	30.08	764.0	30.31	769.9	40.3	4.6	78	ENE			6		10					Foggy	The Staff.
Fort Napier, Natal	27.57	700.3	29.79	756.7	82.4	28.0	87	NE			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.89	759.2	86	30.0	84	SE			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			30.41	772.4	40	4.4	73	E			2		4					Blue sky	J. O'Donaghadue.
Gibraltar, Mediterranean	30.10	764.5	30.16	766.1	59.8	15.4	91	W			4		3					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.51	774.9	30.71	780.0	37.3	2.9	76	NE			4							Blue sky	D. G. MacLean.
Greenwich, Royal Obs'y	30.24	768.1	30.42	772.7	40.9	4.9	78	ENE			6		1					Blue sky	The Staff.
Guernsey	30.00	762.0	30.22	767.6	41	5.0	65	ENE			5		8					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.39	771.9	30.43	772.9	40.0	4.4	60	ENE	37	16.5			3					Blue sky	The Met'g'l Office.
Leicester, Museum	30.26	768.6	30.52	775.2	40.0	4.4	64	NE			1		0					Blue sky	J. E. Carryer.
Malta, Mediterranean	29.84	757.9	29.92	760.0	64.0	17.8	88	NW			2		7					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.02	762.5	74.0	23.3	98	SW			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.96	761.0	30.51	774.9	39.9	4.4	64	ENE			6		0						Robert Pate.
Oxford, Radcliffe Obs'y	30.20	767.1	30.45	773.4	40	4.4	64	NE			6		0					Blue sky	The Staff.
Plymouth	30.24	768.1	30.32	770.1	38.8	3.8	77	NE			3		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.73	780.5	37.2	2.9	99	S	9	4.0			0					Blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.00	762.0	30.07	763.8	51.0	10.6	72	SW			2		9					D. clouds	Serg't W. H. Lyne.
Sheffield	30.34	770.6	30.64	778.2	40.0	4.4	64	NE			2		0			0	0	Blue sky	W. F. Cooper.
Silloth Rectory	30.66	778.7	30.69	779.5	38.8	3.8	71	E			5		0			0	0	Blue sky	Rev. F. Redford, A. M.
Stonyhurst, Observatory			30.61	777.5	38.8	3.8	68	E	16	7.2			0					Blue sky	Rev. S. J. Perry.
Strathfield Turgiss	30.18	766.6	30.41	772.4	39.9	4.4	66	NE			2		0					Squally	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	30.22	767.6	30.29	769.4	40	4.4	82	NE			6		10					Gloomy	W. Newcombe.
Valencia, Observatory	30.36	771.1	30.38	771.6	42.5	5.8	74	E	28	12.5			5					Misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	30.12	765.0	30.16	766.1	2.5	—16.4		Calm	0	0			10n			0	0	Cloudy	Hon. J. Ferguson.
Chatham, N. B.*	29.99	761.7	30.06	763.5	— 7	—21.7	96	Calm	0	0			10ks		Calm	0.01	0.3	Cloudy	G. A. Blair.
Charlottetown, P. E. Island	30.01	762.2	30.05	763.3	18	— 7.8	100	Calm	0	0			10s			0	0	Hazy	H. J. Cundall, C. E.
Chicontime, Quebec					15.2	— 9.4		SE			2		10s			0.02	0.5	Light snow	Rev. V. A. Huart.
Cornwall, Ontario	29.47	748.5	29.68	753.9	20.3	— 6.5	91	NE			2		10n			0.060	1.52	Cloudy	James Smith, M. A.
Dalhousie, N. B	30.43?	772.9?	30.47?	773.9?	7.5	—13.6		NW			1		10s			0	0	Cloudy	H. A. Johnson.
Father Point, Quebec*	29.93	760.2	29.96	761.0	21	— 6.1	71	SE	4	1.8			10n			0	0	Threatening	J. McWilliams.
Fredericton, N. B	29.94	760.5	30.01	762,2	6.4	—14.2	95	N	1	0.4		0	10s			0.06	1.5	Cloudy	Prof. Harrison.
Fort Garry, Manitoba*	29.36	745.7	30.35	770.9	—26	—32.2	100	NW	4	1.8			0			0	0	Clear	James Stewart.
Granton, Ontario	28.50	723.9	29.64	752.8	26.2	— 3.2	99	Calm			0		10n			0.10	2.5	Snowing	James Grant.
Halifax, N. S.*	29.92	760.0	30.06	763.5	16	— 8.9	98	NW	2	0.9			Haze			0	0	Hazy	A. Allison.
Hamilton, Ontario	29.17	740.9	29.58	751.3	29.1	— 1.6	91	SW			1		10ks			0.14	3.6	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.28	743.7	29.63	752.6	25	— 3.9	97	NE	3	1.3			10n		Calm	0.12	3.0	Light snow	S. Woods, M. A.
Little Glace Bay, N. S	30.01	762.2	30.05	763.3	18.0	— 7.8	94	Calm	0	0		0	6ks			0	0	Fair	C. H. Rigby.
Montreal, Quebec*	29.58	751.3	29.79	756.7	19	— 7.2	97	E	5	2.2			10n			0.02	0.5	Light snow	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A.
Parry Sound, Ontario*	28.93	734.8	29.66	753.4	22	— 5.6	92	E	6	2.7			10n		E	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	28.84	732.5	29.62	752.3	23.3	— 4.8	86	WNW			1		10n			Inap.	Inap.	Snowing	J. F. Jeffers, M. A.
Port Dover, Ontario	28.85	732.8	29.57	751.1	27	— 2.8	100	Calm	0	0			10n			0.25	6.3	Threatening	H. Morgan.
Port Stanley, Ontario	28.94	735.1	29.62	752.3	27	— 2.8	97	W	2	0.9			10n		W	0.24	6.1	Light snow	M. Payne.
Quebec, Quebec*	29.54	750.3	29.88	758.9	23	— 5.0	100	NE			5		10n		NE	0.03	0.8	Light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.23	742.4	29.71	754.6	17	— 8.3	80	Calm	0	0			10n			Inap.	Inap.	Cloudy	W. H. McIntyre.
St. Andrews	29.89	759.2	29.95	760.7	31	— 0.6	89	SE	6	2.7			10n			0.08	2.0	Cloudy	
St. John's, N. B	29.82	757.4	29.99	761.7	28.0	— 2.2	100	N	5	2.2			10ks			0.06	1.5	Cloudy	G. Murdock, C. E.
Saugeen, Ontario*	28.88	733.5	29.62	752.3	26	— 3.3	95	NE	2	0.9			10s			0.01	0.3	Light snow	K. Stewart.
Stratford, Ontario	28.28	718.3	29.61	752.1	25.3	— 3.7	95	Calm	0	0			10s			0.15	3.8	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	30.05	763.3	30.09	764.3	9	—12.8	100	S	1	0.4		5c	0	W		0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.18	741.1	29.57	751.1	31	— 0.0	97	N	5	2.2			10n			0.20	5.1	Light snow	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario	28.48	723.4	29.58	751.3	27.1	— 2.7	95	W	2	0.9			10s			0.35	8.9	Snowing	Prof. Wolverton.
Yarmouth, N. S.*																			Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.76	755.9	29.94	760.5	19	— 7.2	100	N	1	0.4		0	0			0	0	Fair	John Delany.
St. Pierre, N. F			29.92	760.0	23.0	— 5.0		NW			.2					0	0		N. F. Land, Comd't.
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			The Staff, for D. Gill.
Cape Town, C. G. H. Obs'y	29.90	759.4	29.94	760.5	77.0	25.0	79	NNW	11.6	5.2		6	4k;ks			0	0	Blue sky	John Duthie.
Cape St. Francis Lt. House	29.79	756.7			73.0	22.8	81	SW	8.2	3.7			0			0	0		
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.35	770.8	30.37	771.4	30.0	— 1.1	49	NW	6.9	3.1			0			0		Clear	M. Marc Dechevrens, S.J.

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

COSTA RICA SERIES.

By authority of the MINISTER OF FOREIGN AFFAIRS.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

STATIONS.	Barometer: Corrected for instrum'tal error and temperature. Inch.	Barometer: Corrected for instrum'tal error and temperature. Mill.	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
San José	26.22	666.0	29.94	760.5	61.7	16.5	84	NE			1	1d				0	0	Clear	Frederico Maison.

DANISH SERIES.

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

STATIONS.	Barometer: Corrected for instrum'tal error and temperature. Inch.	Barometer: Corrected for instrum'tal error and temperature. Mill.	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Copenhagen	30.71	779.9	30.75	781.1	30.9	—0.6	77	N	7	3			0						
Fanöe	30.80	782.4	30.82	782.9	32.4	0.2	87	NE			2		1						
Godthaab, Greenland	29.71	754.7	29.75	755.8	18.3	—7.6	72	E			2		9						
Stykkisholm, Iceland	30.23	767.8	30.27	768.9	31.3	—0.4	96	E			6		10						
Thorshavn	30.52	775.1	30.55	775.0	44.6	7.0	84	W	13	6			3						
Vestervig	30.69	779.6	30.79	782.0	32.5	0.3	90	Calm			0		0						

FRENCH SERIES.

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

STATIONS.	Barometer: Corrected for instrum'tal error and temperature. Inch.	Barometer: Corrected for instrum'tal error and temperature. Mill.	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Agen, Normal School	29.33	744.9	30.00	761.9	42.4	5.8	78	ENE			1		nk		NW	2.24	57.		M. Labroue, Director.
Alençon	29.70	754.3	30.25	768.3	34.5	1.4	93	NE			1		10k			0.055	1.4	Covered	M. Nicot, Director.
Arras, Engineer School	30.07	763.8	30.34	770.7	33.4	0.8	68	ENE	6.7	3.0			s						M. Klein, Commandant.
Avignon, Normal School	29.95	760.8	30.03	762.8	46.0	7.8	69	N			1		0			0	0	Very clear	M. Giraud, Director.
Bar-sur-Seine	29.61	752.2	30.20	767.0	36.3	2.4	84	NE			1		10			0.295	7.5	Covered	M. Saillard, Director.
Beauvais, Normal School	30.03	762.8	30.32	770.0	32.9	0.5	84	E			1		10			0.108	2.75	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.35	745.4	30.28	769.0	38.5	3.6	84	NNE			3		2			0	0	Slightly cl'dy	M. Gobin, Director.
Bordeaux, Observatory	29.74	755.5	30.02	762.4	36.5	2.5	91	SE			1		10		ESE	0.236	6.0	Covered	M. Rayet, Director.
Bourges, Normal School	29.55	750.5	30.13	765.2	35.6	2	94	NNE			1		10n		NNE	0	0	Covered	M. Postel, Director.
Brest, Naval Observatory	29.97	761.2	30.21	767.4	39.9	4.4	80	NE			2		10		NE	0	0		M. de Rermarec, Dir.
Caen, Normal School	30.11	764.8	30.20	767.1	36.3	2.4	100	ENE			1		10		ENE	0	0	Covered	M. Bidtrix, Director.
Châlons-sur-Marne, N.Sch'l	29.54	750.4	30.27	768.9	36.5	2.5	93	ESE			1		10			0	0	Covered	M. Jadot, Director.
Charleville, Normal School	29.77	756.2	30.32	770.0	37.0	2.8	52	E			1		5			0	0	½ covered	M. Baumier, Director.
Clermont-Ferrand Obs'y	28.70	729.0	30.13	765.4	29.7	—1.3	82	NE			1		2			0	0	Foggy	M. Allnard, Director.
Cluny, Normal School	29.26	743.2	30.12	765.1	36.7	2.6	89	NE			1		10		NE	0	0	Covered	M. de Villemontée, Dir.
Commercy, Normal School	29.35	745.4	30.27	768.8	34.9	1.6	71	E			4		kn	E	E	0	0		Dr. Coulet, Director.
Gap, Normal School	27 46	697.4	30.06	763.4	41.0	5	94	N			1		c	S		0	0		M. Jeangirard, Director.
Grénasque, du. Rhone	28.92	734.5	30.06	763.5	47.1	8.4	75	E			1		5		SE	0	0		M. Kina, Director.
Grenoble, Normal School	29.31	744.4	30.11	764.8	36.5	2.5	87	S			1		kn			0	0		M. Ablard, Director.
Guéret, Normal School	28.47	723.0	30.13	765.2	33.8	1	71	SE			1		0			0	0	Clear	M. Rivoir, Director.
Lamballe, Normal School	29.91	759.6	30.19	766.7	36.7	2.6	89	E			1		10		E	0	0	Foggy	M. Ollitrault, Director.
Lescar, Normal School	29.35	745.4	30.04	762.9	42.8	6	61	S			1		2			0	0	Slightly cl'dy	M. Chanvin, Director.
Lorient, Naval Observatory	30.13	765.3	30.23	767.9	38.8	3.8	54	NE			3		2	N	NE	0	0	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.05	737.8	30.12	765.1	32.9	0.5	96	NE			1		Fog			0	0	Foggy	M. André, Director.
Mans, Normal School	29.88	758.9	30.20	767.1	35.8	2.1	94	E			3		10			0	0	Covered	M. Piboeu, Director.
Marseille, Observatory	29.72	754.9	29.99	761.8	50.0	10.0	72	SE			1		10		SE	0.028	0.70	Raining	M. Stephan, Director.
Montlouis l'Instituteur	24.72	627.8	29.95	760.8	30.6	—0.8	58	W	9.4	4.2			5	SW		0.098	2.5		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.90	759.4	30.01	762.2	46.2	7.9	77	NE			3		5		NE	0.323	8.2	Raining	M. Galzin, Director.
Nancy, Normal School	29.44	747.8	30.24	768.1	35.6	2.0	67	NW			2	Sck				0	0	Very cloudy	M. Hasse.
Nantes, Observatory	30.03	762.7	30.19	766.8	37.0	2.8	93	NE			2		10			0.031	0.8	Covered	M. Larocque, Dir.
Nice	29.97	761.2	30.00	762.0	52.2	11.2	75	W			3		1	W	W	0.063	1.6	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.87	758.8	29.98	761.5	45.1	7.3	82	NE	5.6	2.5			10		E	0.173	4.4		Dr. Fines.
Pic-du-Midi, Plantade	22.26	565.5			23.4	—4.8							10		WSW	0.378	9.6	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.06	738.1	30.19	766.9	29.5	—1.4		Calm			0		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.05	636.2			27.5	—2.5	96	ESE			3		k			0.024	0.6		M. Allnard, Director.
Rochefort, Naval Obs'y	30.02	762.4	30.05	763.2	37.6	3.1	96	NE			1		0			0	0	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.85	758.2	30.07	763.8	36.3	2.4	75	NNE			2		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.69	703.3	29.87	758.7	42.8	6.0	79	E			1		10		S			Snowing	M. Richard, Director.
Rouen, Normal School	30.24	768.1	30.33	770.3	34.2	1.2	83	NE			1		2		NE	0	0	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	30.08	764.1	30.24	768.1	35.2	1.8	82	NE			2		10	NE	NE			Snowing	M. Delaplanche, Dir.
Saint Maur, Observatory	30.08	764.1	30.25	768.3	33.1	0.6	99	NE			1		10					Light snow	M. Renou, Director.
Toulouse, Observatory	29.30	744.2	30.02	762.6	37.0	2.8	88	SSE			1		2			1.185	30.1	Slightly cl'dy	M. Baillaud, Director.
Tours	29.96	761.0	30.16	766.0	35.6	2.0	89	E			1		10			0	0	Covered	M. de Tastes.
Versailles, Observatory	29.74	755.5	30.24	768.0	32.7	0.4	96	E			3					0.106	2.68		Dr. A. Bérigny, Director.
SUB-SERIES.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

STATIONS.	Barometer: Corrected for instrum'tal error and temperature. Inch.	Barometer: Corrected for instrum'tal error and temperature. Mill.	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Bamberg	29.61	752.1	30.49	774.4	32.2	0.1	80	NNE			9		0			0	0		Prof. Dr. Holl.
Berlin	30.54	775.7	30.72	780.4	33.8	1.0	67	E			3		0			0	0		Prof. Dr. Arndt.
Breslau	30.12	765.1	30.67	778.9	32.2	0.1	73	NE			2		1			0	0		Royal University Obs'y.
Carlsruhe	29.90	759.4	30.35	770.9	37.4	3.0	79	NE			8		5	NE		0	0		Albert Senz.
Cassel	29.98	761.6	30.60	777.1	32.7	0.4	78	E			2		0			0	0		Dr. H. Möhl.
Frankfort on the Main	30.18	766.6	30.58	776.6	35.6	2.0	54	NE			3		1			0	0		Physical Society.
Friedrichshafen	28.68	728.4	30.17	766.4	36.3	2.4	89	E			7		10	E		0	0		Chief Telegrapher Wilhelm.
Hamburg	30.71	780.1	30.78	781 9	34.0	1.1	70	ESE			2		1			0	0		Dr. R. Kleeman.
Kiel	30.62	777.7	30.63	778.1	34.3	1.3	76	Calm			0		1			0.004	0.10		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.22	767.6	30.67	779.1	29.8	—1.2	76	NE			3		0			0	0		Prof. Dr. Bruhns.
Magdeburg	30.48	774.1	30.72	780.2	31.5	—0.3	78	NE			2		0			0	0		Dr. Assmans.
Memel	30.61	777.4	30.65	778.6	33.1	0.6	73	NW			4		3k						Reinbrecht & Issermann.
Munich	28.44	722.4	30.32	770.2	32.9	0.5	51	NE			3		9	NE		0.035	0.9		Central Station.
Neufahrwasser	30.71	780.0	30.72	780.4	36.0	2.2	61	NNW			1		7			0	0		A Lothes.
Neustadt, Palatinate	29.80	756.8	30.33	770.3	34.7	1.5		NE			2		5	N		0	0		Dicknether.
Stuttgart	29.30	744.3	30.24	768.0	37.4	3.0	45	E			7		5	E		0	0		Prof. Dr. Schoder.
Thorn	28.82	732.1	30.37	771.4	32.0	0.0	81	NE			6		9	NE		0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	30.78	781.8	30.80	782.4	33.4	0.8	78	ENE			1		3s			0	0		Prof. Kemlein.
Wustrow																			Prof. S. Reimer.

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

GREEK SERIES.

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

Athens	29.75	755.6	30.14	765.6	55.8	13.2		SW			0.5		10					Covered	Alexander Wourlisch

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	30.12	765.0	30.17	766.3	73.8	23.2	26	NE	6.0	2.7			2.	W		0	0	D. clouds	
Deesa	29.60	751.9	30.09	764.2	73.2	22.9	22	NE	12.2	5.4			0			0	0	Blue sky	
Bombay	29.94	760.6	29.98	761.5	79.9	26.6	68	NNW	19.0	8.5			0			0	0	Blue sky	
Poona, Yarrowda	28.11	714.1	29.95	760.6	84.8	29.3	25	SSE	1.0	0.4			1		N	0	0	D. clouds	
Belgaum	27.40	696.0	29.93	760.2	80.1	26.7	30	E	5.0	2.2			4	E		0	0	D. clouds	
Lahore	29.33	744.9	30.11	764.7	60.6	15.9	45	W	2.4	1.1			0			0	0	Misty	
Roorkee	29.14	740.0	30.08	764.0	58.8	14.9	54	NW	6.3	2.8			2			0	0		
Agra	29.54	750.4	30.13	765.3	66.9	19.4	33	W	7.0	3.1			0			0	0		
Nagpur	28.96	735.6	30.01	762.3	78.7	25.9	48	Calm	3.1	1.4			8	W		0	0		
Jubbulpore	28.80?	731.4?	30.21?	767.4?	67.7	19.8	61	N	2.0	0.9			0			0	0	Blue sky	
Lucknow	29.67	753.5	30.06	763.6	60.3	15.7	42	NW	5.0	2.2			0			0	0	Blue sky	
Allahabad	29.73	755.2	30.06	763.5	62.8	17.1	54	Calm	3.9	1.7			0			0	0	Blue sky	
Patna	29.84	757.8	30.03	762.7	63.5	17.5	59	W	1.1	0.5			0			0	0	Blue sky	
Hazaribagh	27.96	710.1	30.04	763.0	62.8	17.1	50	NW	10.1	4.5			0			0	0	Blue sky	
Cuttack	29.91	759.8	30.00	761.9	77.2	25.1	67	NNE	1.3	0.6			2			0	0	D. clouds	
Calcutta, Alipore	29.98	761.4	30.00	761.9	67.8	19.9	70	Calm	0	0			0			0	0	Foggy	
Goalpara	29.55	750.6	29.97	761.3	65.9	18.8	63	Calm	1.0	0.4			0			0	0	Blue sky	
Chittagong	29.89	759.3	29.99	761.7	70.8	21.6	59	WNW	3	1.5			1			0	0	Misty	
Sibsagar	29.65	753.2	30.01	762.2	57.9	14.4	88	NE	1.2	0.5			6	W	W	0	0	D. clouds	

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.73	755.2	30.16	766.0	44.4	6.9	59	E	4.3	1.9			9			0.697	17.7		Prof. Giovanni Clodig.
Milan	29.51	749.6	30.06	763.4	42.8	6.0	97	SE	1.8	0.8			10			1.319	33.5		Prof. Schiaparelli.
Padua	29.98	761.5	30.10	764.4	46.4	8.0	80	ESE	26.2	11.7			10	E		1.150	29.2		Prof. Dott. Lorenzoni.
Moncalieri	29.11	739.3	30.06	763.4	40.1	4.5	92	ESE	3.8	1.7			10			1.528	38.8		Prof. P. F. Denza.
Genoa	29.81	757 2	30.01	762.3	49.3	9.6	72	NE	9.8	4.4			10	S		0.413	10.5		Prof. G. M. Garibaldi.
Mondovi	28.08	713.1	30.09	764.3	42.6	5.9	52	W			2		8			1.165	29.6		Prof. D. C. Bruno.
Pesaro	29.95	760.6	30.00	761.9	50.0	10.0	96	NE	23.7	10.6			10			0.354	9.0		Prof. Luigi Guidi.
Florence	29.69	754.1	29.95	760.7	51.8	11.0	94	W			2		10			0.532	13.5		Cav. F. Meucci.
Leghorn	29.90	759.4	29.98	761.6	51.8	11.0	86	NNE	26.6	11.9			10			1.555	39.5		Prof. P. Monte.
Rome	29.74	755.5	29.92	760.0	59.2	15.1	71	SSW	1.3	0.6			9			0.465	11.8		Prof. P. S. Ferrari.
Lecce	29.73	755.2	29.99	761.8	57.2	14.0	92	SSE	15.4	6.9			10	SE		0.165	4.2		Prof. C. de Giorgi.
Cosenza	29.10	739.2	30.01	762.2	56.7	13.7	66	Calm	0	0			10	SSE		0.669	17.0		Prof. D. Conti.
Cagliari	29.77	756.2	29.97	761.2	55.8	13.2	58	NW			2		5	NW		0.008	0.2		Prof. A. Pacinotti.
Palermo	29.71	754.5	29.96	760.9	58.6	14.8	81	WSW	1.3	0.6			10			0.295	7.5		Prof. G. Cincciatore.
Syracuse	29.89	759.3	29.94	760.4	63.0	17.2	82	SSE	7.4	3.3			10	S		0.197	5.0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R.	29.40	746.7	29.92	759.9	59.5	15.3	84	WSW	0	0		rock		ESE		c.650	16.5		Prof. F. Brioschi.
Stelvio	22.21	564.2			28.0	— 2.2	100	ENE					10			‖5.118	130.0		P. F. Denza.
Valdobbia	22.35	560.7			25.7	— 3.5	98	NE					10						

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	29.72	754.9	29.74	755.4	33.5	0.8	88	WNW	8.3	3.7			3ck;n			0.004	0.10	Snowing	K. Sasaki.
Kioto	29.41	747.0	29.59	751.6	38.7	3.7	95						10s;ck		W	0.008	0.20	Cloudy	
Nagasaki, I. M. Obs'y	29.70	754.4	29.92	759.9	33.2	0.7	89	NW	12.4	5.5			10n			0.260	6.60	Snowing	S. Takehayashi.
Tokei Obs'y, Yeddo	29.31	744.5	29.38	746.2	38.7	3.7	89	W	4.4	2.0		3cs	0			0.010	0.25	Fair	The Staff.
Wakayama	29.58	751.3	29.63	752.6	41.2	5.1	69	WNW	5.2	2.3			9ck		W	0.08	2.13	Cloudy	S. Iwahashi.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.79	756.7	29.98	761.5	79.1	26.2	76	N	6.5	2.9			9					Raining	A. N. Pigon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.69	754.1	29.95	760.8	61.0	16.1	61	NE			2	0	0			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	30.48	774.3	30.48	774.3	34.2	1.2		ENE			5					0	0		
Groningen	30.64	778.3	30.70	779.7	32.7	0.4		ENE			4					0	0		
Helder	30.65	778.5	30.65	778.5	33.8	1.0		ENE			5					0	0		
Hellevoetsluis	30.52	775.2	30.52	775.2	34.0	1.1	71	E			5					0	0		
Utrecht	30.53	775.5	30.58	776.7	34.7	1.5	66	ENE			5		2			0	0	Lightly cld'y	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.71	780.1	30.78	781.7	36.0	2.2	82	SE	6.0	2.7		9				0.075	1.9	Rain & snow	
Christiania	30.48	774.1	30.64	778.2	14.5	— 9.7	100	NNE	0	0		10				0	0	Foggy	
Gjæsvær	28.96	735.6	28.98	736.2	35.8	2.1		WSW			8	10							
Lodingen	29.50	749.2	29.54	750.4	37.6	3.1	45	WNW			7	9				0.512	13.0	Light sleet.	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.15	740.5	29.31	744.5	54.7	12.6	77	W	20.6	9.2		5				0.413	10.5		Dr. J. A. Sampaio.
Campo Major	29.11	739.3	30.14	765.6	43.5	6.4	79	W	6.3	2.8		8				0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.89	759.2	29.98	761.4	66.2	19.0	88	SSW	11.9	5.3		10				0.409	10.4		Capt. D. A. de Cunha.
Lisbon, Observatory	29.82	757.4	30.19	766.8	46.0	7.8	85	ENE	1.8	0.8		10		WSW		0	0		The Staff.
Ponta Delgada, Azores	29.35	745.5	29.42	747.3	57.9	14.4	65	WSW	28.0	12.5		3				0.299	7.6		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinsk	28.88	733.5	30.02	762.5	21.2	— 6.0	100	SW	22	10						Blank	Blank		Capt. Lasarew.
Archangel	29.71	754.6	29.73	755.1	18.0	— 7.8	92	WNW	4	2		10							Capt. Sselliwerstow.
Astrakhan	30.17	766.4	30.09	764.3	38.8	3.8	73	SW	11	5		10k							Capt. Wisganow.
Barnaul	29.34	745.1	29.86	758.5	24.3	— 4.3	68	SW	31	14		10							Meteorological Obs'y.
Dorpat	30.12	765.0	30.38	771.6	24.1	— 4.4	88	WSW	9	4		9k;ks							Observatory.
Ekaterinburg	28.64	727.4	29.65	753.2	17.4	— 8.1	85	Calm	0	0		10							Meteorological Obs'y.
Kasan	29.40	746.8	29.69	754.2	15.3	— 9.3	82	N	4	2		10							Observatory.
Kertch	30.11	764.9	30.13	765.4	35.6	2.0	94	NW	7	3		10						Raining	Lagorio.
Kieff	29.60	751.7	30.28	769.0	23.9	— 4.5	81	N	16	7		10cs;ck	s,n					Snowing	Observatory.
Krotkowo, N. 58°47′, E. 48°34′																			Cand. Fatjanow.
Lugan	29.80	756.9	30.02	762.4	27.0	— 2.8	79	NW	18	8		10				Blank	Blank		Meteorological Obs'y.
Moscow	29.44	747.7	30.03	762.7	17.2	— 8.2	76	NNW	7.8	3.5		8s							Meteorological Obs'y.
Nertchinsk	27.62	701.6	30.34	770.6	—31.2	—35.1	84					0							Meteorological Obs'y.
Nikolaiev	30.17	766.3	30.24	768.1	31.6	— 0.2	76	N	13	6		10n							1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.58	751.2	29.66	753.4	—27.8	—33.2	64	Calm	0	0		5c							Lieut. Iwanow.
Nukuss	30.17	766.3	30.41	772.5	42.4	5.8	73	SE	2	1		1s							Dr. Dobrochotow.
Pekin, China	30.13	765.4	30.28	769.0	20.1	— 6.6	42	Calm	0	0		2cs							Physical Observatory.
St. Petersburg	30.18	766.5	30.19	766.9	17.8	— 7.9	86	W	7	3		8sn							Central Physical Obs'y.
Tashkend, Laboratory	28.86	733.0	30.52	775.2	35.6	2.	68	N	7.8	3.5		2							Teich, A. M.
Tiflis	28.75	730.3	30.21	767.2	46.2	7.9	46	NW	9	4		1c							Physical Observatory.
Warsaw	30.18	766.6	30.63	778.1	30.0	— 1.1	73	N	9	4		2ks							Astronomical Obs'y
Wilna	30.09	764.3	30.54	775.7	28.9	— 1.7	79	NW	7	3		2							Berg, Assistant.
Yeniseisk	29.47	748.5	29.78	756.3	13.8	—10.1	94	SE	7	3		10						Snowing	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.76	781.3	37.0	2.8	88	E			1	0				0	0	Very fine	Andrew Gibb.
Monach Lt. House, Hebrides			30.67	779.0	44	6.7	92	SSE			3	0	0			0	0		J. Youngclause.
North Unst, Shetland Isl'ds			30.69	779.5				W			4	3	8	W		0	0		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.88	758.9	29.99	761.7	45.9	7.7	67	N	1.3	0.6		8				0	0	Almost cov'd	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.01	762.2	30.07	763.7	37.0	2.8	97	E	1.7	0.75		10				1.532	38.9	Raining	Prof. Manuel de Naveran·
Burgos, Met. Obs'y	27.90	685.7			33.4	0.8	74	S	4.0	1.78		10				0.020	0.5	Covered	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.80	706.1	30.12	765.0	38.5	3.6	71	W	7.8	3.5		0	1			0	0	Almost clear	The Staff.
Murcia, Met. Obs'y. ‡	29.95	760.6	30.10	764.5	55.4	13.0	51	SW	2.5	1.1		0	3			0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.17	740.8	30.09	764.3	43.0	6.1	89	E	0	0			10			0	0	Covered	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.91	759.8	29.98	761.4	72.5	22.5	91	ESE	3.1	1.4		6c;ck	0	SSW		0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.89	759.1	29.94	760.4	79.7	26.5	81	N	5.9	2.7		4c		E		0.03	0.8	Cloudy	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.09	764.3	30.19	766.8	52.3	11.3	69	NW	1.9	0.8		2	5	NW	N	0	0		Capt. C. Pajazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.02	762.6	30.11	764.9	74.5	23.6	91	SE	3.6	1.60		3k	2k	SE	SE	0	0	D. clouds	Enrique Gadea, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.59	751.5	29.63	752.5	34.9	1.6	82	SW			4	10				0.039	1.0		
Umea	29.89	759.2	29.94	760.5	39.6	4.2	71	W			4	10				0	0		
Hernosand	30.08	764.1	30.13	765.4	40.1	4.5	60	SW			4	10				0	0		
Stockholm	30.57	776.4	30.74	780.9	29.8	— 1.2	92	NW			4	1				0	0		
Wisby	29.93?	760.2?	29.99?	761.7?	33.4	0.8	71	WNW			4	0				0	0		
Sub-Series.																			
Upsala	30.33	770.3	30.41	772.5	26.1	— 3.3	72	WSW	8.1	3.6		2		N		0	0		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.65	727.7	30.13	765.3	37.0	2.8	83	NE			2	10				0.004	6.1	Foggy	The Observatory.
Zurich	28.47	723.2	30.18	766.5	34.5	1.4	85	W			1	10				0	0	Foggy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. 0.0 mm.; Ther. +1°.4 cent.; Hum. +3 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.11	764.9	52.5	11.4	61	WSW	8	3.5		10		SW		0.177	4.5		The Observatory.
Valona			30.03	762.7	55.9	13.3		E			1	10				0	0	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.20	767.0	62.1	16.7	55	NW			1	0				0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.66	753.4	29.75	755.6	28	— 2.2	77	NE	1	0.4			1on		Calm	0.45	11.4	Light snow.	
Alpena, Michigan	29.99	761.7	29.66	753.4	22	— 5.6	86	NW	6	2.7			8s		Calm	0	0	Cloudy	
Atlanta, Georgia	28.70	729.0	29.86	758.4	40	4.4	82	W	8	3.6			10s		W	0.30	7.6	Cloudy	
Atlantic City, New Jersey	29.58	751.3	29.59	751.6	37	2.8	100	N	11	4.9			10n;fg		Calm	0.99	25.1	Light rain	
Augusta, Georgia																			
Baltimore, Maryland	29.66	753.4	29.71	754.6	38	3.3	91	NW	4	1.8			10s;fg		NW;C	0.84	21.3	Cloudy	
Barnegat, New Jersey	29.52	749.8	29.55	750.6	35	1.7	100	N	19	8.5			1on		Calm	1.23	32.5	Light rain	
Benton, Montana	27.28	692.9			7	—13.9	100	E	4	1.8			1on		Calm	0.24	6.1	Light snow	
Bismarck, Dakota	28.29	718.6	30.15	765.8	—11	—23.9		NW	12	5.4		0	Haze		Calm	0.03	0.8	Clear	
Boise City, Idaho	27.30	693.4	30.26	768.6	25	— 3.9	87	SE	2	0.9			10s		Calm	0	0	Cloudy	
Boston, Massachusetts	29.59	751.6	29.75	755.6	32	0.0	100	NE	18	8.0			1on		Calm	0.30	7.6	Heavy snow	
Brackettville, Texas	28.92	734.6	30.04	763.0	30	— 1.1	89	W	12	5.4		0	0			0	0	Clear	
Brownsville, Texas	29.93	760.2	29.98	761.5	42	5.6	100	N	5	2.2			Fog		N	0	0	Dense fog	
Buffalo, New York	28.82	732.0	29.52	749.8	30	— 1.1	95	E	4	1.8			1on		Calm	0.30	7.6	Light snow	
Burlington, Vermont	29.54	750.3	29.84	757.9	27	— 2.8	88	SE	5	2.2			1on		SE	0.10	2.5	Light snow	
Cairo, Illinois	29.46	748.3	29.87	758.7	33	0.6	89	SE	1	0.4			1on		Calm	Inap.	Inap.	Light snow.	
Campo, California	27.37	695.2	29.94	760.5	37	2.8	38	E	10	4.5		0	0			0	0	Clear	
Camp Thomas, Arizona	27.15	689.6			21	— 6.1	86	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	29.70	754.4	29.72	754.9	35	1.7	90	W	13	5.8			10s		W	0.41	10.4	Cloudy	
Cape May, New Jersey	29.61	752.1	29.64	752.8	35	1.7	100	W	20	8.9			10n		Calm	1.31	33.3	Light rain	
Castroville, Texas	29.26	743.2	30.00	762.0	34	1.1	61	NW	10	4.5		0	0			0	0	Clear	
Cedar Keys, Florida	29.95	760.7	29.97	761.2	54	12.2	93	Calm	0	0		0	5ks			0.39	9.9	Fair	
Champaign, Illinois	28.92	734.6	29.75	755.6	25	— 3.9	75	SW	4	1.8			10s		SW	0.06	1.5	Cloudy	
Charleston, S. Carolina	29.84	757.9	29.90	759.4	55	12.8	87	W	4	1.8		0	8s		W	0.46	11.7	Cloudy	
Charlotte, N. Carolina	28.97	735.8	29.80	756.9	35	1.7	100	S	2	0.9			Fog		Calm	1.94	49.3	Dense fog	
Chattanooga, Tennessee	29.06	738.1	29.88	758.9	39	3.9	73	SW	7	3.1			10s		W	0.68	17.3	Cloudy	
Cheyenne, Wyoming	23.86	605.0	29.80	756.9	12	—11.1	61	W	6	2.7		0	0			0.01	0.3	Clear	
Chicago, Illinois	28.99	736.3	29.70	754.4	23	— 5.0	86	NW	5	2.2			10s		Calm	0.01	0.3	Cloudy	
Chincoteague, Virginia	29.66	753.4	29.68	753.9	33	0.6	100	NW	18	8.0			10s		NW	0.76	19.3	Cloudy	
Cincinnati, Ohio	29.12	739.6	29.78	756.4	35	1.7	80	SW	7	3.1			10ks		W	0.30	7.6	Cloudy	
Cleveland, Ohio	28.93	734.8	29.67	753.6	28	— 2.2	88	W	10	4.5			10s		Calm	0.30	7.6	Cloudy	
Coleman City, Texas	28.25	717.5	30.02	762.5	25	— 3.9	75	NW	23	10.3		0	0			0	0	Clear	
Columbus, Ohio	28.86	733.0	29.71	754.6	31	— 0.6	89	W	11	4.9			10s		Calm	0.16	4.1	Cloudy	
Concho, Texas	28.14	714.7	29.91	759.7	28	— 2.2	66	NW	6	2.7		0	0			0	0	Clear	
Corsicana, Texas	29.55	750.6	30.05	763.3	28	— 2.2	77	NW	16	7.2		2cs	0	Calm		0	0	Clear	
Davenport, Iowa	29.08	738.6	29.75	755.6	23	— 5.0	73	W	1	0.4			10s		Calm	0	0	Cloudy	
Dayton, Washington T'y	28.43	722.1	30.19	766.8	28	— 2.2	88	SW	4	1.8		10k	0	N		0	0	Cloudy	
Deadwood, Dakota	25.22	640.6			12	—11.1	61	W	3	1.3			10n		Calm	0.45	11.4	Light snow.	
Decatur, Texas	28.81	731.8	30.06	763.5	22	— 5.6	86	N	14	6.3		0	0			0	0	Clear	
Delaware Breakwater, Del.	29.62	752.3	29.64	752.8	35	1.7	90	W	7	3.1			10n		W	0.90	22.9	Light rain	
Denison, Texas	29.16	740.7	30.01	762.2	21	— 6.1	86	NW	16	7.2			10ks		NW	0	0	Cloudy	
Denver, Colorado	24.68	626.9	29.90	759.4	7	—13.9	77	S	3	1.3		0	0			0	0	Clear	
Des Moines, Iowa	29.00	736.6	29.95	760.7	12	—11.1	80	N	12	5.4			10s		Calm	0.19	4.8	Cloudy	
Detroit, Michigan	28.94	735.1	29.63	752.6	25	— 3.9	87	SW	1	0.4			10s		Calm	0.34	8.6	Cloudy	
Dodge City, Kansas	27.39	693.2	29.86	758.4	12	—11.1	61	N	20	8.9		0	0			0.03	0.8	Clear	
Dubuque, Iowa	29.03	737.3	29.75	755.6	23	— 5.0	86	NW	3	1.3			10n		Calm	0.06	1.5	Light snow	
Duluth, Minnesota	29.20	741.7	29.94	760.5	4	—15.6	100	NW	19	8.5			10s		NW	0.01	0.3	Cloudy	
Eagle Pass, Texas	29.34	745.2	30.11	764.8	38	3.3	45	N	12	5.4		0	0			0	0	Clear	
Eagle Rock, Texas	25.28	642.1	29.93	760.2	1	—17.2	71	N	5	2.2			10s		Calm	0	0	Cloudy	
Eastport, Maine	29.86	758.4	29.93	760.2	32	0.0	79	SE	18	8.0			10s		SE	0.04	1.0	Cloudy	
Edinburg, Texas					41	5.0	74	N			6	0	2ks		Calm	0	0	Fair	
El Paso, Texas	26.18	665.0			30	— 1.1	68	NE	3	1.3		0	1s		Calm	0	0	Clear	
Erie, Pennsylvania	28.85	733.0	29.57	751.1	33	0.6	89	SW	6	2.7			10n		Calm	0.25	6.3	Light snow.	
Escanaba, Michigan	29.06	738.1	29.75	755.6	17	— 8.3	100	NW	6	2.7			10n		Calm	0.47	11.9	Light snow.	
Florence, Arizona	28.47	723.4	30.07	763.8	32	0.0	69	Calm	0	0		0	0			0	0	Clear	
Fort Apache, New Mexico	24.83	630.7	30.28	769.1	24	— 4.4	61	N	1	0.4			10s		Calm	0	0	Cloudy	
Fort Assinniboine, Montana	27.24	691.9			7	—13.9	100	NE	8	3.6			10n		NE	0.15	3.8	Light snow.	
Fort Bennett, Dakota	28.50	723.9			4	—15.6	74	N	12	5.4			10s		Calm	0.01	0.3	Cloudy	
Fort Buford, Dakota	28.17	715.5	30.36	771.1	—23	—30.6	59	Calm	0	0		0	0			0.09	2.3	Clear	
Fort Custer, Montana	26.84	681.7			9	—12.8	100	NW	3	1.3			10n		Calm	0.07	1.8	Light snow.	
Fort Davis, Texas	25.16	639.0	30.12	765.0	20	— 6.7	85	N	4	1.8		0	0			0	0	Clear	
Fort Elliott, Texas	27.17	690.1	29.60	751.8	15	— 9.4	65	NW	28	12.5		0	0			0.03	0.8	Clear	
Fort Gibson, Indian T'y	29.31	744.5	29.87	758.7	27	— 2.8	88	NW	14	6.3			10s		Calm	0.10	2.5	Cloudy	
Fort Grant, Arizona	25.02	635.5	29.82	757.4	32	0.0	50	NE	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas	28.80	731.5	30.16	766.1	24	— 4.4	61	NE	14	6.3		0	0			0.01	0.3	Clear	
Fort Keogh, Montana	27.59	700.8			5	—15.0	75	NW	4	1.8			10s		Calm	0.05	1.3	Cloudy	
Fort Macon, North Carolina	29.78	756.4	29.79	756.7	48	8.9	100	SW	7	3.1		7cs;k	Fog	SW	Calm	0.29	7.4	Cloudy	
Fort Missoula, Montana	26.73	678.9			23	— 5.0	86	E	1	0.4			1on		Calm	0.02	0.5	Light snow.	
Fort McKavett, Texas	27.78	705.6	29.81	757.2	27	— 2.8	76	N	13	5.8		0	0			0	0	Clear	
Fort Shaw, Montana	26.36	669.5			13	—10.6	100	SE	4	3.1			10n		Calm	0.23	5.8	Light snow.	
Fort Sill, Indian Territory	28.74	730.0	29.93	760.2	18	— 7.8	84	N	16	7.2		2c	0	Calm		0.16	4.1	Clear	
Fort Stevenson, Dakota	28.27	718.3			—20	—28.9	100	NW	8	3.6			10ks		NW	0.03	0.8	Cloudy	
Fort Verde, Arizona					24	— 4.4	48	N			2	0	0			0	0	Clear	
Fredericksburg, Texas	28.27	718.3	29.87	758.7	31	— 0.6	79	N	16	7.2		0	0			0	0	Clear	
Galveston, Texas	29.95	760.7	29.99	761.7	42	5.6	74	NW	22	9.8		0	0			0	0	Clear	
Grand Haven, Michigan	29.00	736.6	29.66	753.4	28	— 2.2	88	SE	1	0.4			10s		Calm	0	0	Cloudy	
Hatteras, North Carolina	29.71	754.6	29.73	755.1	50	10.0	86	SW	17	7.6		2cs	0	Calm		1.22	31.0	Fair	
Helena, Montana	25.71	653.0			24	— 4.4	74	SW	14	6.3			10s		Calm	0	0	Cloudy	
Henrietta, Texas	29.03	737.3	30.04	763.0	18	— 7.8	68	NW	21	9.4		0	0			Inap.	Inap.	Clear	
Indianapolis, Indiana	28.94	735.1	29.74	755.4	29	— 1.7	83	W	4	1.8			10s		Calm	0.04	1.0	Cloudy	
Indianola, Texas	30.01	762.2	30.04	763.0	43	6.1	75	NW	31	13.9		0	0			0	0	Clear	
Jacksboro, Texas	28.86	733.0	30.07	763.8	23	— 5.0	60	NW	31	13.9		0	0			Inap.	Inap.	Clear	
Jacksonville, Florida	29.92	760.0	29.96	761.0	57	13.9	87	W	6	2.7		2cs	8s	Calm	W	0.12	3.0	Cloudy	
Keokuk, Iowa	29.10	739.1	29.78	756.4	20	— 6.7	85	Calm	0	0			10s	SW	Calm	0	0	Cloudy	
Key West, Florida	29.98	761.5	30.02	762.5	74	23.3	90	S	7	3.1		2k	0			0	0	Fair	
Kittyhawk, North Carolina	29.76	755.9	29.78	756.4	41	5.0	100	NW	24	10.7			10s		NW	0.33	8.4	Cloudy	
Knoxville, Tennessee	28.83	732.3	29.84	757.9	37	2.8	90	SW	6	2.7		0	8s		SW	0.84	21.3	Clearing	
La Crosse, Wisconsin	29.02	737.1	29.80	756.9	17	— 8.3	83	N	4	1.8			10s		Calm	0.27	6.9	Cloudy	
La Mesilla, New Mexico	26.03	661.2	30.18	766.6	21	— 6.1	71	NE	1	0.4		0	1s		Calm	0	0	Clear	
Laredo, Texas	29.66	753.4	30.02	762.5	40	4.4	65	NW	4	1.8		0	0			0	0	Clear	
Leavenworth, Kansas	29.05	737.9	29.96	761.0	14	—10.0	82	NW	15	6.7			10s			0.01	0.3	Cloudy	
Lewiston, Idaho	29.38	746.2	30.06	763.5	30	— 1.1	79	E	1	0.4			10s		Calm	0	0	Cloudy	
Little Rock, Arkansas	29.44	747.8	29.77	756.1	34	1.1	90	Calm	0	0			10s		Calm	0	0	Cloudy	
Los Angeles, California	29.58	751.3	29.93	760.2	43	6.1	75	N	2	0.9		0	0			0	0	Clear	
Louisville, Kentucky	29.22	742.2	29.79	756.7	32	0.0	89	SW	8	3.6			10s		W	0.36	9.1	Cloudy	
Lynchburg, Virginia	29.01	736.8	29.71	754.6	32	0.0	70	SW	2	0.9		0	0			0.52	13.2	Clear	
Madison, Wisconsin	28.68	728.5	29.72	754.9	18	— 7.8	84	N	12	5.4			10n		Calm	0.05	1.3	Light snow.	
Marquette, Michigan	29.03	737.3	29.78	756.4	15	— 9.4	82	NW	14	6.3			10s		NW	0.33	8.4	Cloudy	
Mason, Texas	28.34	719.8	30.20	767.1	30	— 1.1	78	NW	8	3.6		0	0			0	0	Clear	
Memphis, Tennessee	29.48	748.8	29.83	757.7	30	— 1.1	100	SE	4	1.8			10s		Calm	0.01	0.3	Cloudy	
Milwaukee, Wisconsin	28.93	734.8	29.69	754.1	24	— 4.4	87	NW	5	2.2			10s		Calm	Inap.	Inap.	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.90	759.4	29.97	761.2	41	5.0	91	W	2	0.9			Fog		Calm	0.04	1.0	Dense fog...	
Montgomery, Alabama	29.72	754.9	29.96	761.0	43	6.1	83	W	5	2.2			10ks		W	0.09	2.3	Cloudy	
Morgantown, W. Virginia	28.69	728.7	29.68	753.9	42	5.6	74	SW	8	3.6			10n		Calm	0.39	9.9	Light rain...	
Moorhead, Minnesota	29.08	738.6	30.16	766.1	— 5	—20.6	82	N	16	7.2			10s		N	0	0	Cloudy	
Mt. Washington, N. H.	23.37	593.6	29.73	755.1	12	—11.1	100	SE	45	20.1			10m;fog		SE;C	0.09	2.3	Light snow.	
Nashville, Tennessee	29.33	745.0	29.88	758.9	34	1.1	79	SW	2	0.9			10ks		S	0.22	5.6	Cloudy	
New Haven, Connecticut	29.31	749.5	29.53	750.0	29	— 1.7	94	NE	17	7.6			10n		NE	0.28	7.1	Light rain...	
New London, Connecticut	29 55	750.6	29.00	751.8	34	1.1	90	E	15	6.7			10n		E	0.31	7.9	Light rain...	
New Orleans, Louisiana	29.89	759.2	29.96	761.0	40	4.4	82	E	3	1.3		0	0			0.04	1.0	Clear	
Newport, Rhode Island	29.61	752.1	29.66	753.4	34	1.1	90	NE	9	4.0			10n		Calm	0.48	12.2	Light snow..	
New River, N. Carolina					54	12.2	79	W					8ks		W			Cloudy	
New Shoreham, Rhode I'd	29.56	750.8	29.59	751.6	34	1.1	100	NE	36	16.1			10n		NE	0.03	0.8	Light rain...	
New York, New York	29.46	748.3	29.04	752.8	32	0.0	100	N			2		10m;fg		Calm	0.67	17.0	Sleeting	
Norfolk, Virginia	29.69	754.1	29.75	755.6	39	3.9	82	SW	7	3.1			Fog		Calm	0.41	10.4	Foggy	
North Platte, Nebraska	27.05	687.1	29.82	757.4	11	—11.7	80	NW	10	4.5			10s		Calm	0.01	0.3	Cloudy	
Olympia, Washington T'y	30.22	767.6	30.26	768.6	42.0	5.6	91	N	1	0.4			10n		Calm	0.11	2.8	Light rain...	
Omaha, Nebraska	28.82	732.0	30.04	763.0	1	—17.2	85	N	16	7.2		0	5s		Calm	0.18	4.6	Fair	
Oswego, New York	29.27	743.4	29.60	751.8	31	— 0.6	89	SE	15	6.7			10n		Calm	0.45	11.4	Heavy snow	
Pensacola, Florida	29.97	761.2	30.00	762 0	43	6.1	92	Calm	0	0			Fog		Calm	0.11	2.8	Dense fog....	
Philadelphia, Pa	29.59	751.6	29.64	752.8	34	1.1	100	NE	13	5.8			10m;fog		NE;C	0.45	11.4	Light rain...	
Phœnix, Arizona	28.82	732.0	30.74	780.8	27	— 2.8	64	E	3	1.3		0	0			0	0	Clear	
Pike's Peak, Colorado	17.30	439.4	29.50	749.3	—17	—27.2	69	Calm	0	0		0	0			0.17	4.3	Clear	
Pilot Point, Texas	29.31	744.5	30.22	767.6	22	— 5.6	32	W	14	6.3		0	0			0	0	Clear	
Ploche, Nevada	23.97	508.8	29.74	755.4	15	— 9.4	65	NW	7	3.1		0	0			0	0	Clear	
Pittsburg, Pennsylvania	28.84	732.5	29.65	753.1	38	3.3	91	SW	12	5.4			10s		W	0.24	6.1	Cloudy	
Port Huron, Michigan	28.93	734.8	29.61	752.1	26	— 3.3	88	W	4	1.8			10n		Calm	0.17	4.3	Light snow.	
Portland, Maine	29.78	756.4	29.83	757.7	24	- 4.4	87	N	9	4.0			10n		Calm	0.20	5.1	Light snow.	
Portland, Oregon	30.24	768.1	30.31	769.9	42	5.6	91	SE	3	1.3			10n		Calm	0.01	0.3	Light rain...	
Portsmouth, N. Carolina					49	9.4	93	SW	15	6.7		10k	0	W		0.13	3.3	Cloudy	
Prescott, Arizona	24.60	624.8	29.96	761.0	27	— 2.8	53	NW	5	2.2		0	0			0	0	Clear	
Punta Rassa, Florida	29.92	760.0	29.94	760.5	68	20.0	95	SW	13	5.8			10n		SW	0.40	10.2	Light rain...	
Red Bluff, California	29.77	756.1	30.12	765.0	45.0	7.2	46	N	12	5.4		0	0			0	0	Clear	
Rio Grande City, Texas	29.87	758.7	30.09	764.3	42	5.6	74	W	12	5.4		0	0			0	0	Clear	
Rochester, New York	28.94	735.1	29.56	750.8	32	0.0	89	SE	8	3.6			10n		SE	0.59	15.0	Heavy snow	
Roseburg, Oregon	29.76	755.9	30.35	770.9	39	3.9	91	Calm	0	0			10s		Calm	0	0	Cloudy	
Sacramento, California	30.02	762.5	30.09	764.3	38	3.3	91	NE	3	1.3		0	0			0	0	Clear	
St. Louis, Missouri	29.18	741.1	29.78	756.4	23	— 5.0	100	S	8	3.6			Fog			0.05	1.3	Dense fog....	
St. Paul, Minnesota	29.00	736.6	29.88	758.9	13	—10.6	81	NW	8	3.6			10s		NW	0.01	0.3	Cloudy	
Salt Lake City, Utah	25.67	652.0	30.00	762.0	14	—10.0	46	SE	3	1.3		0	0			Inap.	Inap.	Clear	
San Antonio, Texas	29.36	745.7	30.10	764.5	35	1.7	45	NW	5	2.2		0	0			0	0	Clear	
San Diego, California	29.87	758.7	29.95	760.7	48	8.9	85	NE	8	3.6		0	0			0	0	Clear	
Sandusky, Ohio	28.99	736.3	29.68	753.9	25	— 3.3	88	SW	12	5.4			10s		Calm	0.06	1.5	Cloudy	
Sandy Hook, New Jersey	29.62	752.3	29.66	753.4	32	0.0	100	NE	12	5.3			10n		Calm	0.32	8.1	Light rain...	
San Francisco, California	29.98	761.5	30.05	763.3	51	10.6	46	NE	14	6.3		0	0			0	0	Clear	
Santa Fé, New Mexico	23.04	585.2	29.58	751.3	17	— 8.3	67	E	12	5.4		0	0			0.01	0.3	Clear	
Savannah, Georgia	29.84	757.9	29.93	760.2	56	13.3	87	W	5	2.2		2cs	8s	Calm	W	0.50	12.7	Cloudy	
Shreveport, Louisiana	29.63	752.6	29.88	758.9	38	3.3	72	W	9	4.0			10s		W	0	0	Cloudy	
Silver City, New Mexico	24.08	611.6	30.66	778.7	15	- 9.4	65	N	1	0.4		0	0			0	0	Clear	
Smithville, North Carolina	29.81	757.2	29.85	758.2	52	11.1	93	W	10	4.5		8k	2s	Calm	Calm	0.26	6.6	Cloudy	
Socorro, New Mexico	25.28	642.1	29.35	745.5	8	—13.3	55	N	1	0.4		0	0			0	0	Clear	
Springfield, Illinois	29.07	738.4	29.77	756.1	24	— 4.4	87	SW	2	0.9			10s;fg		Calm	0.01	0.3	Cloudy	
Springfield, Massachusetts	29.59	751.6	29.73	755.1	27	— 2.8	88	N	7	3.1			10n			0.23	5.8	Light snow.	
Stockton, Texas	27.04	686.8	29.04	763.0	25	— 3.3	88	NW	6	2.7		0	2s		Calm	0	0	Fair	
St. Vincent, Minnesota	29.31	744.5	30.24	768.1	—19	—28.3	100	NW	8	3.6		0	0			0	0	Clear	
Thatcher's Island, Mass	29.72	754.9	29.78	756.4	37	2.8	100	NE	10	4.5			10n		NE	0.18	4.6	Heavy rain.	
Toledo, Ohio	28.97	735.8	29.67	753.6	28	— 2.2	88	W	6	2.7			10s		Calm	0.07	1.8	Cloudy	
Tucson, Arizona	27.44	697.0	29.99	761.7	30	— 1.1	68	S	1	0.4		0	0			0	0	Clear	
Umatilla, Oregon	29.91	759.7	30.45	773.4	21	— 6.1	93	W	2	0.9			Fog		W	0	0	Light fog	
Uvalde, Texas	29.16	740.7	30.04	763.0	32	0.0	69	NW	6	2.7		0	0			0	0	Clear	
Vicksburg, Mississippi	29.62	752.3	29.88	758.9	37	2.8	90	S	6	2.7			10s		SW	Inap.	Inap.	Cloudy	
Visalia, California	29.69	754.1	30.07	763.8	44	6.7	92	NW	2	0.9			10s		Calm	0	0	Cloudy	
Washington, D. C.	29.59	751.6	29.71	754.6	34	1.1	100	NW	5	2.2			10s;fg		NW;C	0.81	20.6	Cloudy	
Wickenburg, Arizona					29	— 1.7	78	NW			1	0	0			0	0	Clear	
Wilmington, N. Carolina	29.78	756.4	29.84	757.9	55	12.8	87	W	11	4.9		0	8s		NW	0.21	5.3	Fair	
Winnemucca, Nevada	25.73	653.5	30.09	764.3	15	— 9.4	65	NE	6	2.7		0	0			0	0	Clear	
Wood's Holl, Mass	29.58	751.3	29.62	752.3	36	2.2	90	NE	14	6.3			10s		NE	0.25	6.3	Cloudy	
Yankton, Dakota	28.74	730.0	30.16	766.1	6	—14.4	76	N	12	5.4			10s		Calm	0.30	7.6	Cloudy	
Yuma, Arizona	29.82	757.4	29.97	761.2	50	10.0	20	N	12	5.4		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.01	590.0			47.0	8.3	68	Calm	0	0		2c	0			0	0	Clear	Thomas Herran.
Havana, Cuba, W. I.	29.95	760.7	30.00	762.0	76	24.4	81	Calm	0	0		8cs	0	SW		0	0	Foggy	Charles Hasselbrink.
Jakobshavn, Greenland	29.50	749.3	29.56	750.8	15.1	— 9.4		W			4		4			0	0		
Kingston, Jamaica, W. I.	30.02	762.5	30.03	762.7	69.7	25.6	83	Calm	- 0	0		0	2ks		E	0	0	Fair	Maxwell Hall.
Navassa, W. I.	29.92	760.0	30.00	762.0	78	25.6	75	NE	9	4.0		8k	5s	E	NE	Inap.	Inap.	Cloudy	F. M. Everett.
Paramaribo, S. A.	29.97	761.2	29.97	761.2	77	25.0	82	E			3		10n	E		0.800	20.32	Raining	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.92	760.0	77	25.0	89	Calm			0	0	8ks		Calm	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					72	22		E			1	0	0			0	0		Earl Flint.
Santiago de Cuba, W. I.	30.04	763.0	30.07	763.8	74	23.3	81	Calm	0	0		8ck	8s		NE	0	0		Robert Mason.
Upernavik, Greenland																			G. O. Gellich.
York Factory, B. A.	29.78	756.5	29.84	757.9	11.8	—11.2		W			7		4			0	0		
	29.48	748.8	29.54	750.3	—38.0	—38.9		W	7	3.1		0	0			0	0	Clear	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	c—10	c—10	c—10	From.	From.	Inch.	Mill.				
H. M. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandra																			Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. S. Hope.
H. M. S Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. J. F. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda																			Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.94	760.5	79	26.1	66	NNW			3-5		0							Squally	Capt. R. D. King. Comm. W. H. C. Selby.
H. M. S. Falcon																			Capt. W. C. Karslake.
H. M. S. Fantome																			Capt. P. Aldrich.
H. M. S. Fawn																			Capt. R. N. Castance.
H. M. S Flamingo																			Capt. R. F. Hoskyn.
H. M. S. Flying Fish																			
H. M. S. Gannet, S. 12° 24′, W. 75° 49′	29.93	760.2	67.5	19.7	92	Calm			0		10					2	S	Misty	Comm. E. E. Bourke. Capt. L. F. Jones.
H. M. S. Garnet																			
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	30.06	763.5	57	13.9	100	SE			3		10	SE				7	SE	Raining	Capt. T. L. H. Ward. Capt. J. L. Way.
H. M. S. Humber																			Capt. C. C. P. Fitzgerald
H. M. S. Inconstant																			Capt. E. H. Seymour.
H. M. S. Iris																			Capt. H. F. Cleveland.
H. M. S. Iron Duke																			Comm. R. H. Thornton.
H. M. S. Kingfisher																			Capt. W. Scott.
H. M. S. Lapwing																			Comm. S. Grove.
H. M. S. Lily																			Capt. C. J. Brownrigg.
H. M. S. London																			
H. M. S. Magpie, N. 25° 58′, E. 119° 29′	30.25	768.3	51.3	10.7	64	NE			2		0							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 14° 08′, E. 51° 31′	30.05	763.5	77	25.0	91	ENE			3-4		6	E				4	E	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 38° 42′, W. 9° 05′	30.04	763.0	47.5	8.6	89	E			2		10	SW						Overcast	Capt. H. Rawson. Capt. J. G. Mead.
H. M. S. Modeste																			Capt. G. Tryon, C. B.
H. M. S. Monarch																			

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda, W. I.	29.97	761.2	69	20.6	95	SSW			2		5	W						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes, N. 36° 41′, W. 1° 09′	30.04	763.0	53.5	11.9	81	W			5		9	W				7	W	Squally	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Seraphis, N. 36° 55′, E. 2° 32′	30.22	767.6	65	18.3	63	W			3		5	W				2	W	D. clouds	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb, N. 37° 03′, E. 15° 18′	29.97	761.2	66	18.9	79	SSE			3		7	W						Showery	Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark																			Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
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PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	30.01	762 3	77.9	25.5	78	NE			1		0			0	0	1	SE	Blue sky	S. C. da Silva Costa, Comd't.
Sado, Lobito, Benguela	29.88	759.0	75.2	24.0	88	NW			2		9			3 hours		1	NW	Gloomy	G. A. de Brito Capello, Comd t.
Tamega																			
SWEDISH NAVAL SERIES.																			
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UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.	
										Up'er	Lo'er	Upper	Lower.					
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.			
N. Yard, Pensacola, Fla	30.14	765.5	51	10.6	86	NW	2	0.9	.....	.....	0	.....	.....	0	0	.....	.....	Clear.
N. Yard, Portsmouth, N. H.	29.78	756.4	26	— 3.3	88	NE	10	4.5	.....	.....	0?	.....	.....	0.1	3.	.....	.....	Snowing?
Naval Hospital, Yokohama, Japan	29.29	744.0	41	5.0	87	Calm	.....	.....	0	.....	0	.....	.....	Slight		.....	.....	Clear.
Adams, Callao Peru	29.97	761.2	68	20.0	95	Calm	.....	.....	0	.....	10	.....	.....	.....	.....	Mod.	SW	Cloudy.
Alaska, N. Yard, Mare I'd, Cal*	29.99	761.7	49	9.4	64	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	Clear.
Alert, Hong-Kong, China	30.08	764.0	61	16.1	45	ENE	.....	.....	2	.....	0	.....	.....	0	0	Sm'h	.....	Hazy.
Alliance, Pensacola, Fla	29 98	761.5	48	8.9	92	Calm	.....	.....	0	.....	2	.....	.....	Light		Sm'h	.....	Clear
Ashuelot, Tientsin, China	30.31	769.9	19	— 7.2	85	NNW	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	Clear.
Colorado, New York, N. Y.	29.64	752.8	34	1.1	100	NNE	3	1.3	.....	.....	10	.....	Calm	0.360	9.14	.....	.....	Rainy.
Constitution, N. Yard, League I'd., Pa	.....	.....	35	1.7	90	NNE	2	0.9	.....	.....	10	.....	.....	.....	.....	.....	.....	Gloomy
Franklin, Off N. Yard, Norfolk, Va	29.67	753.6	36	2.2	90	SW	6	2.7	.....	.....	10	.....	.....	1.51	38.4	.....	.....	Overcast.
Galena, N. 35° 17′, W. 24° 13′	29.57	751.1	60	15.6	82	WSW	.....	.....	6	.....	8	.....	.....	.....	.....	Long	W	Fair.
Independence, N. Yard, Mare I'd, Cal	30.03	762.7	47	8.3	77	NW	6.0	2.7	.....	.....	0	.....	.....	0	0	.....	.....	Clear.
Jamestown, Sitka, Alaska*	30.20	767.1	34	1.1	90	NE	.....	.....	1	.....	8?	.....	.....	0.37	9.4	.....	.....	Clear?
Kearsarge, Curacoa, W. I.	30.02	762.5	80	25.7	78	ENE	.....	.....	3	.....	5	.....	E	.....	.....	Sm'h	.....	Fair.
Lackawanna, Ancon, Peru	30.08	764.0	69	20.6	85	WNW	.....	.....	0-1	.....	10	.....	.....	0	0	.....	.....	Cloudy.
Marion, Sandy Point, Patagonia, S. A	29.49	749.0	50	10.0	79	NNE	.....	.....	2	.....	8	.....	NNE	.....	.....	Sm'h	.....	Fair.
Michigan, Erie, Pennsylvania	29.56	750.8	33	0.6	.....	W	.....	.....	2	.....	10	.....	W	.....	.....	.....	.....	Cloudy.
Minnesota, New York, N. Y.	29.66	753.4	34	1.1	100	ENE	.....	.....	4	.....	10	.....	ENE	.....	.....	.....	.....	Raining
Monocacy, Shanghai, China	30.33	770.4	32	0.0	69	NW	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	Hazy.
New Hampshire, Port Royal, S. C.	29.85	758.2	53	11.7	93	WNW	4	1.8	.....	.....	8	.....	WSW	c	o	.....	.....	Cloudy.
Nipsic, Villafranca, France	30.01	762.2	58	14.4	58	Calm	.....	.....	0	.....	2	.....	.....	.....	.....	Sm'h	.....	D. clouds.
Onward, Chimbote Bay, Peru†	29.89	759.2	71	21.7	75	S	.....	.....	4	.....	2	.....	NE	.....	.....	Long	N;W	Fair.
Palos, Shanghai, China	30.39	771.9	32	0.0	50	NW	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	Clear.
Passaic, Washington, D. C.	29.76	755.9	36	2.2	80	WNW	.....	.....	1	.....	10	.....	Calm	.....	.....	.....	.....	Cloudy.
Pensacola, N. 29° 17′ W. 116° 55′	29.91	759.7	58	14.4	76	SSW	.....	.....	1	.....	10	.....	.....	.....	.....	Sm'h	SE	Cloudy.
Portsmouth, Washington, D. C.	29.68	753.9	33	0.6	100	NW	.....	.....	1	.....	10	.....	NW	.....	.....	.....	.....	Misty.
Powhatan, New York, N. Y.	29.65	753.1	30	— 1.1	.....	NE	.....	.....	3	.....	10	.....	ENE	.....	.....	.....	.....	Rain & sleet
Quinnebaug, Alexandria, Egypt	30.19	766.8	65	18.3	58	ENE	.....	.....	3	.....	8	.....	ENE	.....	.....	Sm'h	.....	Cloudy.
Richmond, N. 26° 14′, E 120° 33′	30.26	768.6	52	11.1	73	NNE	.....	.....	4	.....	0	.....	.....	0	0	Mod.	NNE	Clear.
Saratoga, Baltimore, Md	29.67	753.6	35	1.7	100	WNW	.....	.....	3	.....	10	.....	.....	Heavy		.....	.....	Cloudy.
Shenandoah, Montevideo, Uruguay.*	30.12	765.0	66	18.9	79	Calm	.....	.....	0	.....	2	.....	.....	.....	.....	Sm'h	.....	Fair.
St. Louis, League Island, Pa	29.72	754.9	35	1.7	90	NNE	10	4.5	.....	.....	10	.....	.....	1.1	28.	.....	.....	Drizzling.
Swatara, Hamada, Japan†	29.46	748.3	47	8.3	77	WSW	.....	.....	3	.....	10	.....	WSW	.....	.....	Mod.	wsw	Hazy.
Tennessee, Trinidad, W. I.	30.11	764.8	76	24.4	86	E	4	1.8	.....	.....	10	.....	E	0.19	4.8	Sm'h	.....	Cloudy.
Trenton, Villafranca, France*	29.95	760.7	60	15.6	60	SW	.....	.....	0-1	.....	10	.....	.....	o	o	.....	.....	Fair.
Vandalia, N. 39° 25′, W. 72° 43′	29.72	754.9	52	11.1	100	S	.....	.....	4	.....	10	.....	Calm	.....	.....	Mod.	E	Drizzling.
Wabash, Boston, Massachusetts	29.79	756.7	32	0.0	100	NE	12	5.4	.....	.....	10	.....	Calm	.....	.....	.....	.....	Snowing.
Wachusetts, Taboga near Panama.*	29.53	750.0	78	25.6	91	NW	.....	.....	3	.....	8	.....	N	o	o	Sm'h	.....	Fair.
Wyoming, Naples, Italy	29.91	759.7	61	16.1	88	S	.....	.....	1	.....	10	.....	SSW	.....	.....	Sm'h	.....	Cloudy.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡ S. 25° 03′, E. 55° 59′	29.99	761.7	77	25.0	91	ENE			2		4							D. clouds.	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡ N. 35° 33, W. 20° 49′	29.61	752.1	66.1	18.9	74	S			6		10							Raining	Capt. N. Youlden.
City of Agra, ‡ S. 54° 38′, W. 128° 30′	29.51	749.5	46.5	8.1	100	WNW			5		10							Drizzling	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Coppenname, N. 39° 20′, W. 19° 38′	29.53	750.0	62.3	16.8	93	S			6		9							Overcast	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra, ‡ S. 24° 21′, E. 67° 13′	30.09	764.3	78	25.6	91	ESE			6		9							Showery	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡ N. 47° 19′, W. 43° 41′	28.98	736.1	39	3.9	100	W			7		8					8	W;N	Squally	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams
Ship Iron Cross, N. 51° 15′, W. 8° 00′	30.37	771.4	45	7.2	100	ENE			6		10					6	NE	Overcast	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 3° 30′, E. 89° 40′	29.88	758.9	80.5	26.9	78	NNE			3		8							D. clouds	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. O. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland ‡																			Capt. H. W. Dyke.
Barque Meriola																			Capt E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 21° 56′, E. 37° 36′	29.92	760.0	75.0	23.9	75	NNW			5		3							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
Moravian																			
S. S. Peruvian																			Capt. W. H. Smith, R.N.R.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Britanic, N. 43° 41′, W. 44° 19′ †	29.38	746.2	41	5.0		NNW			7		10		NW			H'vy	N	Squally	Capt. H. Perry.
S. S. Celtic, N. 51° 25′, W. 15° 05′ †	30.30	769.6	52	11.1		SSW			4		10		S	0	0	Mod.	S	Cloudy	Capt. Benj. Gleadell.
S. S. Germanic, N. 48° 05′, W. 45° 01′ †	29.05	737.9	37	2.8		NW			7		10		NW	Sno Sho	ow wers	H'vy	NNW	Misty	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Undütsch.
S. S. Hermann, N. 52° 15′, E. 3° 07′	30.54	775.7	40.1	4.5		ENE			7		2		ENE	0	0	H'vy	ENE	Clear	Capt. H. Maur.
S. S. Köln																			
S. S. Leipzig ‡																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolph Fredholm, ‡ S. 27° 20′, W. 35° 31′ *†	30.08	764.0	77.9	25.5	85	NNW			6		3							Squally	Capt. Albert Fredholm.
Ship Peru, ‡ N. 19° 21′, W. 79° 32′	29.99	761.8	78.3	25.7	88	E			3	c	3k							D. clouds	Capt. O. F. Sköterbrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	30.42	772.7	44	6.7	84	ENE			4		2		ENE					Clear	Capt. J. W. Shackford.
S. S. Indiana, ‡ Philadelphia, Pa. †	29.50	749.3	32	0.0	79	E			5		8		E	Li	ght			Cloudy	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 50° 13′, W. 360 49′ *†	29.01	736.8	54	12.2	93	SE			7		10		SE	Hea	vy	H'vy	SSE	Raining	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, ‡ Delaware River, Del. †	29.96	761.0	35	1.7		NE			4		10		NE	2.	51.			Overcast	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 36° 04′, E. 179° 55′ †	29.90	759.4	58	14.4	76	SW			6		8		SW	0	0	High	WNW	Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 43° 46′, W. 140° 10′ *†	30.41	772.4	58	14.4	76	ESE			4		10		ESE			Mod.	ESE	Misty	Capt. W. H. Kidley.
S. S. Oceanic, Yokohama, Japan	30.17	766.3	48	8.9	85	Var.			2		5			0	0			Fine	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			Capt. J. M. Lachlan.
S. S. Geo. W. Elder																			Capt. Fred. Bolles
S. S. Columbia																			
S. S. Oregon, N. 38° 07′, W. 123° 08′ †	30.07	763.8	53.0	11.7	69	SE			2		0					Sm'l	W	Pleasant	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal. †	29.98	761.5	51	10.6	46	NE			4		0							Clear	Capt. J. N. Ingalls.
S. S. Idaho																			C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 33° 41′, W. 118° 32′ †	30.06	763.5	56	13.3	87	SE			3		0					Sm'l		Fair	
S. S. State of California, San Francisco, Cal. †	30.05	763.3	50	10.0	45	NE			4		0							Clear	Capt. G. Debney.
S. S. Victoria, Nanaimo, Vancouver I'd. †	30.26	768.6	37	2.8	100	Calm			0		8					Sm'l		Cloudy	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			A. Bannerman, 1st Officer.
S. S. Australia																			
S. S. City of New York, S. 2° 30′, W. 166° 51′ †	29.78	756.4	80	26.7	87	NW			3		5?		NW	0	0	Mod.	NW	Cloudy?	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking																			Capt. G. G. Berry.
S. S. City of Sidney, S. 28° 32, W. 178° 26′ †	29.73	755.1	75	23.9	86	NNE			5		10			0	0	Mod.	ENE	Cloudy	Capt. H. C. Dearborn
S. S. City of Tokio, Hong Kong, China †	30.29	769.4	50	10.0	86	N			2		0			0	0	Sm'l		Clear	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 9° 33′, W. 85° 05′ †	29.90	759.4	78	25.6	86	WNW			2		2		SW	0	0	Sm'l	SW	Clear	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, N. 31° 35′, W. 119° 26′ †	29.83	757.7	57	13.9	87	NW			1		5		Calm	0	0	Sm'l	NW	Clear	
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			Capt. Sam'l Jackson.
S. S. Belgenland ‡																			Capt. S. Stokes.
S. S. Nederland																			Capt. W. Geo. Randle.
S. S. Rhynland ‡																			
S. S. Vaderland, ‡ N. 49° 18′, W. 180 29′	30.17	766.3				SE			6		10			0	0	R'gh	SE	Overcast	Capt. J. C. Jamison.
MISCELLANEOUS.																			Capt. A. Mehaffey.
Sch'r Abby K. Bentley																			
Sch'r Addie Fuller, Brunswick, Ga.	29.90	759.4	57	13.9	81	WSW	3	1.3			5k		SW	0.42	10.7			Fair	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, ‡ Arroyo, P. R. †	30.32	770.1	78	25.6		ENE			5		2		E	0	0	Sm'l		Fair	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va†	29.79	756.7	37	2.8	90	WNW	2	0.9			10n			0	0			Cloudy	
Sch'r, Hattie V. Kelsey,																			Capt. J. L. Randall.
Ship Jumna																			Capt. James S. Gawin
Bark Sunbeam, ‡ Lisbon, Portugal †	30.07	763.8	48	8.9	?	ENE			3		10		W	0	0			Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OE THE SECRETARY OF WAR.

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

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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 7, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instru-m'tal error and tem-perature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.10	764.6	61.7	16.5	75	SE			2	4				0	0	Cloudy	Dr. Ollive.
Nemours			30.13	765.4	56.1	13.4	85	N			3	4				0	0	Cloudy	Raynard.
Algiers			30.09	764.2	54.0	12.2	56	NNW			3	10				0.181	4.6	Covered	Nicolas.
La Calle			30.05	763.3	53.6	12.0	89	WNW			5	6				0	0	Cloudy	Fonfrède.
Tunis			30.04	763.0															Jacques.
Sfax			30.15	765.7															Gau.
Saida			30.14	765.6	48.7	9.3	48	SSE			2	4				0	0	Cloudy	Dumas.
Tebessa			30.11	764.8	47.1	8.4	37	SW			2	9				0	0	Covered	Watrin.
Gerville																			Louchamp.
Laghouat			30.20	767.0	55.0	12.8	59	SSW			1	4				0	0	Cloudy	Herbin.
Biskra			30.16	766.0	50.0	10.0	75	W			2	10				0	0	Covered	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.93	760.2	30.02	762.5	68.3	20.2	84	E	6	2.7		6				0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania			30.30	769.6	72	22.2		SE			2	0				0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.91	759.8	30.50	774.8	30.2	— 1.0	96	NE			5	4				0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.71	754.6	30.53	775.5	27.9	— 2.3	92	SW	10.5	4.7		0				0	0		Dr. Wiersbicki.
Eperies	29.54	750.4	30.48	774.1	31.3	— 0.4	60	Calm			0	0				0	0		Julius Mikolik.
Gratz‡	29.19	741.5	30.53	775.5	29.3	— 1.5	86	WNW			2	0				0	0		Andreas Rospini.
Hermannstadt	28.99	736.3	30.56	776.3	16.9	— 8.4	100	WNW			1	0				0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.05	737.9	30.50	774.6	26.2	— 3.2	82	ESE			4	0				0	0		The Staff.
Lemberg	29.32	744.7	30.37	771.3	30.9	— 0.6	70	NW			4	0				0	0		Dr. T. Stanecki.
Pola	30.08	763.9	30.19	766.9	38.1	3.4	83	E			8	0				0	0		I. R. HydrographicOffice.
Szathmar	30.04	763.1	30.50	774.8	30.9	— 0.6	77	SE			2	0				0	0		Beicht Petér, S. J.
Szegedin	30.17	766.4						Calm			0	0				0	0		Karl Stancel.
Trieste	30.20	767.1	30.30	769.7	36.0	2.2	61	ENE			4	0				0	0	Clear.	P. Busin.
Vienna	29.82	757.3	30.59	776.9	28.0	— 2.8	70	Calm			0	0				0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 14, 1882.

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

BRITISH SERIES.

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

Aberdeen	30.64	778.2	30.75	781.0	23.4	— 4.8	73	WNW	6	2.7			1			0	0	Misty	W. Boswell.
Armagh, Observatory	30.40	772.1	30.64	778.2	39.4	4.1	77	ENE	7	3.1			1					D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.67	779.0	34.5	1.4	80	ESE	5	2.2			1					Misty	John Hartnup.
Bolton, Sharples	30.10	764.5	30.66	778.7	36.2	2.3	74	SE	15	6.7			0					Blue sky	Thomas Mackereth.
Bradford, Yorkshire	30.29	769.4	30.69	779.5	39.7	4.3	81	SE			2		7			0	0	D. clouds	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	30.02	762.5	30.04	763.0	79.0	26.1	80	NE			2		3					Blue sky	Pvt. J. Surgenor, A. H. C.
Cardington			30.60	777.2	35.0	1.7	75	NE			0.4		0					Blue sky	John McLaren.
Chatham, School M. E.	30.45	773.4	30.59	777.0	41.1	5.1	74	E			3		4					D. clouds	Cpl. Gwinn, R. E.
Falmouth, Observatory	30.24	768.1	30.47	773.9	42.7	5.9	80	E			5		9					Overcast	The Staff.
Fort Napier, Natal	27.54	699.5	29.75	755.6	85.1	29.5	54	NE			1		8					Overcast	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.63	752.6	29.86	758.4	87	30.6	84	Calm			0		5					D. clouds	C. E. Keane.
Galway, Queen's College			30.48	774.2	37	2.8	90	E			2		2					Blue sky	J. O'Donaghadue.
Gibraltar, Mediterranean	30.05	763.5	30.12	765.0	58.3	14.6	92	WSW			3		10					Gloomy?	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.52	775.2	30.73	780.5	35.0	1.7	81	E			2							Blue sky	D. G. MacLean.
Greenwich, Royal Obs'y	30.40	772.1	30.58	776.7	39.9	4.4	77	ENE			1		0					Blue sky	The Staff.
Guernsey	30.20	767.1	30.43	772.9	39	3.9	64	NE			4		0					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.55	776.0	30.59	777.0	38.7	3.7	75	ENE	7	3.1								Foggy	The Met'g'l Office.
Leicester, Museum	30.39	771.9	30.66	778.7	36.0	2.2	90	NE			1		2					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.86	758.4	29.94	760.5	60.2	15.7	68	NW			2		4					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.13	765.3	74.0	23.3	95	SE			2		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.12	765.0	30.67	779.0	32.9	0.5	94	ENE			3-4		9					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	30.35	770.9	30.61	777.5	38	3.3	72	NNE			3		0					Blue sky	The Staff.
Plymouth	30.41	772.4	30.49	774.4	40.0	4.4	80	ENE			4		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.73	780.5	32.1	0.1	99	S	1	0.4			0					Blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.26	768.6	30.33	770.4	39.0	3.9	91	ENE			2		10					Raining	Serg't W. H. Lyne.
Sheffield	30.42	772.7	30.71	780.0	37.5	3.1	86	NE			1		5			0	0	Misty	W. F. Cooper.
Silloth Rectory	30.64	778.2	30.66	778.7	35.8	2.1	70	E			4		0			0	0	Blue sky	Rev. F. Redford, A. M.
Stonyhurst, Observatory			30.68	779.3	37.0	2.8	69	NE	11	4.9			0					Blue sky	Rev. S. J. Perry.
Strathfield Turgiss	30.34	770.6	30.57	776.5	38.5	3.6	75	NE			1		0					Blue sky	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	30.38	771.6	30.46	773.7	44	6.7	84	E			4		6					D. clouds	W. Newcombe.
Valencia, Observatory	30.42	772.7	30.45	773.4	45.4	7.4	76	E	18	8.0			10					D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B.	29.83	757.7	29.87	758.7	24.6	— 4.1	91	N	3	1.3			10n			Inap.	Inap.	Snowing	Hon. J. Ferguson.
Chatham, N. B.*	29.64	752.8	29.71	754.6	25	— 3.9	91	Calm	0	0			10n		NE	0.60	15.2	Light snow.	G. A. Blair.
Charlottetown, P. E. Island	29.56	750.8	29.61	752.1	27	— 2.8	100	NE	8	3.6			10n			0.420	10.67	Light snow.	H. J. Cundall, C. E.
Chicontime, Quebec					22.1	— 5.5		SE			4		10s			0.15	3.8	Light snow.	Rev. V. A. Huart.
Cornwall, Ontario	29.57	751.1	29.77	756.1	28.9	— 1.7	95	W			1		10n			0.22	5.6	Cloudy	James Smith, M. A.
Dalhousie, N. B.	29.70	754.4	29.74	755.4	24.5	— 4.2		Calm			0	0	7s			0	0	Fair	H. A. Johnson.
Father Point, Quebec*	29.69	754.1	29.71	754.6	23	— 5.0	73	NE	8	3.6			10n			0.50	12.7	Cloudy	J. McWilliams.
Fredericton, N. B.	29.64	752.8	29.71	754.6	24.0	— 4.4	91	NW	5	2.2			10s			0.330	8.38	Cloudy	Prof. Harrison.
Fort Garry, Manitoba*	29.26	743.2	30.25	768.3	—28	—33.3	100	SW	5	2.2		0	0			0	0	Clear	James Stewart.
Granton, Ontario	28.90	734.0	30.09	764.3	16.0	— 8.9	100	N			1		10n			0	0	Cloudy	James Grant.
Halifax, N. S.*	29.44	747.8	29.57	751.1	32	0.0	99	NW	7	3.1			Fog			0.285	7.24	Foggy	A. Allison.
Hamilton, Ontario	29.58	751.3	30.00	762.0	24.7	— 4.1	93	SW			3		10ks			0.03	0.8	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.50	749.3	29.86	758.4	25	— 3.9	91	SW	10	4.5		0	0			9.19	4.8	Clear	S. Woods, M. A.
Little Glace Bay, N. S.	29.52	749.8	29.56	759.8	25.0	— 3.9	97	SE	4	1.8			10n			0.30	7.6	Snowing	C. H. Rigby.
Montreal, Quebec*	29.56	750.8	29.77	756.1	23	— 5.0	89	W	21	9.4			10s			0.46	11.7	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A.
Parry Sound, Ontario*	29.18	741.1	29.93	760.2	14	—10.0	82	NW	22	9.8		2k	5ks	W	W	0.02	0.5	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.10	739.1	29.89	759.2	23.7	— 4.6	79	W			2	0	9ks			0.40	10.2	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.29	744.0	30.02	762.5	23	— 5.0	100	SW	12	5.4			10n			0.04	1.0	Threatening	H. Morgan.
Port Stanley, Ontario	29.38	746.2	30.07	763.8	22	— 5.6	85	W	12	5.4			10n		W	0.05	1.3	Cloudy	M. Payne.
Quebec, Quebec*	29.35	745.5	29.68	753.9	25	— 3.9	100	W			3		10n		W	0.55	14.0	Light snow.	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.28	743.7	29.77	756.1	16	— 8.9	80	Calm	0	0			10n			0.33	8.4	Light snow.	W. H. McIntyre.
St. Andrews	29.62	752.3	29.67	753.6	26	— 3.3	89	N	3	1.3			10k			0.41	10.4	Cloudy	
St. John's, N. B.	29.52	749.8	29.69	754.1	26.0	— 3.3	87	NW	6	2.7		0	7k			0.25	6.3	Fair	G. Murdock, C. E.
Saugeen, Ontario*	29.22	742.2	29.98	761.5	19	— 7.2	88	W	21	9.4			10ks		W	0.31	7.9	Cloudy	K. Stewart.
Stratford, Ontario	28.73	729.7	30.10	764.5	17.0	— 8.3	95	W	9	4.0			10s			0.20	5.1	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.56	750.8	29.61	752.1	29	— 1.7	94	E	10	4.5			10n			0.10	2.5	Light snow.	T. C. Hill, C. E.
Toronto, Ontario*	29.58	751.3	29.99	761.7	24	— 4.4	90	SW	10	4.5			10s		W	0.17	4.3	Cloudy	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario	28.91	734.3	30.05	763.3	19.7	— 6.8	95	W	18	8.0		0	9ks			0	0	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*																			Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.82	757.4	30.00	762.0	20	— 6.7	100	NE					10n			0	0	Cloudy	John Delany.
St. Pierre, N. F.			29.80	756.9	17.6	— 8.0		E			2					0	0		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.87	758.7	29.91	759.7	81.5	27.5	50	S	2.2	1.0		2	6cs			0	0		The Staff, for D. Gill.
Cape St. Francis Lt. House	29.81	757.2			73.5	23.1	80	E	9.6	4.3			0			0	0	Blue sky	John Duthie.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.17	766.2	30.19	766.8	30.2	— 1.0	67	SSE	3.4	1.5		3c			W	0	0	Fair	M. Marc Dechevrens, S.J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.21	665.7	29.93	760.2	65.8	18.8	88	NE			1	9d		NE		0	0	Cloudy	Federico Maison.

DANISH SERIES.

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

Copenhagen	30.32	770.2	30.37	771.4	36.1	2.3	89	NW	16	7			9						
Faröe	30.50	774.7	30.52	775.2	36.9	2.7	87	NW			4		7						
Godthaab, Greenland	30.17	766.4	30.22	767.5	19.9	—5.7	86	N			4		10						
Stykkisholm, Iceland	30.54	775.8	30.59	776.9	39.9	4.4	93	SE			2		8					Raining	
Thorshavn	30.67	779.0	30.71	779.9	35.2	1.8	95	Calm	0	0			1						
Vestervig	30.34	770.6	30.43	773.0	39.9	4.4	92	NW			6		2						

FRENCH SERIES.

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

Agen, Normal School	29.62	752.3	30.30	769.7	31.6	—0.2	97	NW			1		Fog			0	0	Dense fog	M. Labroue, Director.
Alençon	29.91	759.7	30.46	773.7	31.3	—0.4	92	NE			1		0			0	0	Clear	M. Nicot, Director.
Arras, Engineer School	30.24	768.0	30.52	775.1	32.7	0.4	81	ENE	2.2	1.0			0					Clear	M. Klein, Commandant.
Avignon, Normal School	30.07	763.8	30.15	765.8	43.5	6.4	65	N			2		0			0	0	Very clear	M. Giraud, Director.
Bar-sur-Seine‖	29.85	758.3	30.45	773.4	32.5	0.3	82	E			1		0			0	0	Clear	M. Saillard, Director.
Beauvais, Normal School	30.20	767.1	30.49	774.4	30.9	—0.6	65	ENE			2		0			0	0	Clear	M. Frère Eugene Marie.
Besançon, Normal School	29.39	746.6	30.34	770.6	33.1	0.6	73	NNW			4		0			0	0	Clear	M. Gobin, Director.
Bordeaux, Observatory	29.99	761.7	30.26	768.7	34.3	1.3	99	NNW			1		10			0	0	Covered	M. Rayet, Director.
Bourges, Normal School	29.71	754.7	30.30	769.5	34.2	1.2	100	NNE			3		1		NNE	0	0	Clear	M. Postel, Director.
Brest, Naval Observatory	30.19	766.7	30.43	772.8	39.9	4.4	79	NNE			1		0			0	0		M. de Remaree, Dir.
Caen, Normal School	30.34	770.7	30.43	773.0	34.9	1.6	78	E			1		1		E	0	0	Clear	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.09	764.3	30.43	772.8	39.4	4.1	90	WSW			1		0			0.094	2.4	Clear	M. Jadot, Director.
Charleville, Normal School	29.92	759.9	30.45	773.5	42.4	5.8	44	E			1		0			0	0	Clear	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.84	732.5	30.28	769.1	30.6	—0.8	90	N			1		10			0	0	Misty	M. Allnard, Director.
Cluny, Normal School	29.39	746.6	30.28	769.0	32.0	0.0	73	NE			1		0			0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	29.50	749.4	30.42	772.7	33.3	0.7	79	NE			4					0	0		Dr. Coulet, Director.
Gap, Normal School	27.53	699.3	30.15	765.7	39.4	4.1	97	W			6				N	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.02	737.1	30.16	766.1	45.1	7.3	77	NW			2		8		NW	0	0		M. Kina, Director.
Grenoble, Normal School	29.43	747.5	30.24	768.0	35.6	2	95	ENE			1		km		NW	0	0		M. Ablard, Director.
Guéret, Normal School	28.59	726.2	30.16	766.1	33.4	0.8	79	E			1		10			0	0	Covered	M. Rivoir, Director.
Lamballe, Normal School	30.15	765.8	30.44	773.1	34.7	1.5	74	E			1		0		E	0	0	Clear	M. Ollitrault, Director.
Lesear, Normal School	29.70	754.3	30.41	772.3	40.6	4.8	84	N			1		10			1.319	33.50	Covered	M. Chauvin, Director.
Lorient, Naval Observatory	30.33	770.3	30.43	772.9	39.6	4.2	70	NE			2		0			0	0	Clear	Lt. T Carré, Director.
Lyon Obs'y, Park Station	29.16	740.7	30.24	768.2	30.2	—1.0	92	N			1		8n		NW	0	0	Almost cov'd	M. André, Director.
Mans, Normal School	30.09	764.3	30.41	772.5	33.1	0.6	92	E			1		0			0	0	Clear	M. Piboen, Director.
Marseille, Observatory	29.82	757.5	30.10	764.5	50.2	10.1	68	NW			1		6		ENE	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.82	630.5	30.06	763.5	29.8	—1.2	64	N	3.8	1.7			7	W		0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.04	763.0	30.15	765.8	42.3	5.7	78	N			2		5		S	0	0	Cloudy	M. Galzin, Director.
Nancy, Normal School	29.58	751.4	30.38	771.6	34.7	1.5	56	NE			2		0			0	0	Clear	M. Hasse.
Nantes, Observatory	30.25	768.6	30.43	772.8	35.4	1.9	64	NE			1		0			0	0	Hazy	M. Larocque, Dir.
Nice	30.04	763.0	30.23	767.8	53.2	11.8	33	E			8		5	E	E	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	30.02	762.6	30.13	765.3	49.3	9.6	57	NW	18.6	8.3			7	N	NNE	0.146	3.7		Dr. Fines.
Pic-du-Midi, Plantade	22.48	571.1			22.5	—5.3							1		NE	0	0	Clear	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.12	739.6	30.24	768.1	36.5	2.5	79	N			3		10	N	N	0	0	Covered	M. Tallieu.
Puy de Dôme O. s'y, Summit	25.15	638.9			30.6	—0.8	79	NNW			3		0			0	0		M. Allnard, Director.
Rochefort, Naval Obs'y	30.28	769.1	30.31	769.9	37.4	3.0	93	NE			1		8		NE	0	0	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.97	761.3	30.20	767.0	34.5	1.4	73	N			1		0			0	0	Clear	M. Monillot, Director.
Rodez, Normal School	27.98	710.7	30.23	767.9	31.6	—0.2	92	SE			1		Fog			0	0	Foggy	M. Richard, Director.
Rouen, Normal School	30.37	771.3	30.45	773.5	37.2	2.9	54	E			2		0			0	0	Clear	M. Platrier, Director.
Saint Lô, Normal School	30.30	769.7	30.46	773.7	35.1	1.7	70	E			3		0			0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.25	768.4	30.42	772.6	30.9	—0.6	54	NE			1		0					Clear	M. Renou, Director.
Toulouse, Observatory	29.58	751.2	30.30	769.7	29.3	—1.5	100	NW			1		10			0	0	Covered	M. Baillaud, Director.
Tours	30.13	765.3	30.33	770.3	33.8	1.0	64	NE			2		0			0	0	Clear	M. de Tastes.
Versailles, Observatory	29.92	759.9	30.41	772.4	31.3	—0.4	63	ENE			2		0			0	0	Very clear	Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	29.60	751.8	30.47	774.0	31.6	—0.2	87	N			5		0			0	0		Prof. Dr. Hoh.
Berlin	30.35	771.0	30.54	775.7	29.8	—1.2	77	W			1		9			0	0		Prof. Dr. Arndt.
Breslau	30.01	762.2	30.55	775.9	30.0	—1.1	74	W			2		0			0	0		Royal University Obs'y.
Carlsruhe	30.04	763.0	30.50	774.7	32.7	0.4	80	NE			4		0			0	0		Albert Senz.
Cassel	29.92	760.0	30.54	775.7	31.1	—0.5	86	N			2		0			0	0		Dr. H. Möhl.
Frankfort on the Main	30.24	768.0	30.63	778.1	32.4	0.2	71	NNE			2		0			0	0		Physical Society.
Friedrichshafen	28.84	732.6	30.37	771.3	29.8	—1.2	43	E			6		0			0	0		Chief Telegrapher Wilhelm.
Hamburg	30.52	775.1	30.59	776.9	32.2	0.1	81	NW			4		10			0	0		Dr. R. Kleeman.
Kiel	30.56	776.1	30.57	776.5	33.6	0.9	77	W			4		10			0.008	0.20		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.17	766.2	30.63	777.9	21.9	—5.6	100	SW			1		10			0	0	Foggy	Prof. Dr. Bruhns.
Magdeburg	30.35	770.9	30.60	777.1	27.1	—2.7	92	Calm			0		0			0	0	Heavy fog	Dr. Assmans.
Memel	30.07	763.8	30.12	765.0	36.5	2.5	82	NW			6		2cs						Reinbrecht & Issermann.
Munich	28.52	724.3	30.40	772.2	27.3	—2.6	54	NE			3		0			0	0		Central Station.
Neufahrwasser	30.27	768.9	30.29	769.3	34.7	1.5	94	WNW			4		9			0	0		A Lothes.
Neustadt, Palatinate	29.88	759.0	30.41	772.4	34.5	1.4		N			2		0			0	0		Dicknether.
Stuttgart	29.44	747.7	30.38	771.6	34.7	1.5	41	NE			5		0			0	0		Prof. Dr. Schoder.
Thorn	28.85	732.9	30.40	772.2	30.9	—0.6	72	NE			2		0			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	30.44	773.2	30.47	773.8	34.3	1.3	94	W			5		10s			0	0		Prof. Kemlein.
Wustrow																			Prof. S. Reimer.

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

GREEK SERIES.

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

Athens	29.72	755.0	30.12	765.0	52.5	11.4		NE			1.0		10					Covered	Alexander Wourlisch

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	30.04	763.1	30.10	764.4	71.1	21.7	42	SW	6.0	2.7			3	W		0	0	D. clouds	
Deesa	29.53	750.1	30.01	762.3	75.8	24.3	19	N	9.8	4.4			3	WSW		0	0	D. clouds	
Bombay	29.91	759.7	29.95	760.6	83.1	28.4	68	WNW	10.0	4.5			0			0	0	Blue sky	
Poona, Yarrowda	28.09	713.5	29.93	760.3	84.3	29.1	27	SSE	6.0	2.7			5		ESE	0	0	D. clouds	
Belgaum	27.41	696.2	29.94	760.5	78.2	25.7	34	ENE	7.0	3.1			6	NE		0	0	D. clouds	
Lahore	29.29	744.0	30.07	763.8	60.6	15.9	39	W	1.9	0.8			6			0	0	Gloomy	
Roorkee	29.08	738.6	30.02	762.5	58.8	14.9	43	NW	4.8	2.2			6			0	0		
Agra	29.48	748.8	30.06	763.6	67.4	19.7	34	W	7.8	3.5			0			0	0		
Nagpur	28.95	735.2	30.01	762.2	74.2	23.4	43	Calm	4.3	1.9			0			0	0	Blue sky	
Jubbulpore	29.67	728.2	30.09	764.2	63.6	17.6	49	Calm	2.2	1.0			0			0	0	Blue sky	
Lucknow	29.60	751.7	29.99	761.7	63.3	17.4	40	NW	5.3	2.4			0			0	0	Blue sky	
Allahabad	29.70	754.4	30.03	762.8	58.7	14.8	55	Calm	5.8	2.6			0			0	0	Blue sky	
Patna	29.80	756.8	29.99	761.7	61.1	16.2	50	W	2.6	1.2			0			0	0	Blue sky	
Hazaribagh	27.94	709.6	30.04	763.0	57.8	14.3	42	W	10.8	4.8			0			0	0	Blue sky	
Cuttack	29.92	760.0	30.00	762.1	72.9	22.7	55	NW	0.5	0.2			0			0	0	Blue sky	
Calcutta, Alipore	29.98	761.5	30.00	762.1	63.5	17.5	58	Calm	0	0			0			0	0	Blue sky	
Goalpara	29.57	751.0	29.99	761.7	61.7	16.5	58	WSW	1.8	0.8			9	SSE		0	0	D. clouds	
Chittagong	29.88	758.8	29.97	761.2	66.8	19.3	54	WNW	4.1	1.8			1			0	0	Blue sky	
Sibsagar	29.67	753.6	30.03	762.7	56.3	13.5	98	S	1.2	0.5			10	W	W	0.15	3.8	Gloomy	

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.90	759.4	30.32	770.2	39.7	4.3	31	E	6.3	2.8			0			0	0		Prof. Giovanni Clodig.
Milan	29.79	756.7	30.34	770.5	37.4	3.0	54	SW	4.9	2.2			6	NW		0.417	10.6		Prof. Schiaparelli.
Padua	30.19	766.7	30.30	769.6	39.7	4.3	75	ENE	19.9	8.9			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.41	747.1	30.36	771.2	36.7	2.6	72	ESE	3.1	1.4			8	NE		0	0		Prof. P. F. Denza.
Genoa	29.99	761.7	30.19	766.8	43.3	6.3	26	NW	11.2	5.0			2	N		0.181	4.6		Prof. G. M. Garibaldi.
Mondovi	28.36	720.3	30.37	771.5	30.7	—0.7	96	W			4		9			0	0		Prof. D. C. Bruno.
Pesaro	30.12	765.1	30.17	766.4	41.9	5.5	59	NE	24.8	11.1			10	NE		0.630	16.0		Prof. Luigi Guidi.
Florence	29.89	759.2	30.15	765.8	39.2	4.0	50	NE			8		10	SE		0.043	1.1		Cav. F. Moucci.
Leghorn	30.02	762.6	30.11	764.8	39.4	4.1	44	ENE	26.6	11.9			10			0.315	8.0		Prof. P. Monte.
Rome	29.80	757.0	29.98	761.5	43.7	6.5	69	NNE	6.9	3.1			10			0.035	0.9		Prof. P. S. Ferrari.
Lecce	29.63	752.6	29.89	759.2	50.9	10.5	86	N	6 9	3.1			10	S		0.839	21.3		Prof. C. de Giorgi.
Cosenza	29.00	736.7	29.91	759.7	56.3	13.5	69	Calm	0	0			10	WSW		0.197	5.0		Prof. D. Conti.
Cagliari	29.66	753.4	29.86	758.4	52.5	11.4	70	NW			2		7	W		0.008	0.2		Prof. A. Pacinotti.
Palermo	29.67	753.5	29.92	759.9	59.7	15.4	44	WSW	5.6	2.5			7	WSW		0.028	0.7		Prof. G. Ciacciatore.
Syracuse	29.87	758.7	29.91	759.8	58.3	14.6	68	SW	4.9	2.2			5	SW		0.008	0.2		Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R.	29.41	746.9	29.95	760.6	44.6	7.0	61	ENE	10.5	4.7		10ck		NE		0.724	18.4		Prof. F. Brioschi.
Stelvio	22.17	563.0			16.7	—8.5	32	N				0				0	0		P. F. Denza.
Valdobbia	22.12	561.8			17.1	—8.3	68	NE				0				0	0		

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	29.99	761.7	30.01	762.2	32.2	0.1	77	W	3.7	1.7			7ck			0	0	Cloudy	K. Sasaki.
Kioto	29.70	754.4	29.88	758.9	32.5	0.3	55						0			0	0	Clear	
Nagasaki, I. M. Obs'y	29.85	758.2	30.07	763.8	34.6	1.4	75	NNE	3.9	1.7			10s			0.250	6.35	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.65	753.1	29.72	754.9	28.8	—1.8	50					0	0			0	0	Clear	The Staff.
Wakayama	29.90	759.4	29.95	760.7	34.9	1.5	55	WNW	12.0	5.4			0			0	0	Clear	S. Iwahashi.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.79	756.7	29.98	761.5	81.4	27.4	64	ENE	9.0	4.0		4	4	W	ENE	0.89	22.6	Cloudy	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.73	755.1	29.99	761.8	65.0	18.3	63	NE			1	10cs	0	SW		0	0	Covered	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	30.59	777.0	30.59	777.0	35.2	1.8		ENE			4					0	0		
Groningen								NNE			2					0	0		
Helder	30.65	778.5	30.65	778.5	32.0	0.0		ENE			2					0	0		
Hellevoetsluis	30.60	777.3	30.60	777.3	31.8	— 0.1	92	NE			2					0	0		
Utrecht	30.58	776.8	30.63	778.0	32.0	0.0	81	ENE			2		2			0	0	Lightly cl'dy	H. van der Brink.

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

NORWEGIAN SERIES.

Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.

Bergen	30.50	774.8	30.57	776.4	35.2	1.8	66	N	27.7	12.4			2			0	0	
Christiania	30.16	766.1	30.32	770.1	28.8	— 1.8	70	WNW	0	0			5			0	0	
Gjæsvær	29.03	737.3	29.05	737.9	27.7	— 2.4		NE		6			4					
Lodingen	29.51	749.5	29.56	750.7	27.9	— 2.3	98	WNW		8			10			0.295	7.5	Snowing

PORTUGUESE SERIES.

Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Angra, Azores	29.31	744.5	29.47	748.5	55.0	12.8	81	SSE	4.9	2.2			6			0.374	9.5	Dr. J. A. Sampaio.
Campo Major	29.18	741.2	30.22	767.5	45.3	7.4	63	ENE	9.4	4.2			7			0	0	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.76	755.9	29.85	758.1	63.3	17.4	84	WNW	6.9	3.1			10			0.551	14.0	Raining — Capt. D. A. de Cunha.
Lisbon, Observatory	29.79	756.7	30.17	766.2	47.5	8.6	86	ENE	15.4	6.9			10	S		0.051	1.3	The Staff.
Ponta Delgada, Azores	29.43	747.6	29.50	749.4	57.2	14.0	82	SE	5.6	2.5			3			0.488	12.4	Light rain

RUSSIAN SERIES.

Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.

Akmolinsk	28.77	730.8	29.90	759.5	26.6	— 3.0	100	SW	22	10			10			Blank	Blank	Capt. Lasarew.
Archangel	28.88	733.6	28.90	734.1	13.6	—10.2	90	SE	13	6			10					Snowing — Capt. Sseliwerstow.
Astrakhan	30.16	766.0	30.08	763.9	16.7	— 8.5	82	NW	7	3			10			Blank	Blank	Capt. Wisganow.
Barnaul	29.60	751.9	30.13	765.4	24.6	— 4.1	97	SW	2	1			10					Meteorological Obs'y.
Dorpat	29.50	749.4	29.76	755.9	25.2	— 3.2	53	NW	11	5			1k					Observatory.
Ekaterinburg	28.34	719.9	29.37	746.1	7.0	—13.9	86	Calm	0	0			10					Meteorological Obs'y.
Kasan	29.18	741.2	29.47	748.5	14.7	— 9.6	80	S	7	3			10					Observatory.
Kertch	30.34	770.6	30.36	771.1	25.5	— 3.6	87	NW	7	3			10					Lagorio.
Kieff	29.36	745.7	30.00	762.1	30.2	— 1.0	56	W	20	9		2c						Light clouds — Observatory.
Krotkowo, N. 58°47′, E. 48°34′																		Cand. Fatjanow.
Lugan	29.84	757.9	30.05	763.4	24.3	— 4.3	73	WSW	34	15			9			Blank	Blank	Meteorological Obs'y.
Moscow	28.78	731.0	29.34	745.3	30.4	— 0.9	90	SSE	10.1	4.5			8ks					Meteorological Obs'y.
Nertchinsk	27.50	698.5	30.22	767.6	—33.0	—36.1	83						0					Meteorological Obs'y.
Nikolaiev	30.31	769.8	30.38	771.6	30.9	— 0.6	51	WSW	18	8			0					1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor																		Lieut. Iwanow.
Nukuss	29.86	758.5	30.10	764.5	46.4	8.0	65	SW	7	3			0					Dr. Dobrochotow.
Pekin, China	29.83	757.6	29.97	761.2	27.7	— 2.4	75	Calm	0	0		1c						Physical Observatory.
St. Petersburg	29.45	748.1	29.47	748.5	19.8	— 6.8	68	NW	22	10			3ks;n					Central Physical Obs'y.
Tashkend, Laboratory	28.57	725.6	30.20	767.0	38.5	3.6	52	NE	13	6			6					Teich, A. M.
Tiflis	28.58	726.0	30.04	762.9	43.5	6.4	65	NW	13	6			4ks					Physical Observatory.
Warsaw	29.91	759.6	30.35	771.0	29.5	— 1.4	70	WNW	22	10			0					Astronomical Obs'y.
Wilna	29.54	750.3	29.98	761.4	34.0	1.1	83	WNW	7	3			10					Heavy cl'ds. — Berg, Assistant.
Yeniseisk	29.69	754.2	30.00	762.0	14.7	— 9.6	95	ESE	2	1			9					M. O. Marks.

SCOTTISH SERIES.

Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.

Leith, Restalrig Park			30.75	781.3	33.0	0.6	85	SE			1		0			0	0	Very fine — Andrew Gibb.
Monach Lt. House, Hebrides			30.65	778.5	41	5.0	91	SE			3	0	0			0	0	J. Youngclause.
North Unst, Shetland Isl'ds			30.70	779.8				NW			3		10			0	0	Robert Burnet.

SPANISH SERIES.

Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.

Barcelona, Met. Obs'y ‡	30.01	762.2	30.12	765.0	52.3	11.3	61	ENE	0.2	0.11			1			0	0	Clear — Antonio Rave, Director.
Bilbao, Met. Obs'y	30.21	767.4	30.27	768.9	43.3	6.3	94	E	4.5	2.01			10			0.268	6.8	Rainy — Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.23	691.6			36.5	2.5	82	E	4.1	1.84			8			0	0	Cloudy — Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.94	709.7	30.27	768.9	39.2	4.0	72	N	5.4	2.4		0	0			0	0	Clear — The Staff.
Murcia, Met. Obs'y ‡	30.04	763.0	30.19	766.9	53.4	11.9	59	NNW	3.4	1.5		0	1			0	0	Almost clear — Olayo Diaz, Director.
Santiago, Met. Obs'y	29.24	742.6	30.16	766.0	45.5	7.5	62	SE	21.0	9.4			7			0	0	Cloudy — R. Gil Villanueva, Dir.
Sub-Series.																		
Havana, Cuba, W. I	30.02	762.5	30.09	764.2	70.3	21.3	91	E	3.4	1.5		6c;cs	1k	SSW		0	0	Fair — Benito Vines, S. J.
Manilla, Phillippine Islands	29.93	760.2	29.98	761.5	78.8	26.0	80	NNE	0	0			1s			0	0	Fair — Federico Faura, S. J.
San Fernando, Naval Obs'y	30.08	763.9	30.18	766.5	50.5	10.3	66	NE	2.4	1.1			10		NE	0	0	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.04	762.9	30.13	765.2	75.6	24.2	87	NE	14.7	6.58		5cks	4kn	NE	NE	0.010	0.25	Cloudy — Enrique Gadea, Chief Engineer.

SWEDISH SERIES.

Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.

Haparanda	29.48	748.8	29.52	749.8	18.7	— 7.4	89	NW			2		8			0	0	
Umea	29.69	754.1	29.74	755.4	25.9	— 3.4	56	NNW			7		8			0	0	
Hernosand	29.89	759.1	29.94	760.4	28.2	— 2.1	57	WNW			7		5			0	0	
Stockholm	29.96	761.0	30.14	765.5	30.6	— 0.8	70	NNW			6		1			0	0	
Wisby	30.04	763.0	30.10	764.5	34.9	1.6	59	N			6		3			0	0	
Sub-Series.																		
Upsala	30.04	762.9	30.12	765.1	28.2	— 2.1	61	WNW	8.5	3.8			5		NNW	0	0	Nils Ekholm.

SWISS SERIES.

Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.

Geneva	28.80	731.5	30.30	759.7	28.8	— 1.8	85	NNE			7		10			0	0	Covered — The Observatory.
Zurich	28.63	727.1	30.36	771.1	25.6	— 3.0	65	E			4		1			0	0	Clear — The Observatory.

At Geneva the corresponding departures from the normal values are: Bar. +3.8 mm.; Ther. −3°.1 cent.; Hum. +5 per cent.

TURKISH SERIES.

Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.

Constantinople			30.38	771.6	39.2	4.0	85	NE	22	10.0			10		N	0.110	2.8	The Observatory.
Valona			29.89	759.2	54.6	12.2		SE			2		10			1.38	35.	Covered — A. Bertrand.
Sub-Series.																		
Beirut, Lee Obs'y, Syria			30.15	765.7	63.1	17.3	54	NE			1	9c				0	0	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.87	758.7	29.95	760.7	36	2.2	71	N	4	1.8			10s		NW	0.21	5.3	Cloudy	
Alpena, Michigan	29.35	745.5	30.05	763.3	12	—11.1	80	W	9	4.0			10s		W	0.15	3.8	Cloudy	
Atlanta, Georgia	29.00	736.6	30.20	767.1	35	1.7	80	NW	7	3.1		1k	0	Calm		0	0	Clear	
Atlantic City, New Jersey	30.07	763.8	30.09	764.3	31	— 0.6	89	W	7	3.1			10s;fg		Calm	0.02	0.5	Cloudy	
Augusta, Georgia																			
Baltimore, Maryland	30.05	763.3	30.11	764.8	32	0.0	89	SW	3	1.3			Fog		SW	0	0	Dense fog	
Barnegat, New Jersey	30.02	762.5	30.04	763.0	30	— 1.1	100	W	7	3.1		8k	Haze	W	Calm	0.02	0.5	Fair	
Benton, Montana	27.36	694.9			5	—15.0	100	Calm	0	0			10n		Calm	0.12	3.0	Heavy snow	
Bismarck, Dakota	28.30	718.8	30.15	765.8	—21	—29.4		W	6	2.7			0			0	0	Clear	
Boise City, Idaho	27.24	691.9	30.20	767.1	27	— 2.8	83	Calm	0	0			10s		Calm	0	0	Cloudy	
Boston, Massachusetts	29.79	756.7	29.95	760.7	36	2.2	71	W	12	5 4		0	0			0.19	4.8	Clear	
Brackettville, Texas	29.01	736.8	30.13	765.3	30	— 1.1	89	Calm	0	0		0	0			0	0	Clear	
Brownsville, Texas	30.11	764.8	30.13	766.1	44	6.7	92	N	8	3.6			10n		Calm	0.02	0.5	Light rain	
Buffalo, New York	29.24	742.7	29.97	761.2	24	— 4.4	87	SW	18	8.0			10s		Calm	0.10	2.5	Cloudy	
Burlington, Vermont	29.58	751.3	29.88	758.9	34	1.1	70	S	9	4.0			10s		W	0.04	1.0	Cloudy	
Cairo, Illinois	30.04	763.0	30.48	774.2	15	— 9.4	65	NW	7	3.1		0	2s		NW	0.08	2.0	Clear	
Campo, California	27.49	698.2	30.06	763.5	21	— 6.1	86	E	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.26	692.4			20	— 6.7	85	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.11	764.8	30.13	765.3	37	2.8	90	NW	6	2.7			10s		NW	0	0	Cloudy	
Cape May, New Jersey	30.09	764.3	30.12	765.0	31	— 0.6	89	SW	12	5.4			Fog			0.02	0.5	Dense fog	
Castroville, Texas	29.42	747.3	30.17	766.3	32	0.0	59	E	7	3.1		5c	0	Calm		0	0	Fair	
Cedar Keys, Florida	30.16	766.1	30.19	766.8	53	11.7	93	NE	3	1.3		0	2s		Calm	0	0	Clear	
Champaign, Illinois	29.47	748.5	30.38	771.6	— 2	—18.9	67	W	8	3.6		0	0			0	0	Clear	
Charleston, S. Carolina	30.12	765.0	30.17	766.3	46	7.8	77	W	3	1.3		0	0			0	0	Clear	
Charlotte, N. Carolina	29.28	743.7	30.13	765.3	36	2.2	90	NW	4	1.8		0	Sm'e		Calm	0	0	Clear	
Chattanooga, Tennessee	29.43	747.5	30.28	769.1	35	1.7	80	NW	10	4.5			10s		NW	0.01	0.3	Cloudy	
Cheyenne, Wyoming	23.85	605.8	29.79	756.7	7	—13.9	77	W	6	2.7		0	0			0	0	Clear	
Chicago, Illinois	29.50	749.3	30.27	768.8	5	—15.0	75	W	10	4.5		0	0			Inap.	Inap.	Clear	
Chincoteague, Virginia	30.10	764.5	30.12	765.0	32	0.0	100	W	6	2.7			Fog		Calm	0.01	0.3	Dense fog	
Cincinnati, Ohio	29.62	752.3	30.32	770.1	25	— 3.9	75	W	9	4.0		2c	5k	Calm	NW	0.02	0.5	Clearing	
Cleveland, Ohio	29.39	746.5	30.16	766.1	23	— 5.0	80	W	16	7.2			10n		Calm	0.05	1.3	Light snow	
Coleman City, Texas	28.39	721.1	30.18	766.6	24	— 4.4	74	NE	4	1.8		0	0			0	0	Clear	
Columbus, Ohio	29.33	745.0	30.22	767.6	25	— 3.9	87	W	11	4.9			10s		SW	0.02	0.5	Cloudy	
Concho, Texas	28.23	717.0	30.03	762.7	24	— 4.4	87	NE	5	2.2		2c	0	Calm		0	0	Fair	
Corsicana, Texas	29.86	758.4	30.37	771.4	24	— 4.4	74	Calm	0	0		0	8s		Calm	0	0	Cloudy	
Davenport, Iowa	29.66	753.4	30.40	772.1	— 2	—18.9	67	W	4	1.8		0	0			Inap.	Inap.	Clear	
Dayton, Washington T'y	28.41	721.6	30.15	765.8	33	0.6	100	Calm	0	0			10s		Calm	0	0	Cloudy	
Deadwood, Dakota	25.23	640.8			8	—13.3	78	S	4	1.8			10s		Calm	0.05	1.3	Cloudy	
Decatur, Texas	29.06	738.1	30.33	770.4	23	— 5.0	86	N	11	4.9		0	2s		Calm	0	0	Fair	
Delaware Breakwater, Del.	30.08	764.0	30.11	764.8	30	— 1.1	89	SW	7	3.1			Fog			0.01	0.3	Dense fog	
Denison, Texas	29.49	749.0	30.36	771.1	21	— 6.1	86	NE	4	1.8			10s		Calm	0	0	Cloudy	
Denver, Colorado	24.65	626.1	29.87	758.7	12	—11.1	61	S	3	1.3		0	0			0	0	Clear	
Des Moines, Iowa	29.46	748.3	30.48	774.2	— 8	—22.2	79	Calm	0	0		0	0			0.01	0.3	Clear	
Detroit, Michigan	29.38	746.2	30.10	764.5	22	— 5.6	86	SW	8	3.6			10s		Calm	0.04	1.0	Cloudy	
Dodge City, Kansas	27.47	697.7	29.98	761.5	10	—12.2	58	SE	14	6.3			10s		W	0	0	Cloudy	
Dubuque, Iowa	29.58	751.3	30.40	772.1	—10	—23.3	77	W	2	0.9		0	0			0.03	0.8	Clear	
Duluth, Minnesota	29.52	749.8	30.32	770.1	—19	—28.3	100	SW	1	0.4		0	0			0	0	Clear	
Eagle Pass, Texas	29.44	747.8	30.21	767.3	38	3.3	54	Calm	0	0		10cs	0	Calm		0	0	Cloudy	
Eagle Rock, Texas	25.19	639.8	29.84	757.9	9	—12.8	100	N	4	1.8			Fog			0	0	Foggy	
Eastport, Maine	29.62	752.3	29.69	754.1	27	— 2.8	88	NW	6	2.7			10s		NW	0.21	5.3	Cloudy	
Edinburg, Texas					44	6.7	68	Calm			0	0	2ks		Calm	0	0	Fair	
El Paso, Texas	26.18	665.0			24	— 4.4	74	SE	1	0.4		0	0			0	0	Clear	
Erie, Pennsylvania	29.30	744.2	30.05	763.3	25	— 3.9	87	W	14	6.3			10n		Calm	0.10	2.5	Light snow	
Escanaba, Michigan	29.45	748.0	30.19	766.8	0	—17.8	70	W	4	1.8		5c	2s	W	Calm	0.17	4.3	Fair	
Florence, Arizona	28.58	725.9	30.18	766.6	28	— 2.2	54	Calm	0	0		0	0			0	0	Clear	
Fort Apache, New Mexico	24.95	633.7	30.40	772.1	19	— 7.2	54	SE	6	2.7		0	2s		E	0	0	Fair	
Fort Assiniboine, Montana	27.46	697.5			— 7	—21.7	59	NW	10	4.5		0	0			0.03	0.8	Clear	
Fort Bennett, Dakota	28.58	725.9			—14	—25.6	73	Calm	0	0		0	0			0	0	Clear	
Fort Buford, Dakota	28.11	714.0	30.34	770.6	—33	—36.1	100	Calm	0	0		0	0			0	0	Clear	
Fort Custer, Montana	25.85	682.0			— 8	—22.2	56	SE	3	1.3		0	0			0.11	2.8	Clear	
Fort Davis, Texas	25.09	637.3	30.05	763.3	20	— 6.7	85	Calm	0	0		0	0			0	0	Clear	
Fort Elliott, Texas	27.30	693.4	29.77	756.1	12	—11.1	23	S	4	1.8		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.79	756.7	30.40	772.1	5	—15.0	75	Calm	0	0			10s		Calm	Inap.	Inap.	Cloudy	
Fort Grant, Arizona	25.10	637.5	29.90	759.4	25	— 3.9	75	Calm	0	0		0	0			0	0	Clear	
Fort Griffin, Texas	28.95	735.3	30.32	770.1	26	— 3.3	75	Calm	0	0		0	0			0	0	Clear	
Fort Keogh, Montana	27.58	700.5			— 5	—20.6	63	SW	1	0.4		0	0			0	0	Clear	
Fort Macon, North Carolina	30.14	765.5	30.15	765.8	42	5.6	91	W	4	1.8		0	2s		Calm	0	0	Fair	
Fort Missoula, Montana	26.65	676.9			19	— 7.2	100	NW	2	0.9			10n		Calm	0.49	12.4	Heavy snow	
Fort McKavett, Texas	27.87	707.9	29.92	760.0	27	— 2.8	88	NE	5	2.2		2k	0	Calm		0	0	Clear	
Fort Shaw, Montana	26.48	672.6			4	—15.6	100	N	16	7.2			10n		Calm	0.05	1.3	Light snow	
Fort Sill, Indian Territory	28.98	736.1	30.20	767.1	16	— 8.9	83	Calm	0	0		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.24	717.3			24	— 4.4	100	NW	2	0.9		0	0			0	0	Clear	
Fort Verde, Arizona					13	—10.6	44	N			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.42	721.9	30.09	764.3	30	— 1.1	78	N	4	1.8		0	1s		Calm	0	0	Clear	
Galveston, Texas	30.20	767.1	30.25	768.3	37	2.8	71	NE	8	3.6			10s		Calm	0	0	Cloudy	
Grand Haven, Michigan	29.44	747.8	30.13	765.3	21	— 6.1	71	W	20	8.9			10n		Calm	0.13	3.3	Light snow	
Hatteras, North Carolina	30.11	764.8	30.13	765.3	45	7.2	84	SW	16	7.2		2c	0	Calm		0	0	Fair	
Helena, Montana	25.76	654.3			10	—12.2	77	SW	4	1.8			10n		Calm	0.04	1.0	Heavy snow	
Henrietta, Texas	29.26	743.2	30.30	769.6	16	— 8.9	66	NE	2	0.9		0	0			0	0	Clear	
Indianapolis, Indiana	29.47	748.5	30.34	770.6	9	—12.8	78	W	4	1.8		0	Haze		Calm	Inap.	Inap.	Clear	
Indianola, Texas	30.23	767.8	30.26	768.6	37	2.8	63	N	20	8.9			10s		Calm	0	0	Cloudy	
Jacksboro, Texas	29.10	739.1	30.32	770.1	26	— 3.3	63	Calm	0	0		0	5s		Calm	0	0	Fair	
Jacksonville, Florida	30.15	765.8	30.20	767.1	49	9.4	85	SW	2	0.9		5cs	0	SW		0	0	Fair	
Keokuk, Iowa	29.70	754.4	30.45	773.4	1	—17.2	71	NW	4	1.8		0	0			0	0	Clear	
Key West, Florida	30.08	764.0	30.12	765.0	73	22.8	95	NE	5	2.2			10s		E	0.01	0.3	Threatening	
Kittyhawk, North Carolina	30.10	764.5	30.12	765.0	38	3.3	91	NW	14	6.3		0	0			0	0	Clear	
Knoxville, Tennessee	29.22	742.2	30.28	769.1	35	1.7	85	W	3	1.3			10s		W	Inap.	Inap.	Cloudy	
La Crosse, Wisconsin	29.52	749.8	30.38	771.6	—13	—25.0	100	W	4	1.8		0	0			0	0	Clear	
La Mesilla, New Mexico	26.66	661.9	30.22	767.6	18	— 7.8	84	NE	1	0.4		0	0			0	0	Clear	
Laredo, Texas	29.77	756.1	30.13	765.3	35	1.7	70	NE	4	1.8		0	5s		Calm	0	0	Fair	
Leavenworth, Kansas	29.50	749.3	30.45	773.4	5	—15.0	75	N	3	1.3		5cs	0	W		0	0	Fair	
Lewiston, Idaho	29.27	743.4	29.94	760.5	33	0.6	69	E	2	0.9			10s		Calm	Inap.	Inap.	Cloudy	
Little Rock, Arkansas	30.02	762.5	30.37	771.4	25	— 3.9	75	N	6	2.7		0	0			0	0	Clear	
Los Angeles, California	29.72	754.9	30.07	763.8	39	3.9	55	NE	5	2.2		0	0			0	0	Clear	
Louisville, Kentucky	29.74	755.4	30.35	770.9	20	— 6.7	85	W	10	4.5		0	2cpm'e		Calm	Inap.	Inap.	Clear	
Lynchburg, Virginia	29.42	747.3	30.14	765.5	33	0.6	79	Calm	0	0		5k	Fog	W	Calm	0	0	Fair	
Madison, Wisconsin	29.16	740.7	30.29	769.4	— 6	—21.1	61	W	9	4.0		0	0			0.20	5.1	Clear	
Marquette, Michigan	29.35	745.5	30.15	765.8	— 5	—20.6	63	NW	6	2.7		0	0			0.04	1.0	Clear	
Mason, Texas	28.48	723.4	30.36	771.1	28	— 2.2	77	E	2	0.9		0	5s		Calm	0	0	Fair	
Memphis, Tennessee	29.09	761.7	30.35	770.9	27	— 2.8	76	NW	8	3.6			10s		Calm	0.04	1.0	Cloudy	
Milwaukee, Wisconsin	29.43	747.5	30.25	768 3	2	—16.7	72	NW	15	6.7		0	1s		Calm	Inap.	Inap.	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'or 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.15	765.8	30.23	767.8	37	2.8	81	N	7	3.1	.....	5ck	0	W	.....	0	0	Fair	
Montgomery, Alabama	30.00	762.0	30.24	768.1	36	2.2	80	NW	1	0.4	.....	0	2s;fg	.....	Calm	0	0	Fair	
Morgantown, W. Virginia	29.11	739.4	30.14	765.5	36	2.2	71	SW	6	2.7	.....	.....	1on	.....	SW	0.07	1.8	Light snow.	
Moorhead, Minnesota	29.19	741.4	30.32	770.1	— 20	—28.9	63	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Mt. Washington, N. H.	23.22	589.8	29.58	751.3	9	—12.8	100	NW	60	26.8	.....	.....	10n;fg	.....	NW,C	0.59	15.0	Light snow.	
Nashville, Tennessee	29.78	756.4	30.36	771.1	29	— 1.7	78	NW	7	3.1	.....	.....	10ks	.....	NW	0.02	0.5	Cloudy	
New Haven, Connecticut	29.82	757.4	29.94	760.5	31	— 0.6	79	SW	3	1.3	.....	1ck	2s	SW	W	0.04	1.0	Fair	
New London, Connecticut	29.86	758.4	29.91	759.7	32	0.0	69	W	4	1.8	.....	0	0	.....	.....	0.34	8.6	Clear	
New Orleans, Louisiana	30.17	766.3	30.23	767.8	41	5.0	74	NE	10	4.5	.....	10s	0	SW	.....	0	0	Clear.	
Newport, Rhode Island	29.86	758.4	29.91	759.7	33.5	0.8	84	SW	12	5.4	.....	0	1s	.....	Calm	0.32	8.1	Fair	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	29.95	761.0	29.99	761.7	37	2.8	71	W	18	8.0	.....	0	0	.....	.....	0.15	3.8	Clear	
New York, New York	29.82	757.4	30.00	762.0	34	1.1	70	W	12	5.4	.....	5cs	0	Calm	.....	0.04	1.0	Fair	
Norfolk, Virginia	30.09	764.3	30.15	765.8	37	2.8	90	NW	7	3.1	.....	.....	10s;fg	.....	W;C	Inap.	Inap.	Cloudy	
North Platte, Nebraska	27.16	689.8	30.00	762.0	3	—16.1	86	E	6	2.7	.....	.....	10s	.....	Calm	0.07	1.8	Cloudy	
Olympia, Washington T'y	30.18	766.6	30.22	767.6	43.0	6.1	92	N	1	0.4	.....	.....	1on	.....	Calm	0.05	1.3	Light rain	
Omaha, Nebraska	29.18	741.1	30.44	773.2	— 4	—20.0	83	NW	3	1.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Oswego, New York	29.57	751.1	29.90	759.4	32	0.0	89	SW	12	5.4	.....	.....	10s	.....	W	0.09	2.3	Cloudy	
Pensacola, Florida	30.20	767.1	30.23	767.8	42	5.6	74	NE	12	5.4	.....	.....	10ks	.....	W	0	0	Cloudy	
Philadelphia, Pa	30.00	762.0	30.05	763.3	29	— 1.7	100	W	10	4.5	.....	.....	Fog	.....	Calm	Inap.	Inap.	Dense fog	
Phœnix, Arizona	28.97	735.8	30.91	785.1	26	— 3.3	63	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.25	438.1	29.46	748.3	—15	—26.1	71	NW	6	2.7	.....	0	5s	.....	NW	0	0	Fair	
Pilot Point, Texas	29.48	748.8	30.40	772.1	24	— 4.4	61	NE	8	3.6	.....	0	5s	.....	Calm	0	0	Fair	
Ploche, Nevada	23.97	608.8	29.74	755.4	16	— 8.9	49	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	29.25	742.9	30.10	764.5	32	0.0	89	W	12	5.4	.....	.....	10s	.....	W	0.01	0.3	Cloudy	
Port Huron, Michigan	29.38	746.2	30.08	764.0	20	— 6.7	85	W	8	3.6	.....	.....	10s	.....	Calm	0.21	5.6	Cloudy	
Portland, Maine	29.73	755.1	29.78	756.4	35	1.7	80	Calm	0	0	.....	0	5s	.....	Calm	0.26	6.6	Fair	
Portland, Oregon	30.20	767.1	30.27	768.8	42.5	5.8	87	S	4	1.8	.....	.....	10s	.....	Calm	0.02	0.05	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	46	7.8	92	W	12	5.4	.....	5k	0	W	.....	0	0	Fair	
Prescott, Arizona	24.70	627.4	30.06	763.5	17	— 8.3	67	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	30.10	764.5	30.12	765.0	62	16.7	88	NE	11	4.9	.....	.....	1on	.....	SW	0.29	7.4	Light rain	
Red Bluff, California	29.78	756.4	30.13	765.3	35.5	1.9	90	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Rio Grande City, Texas	30.00	762.0	30.22	767.6	45	7.2	46	N	9	4.0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Rochester, New York	29.30	744.2	29.94	760.5	28	— 2.2	88	W	18	8.0	.....	.....	10ks	.....	W	0.08	2.0	Cloudy	
Roseburg, Oregon	29.75	755.6	30.34	770.6	28	— 2.2	90	N	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Sacramento, California	30.08	764.0	30.15	765.8	38	3.3	91	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
St. Louis, Missouri	29.78	756.4	30.43	772.9	4	—15.6	74	NW	11	4.9	.....	0	0	.....	.....	0.02	0.5	Clear	
St. Paul, Minnesota	29.35	745.5	30.32	770.1	—15	—26.1	71	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Salt Lake City, Utah	25.64	651.2	29.97	761.2	25	— 3.9	60	Calm	0	0	.....	.....	1on	.....	Calm	0.01	0.3	Light snow.	
San Antonio, Texas	29.53	750.0	30.28	769.1	31	— 0.6	79	N	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
San Diego, California	30.03	762.7	30.11	764.8	43	6.1	67	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Sandusky, Ohio	29.47	748.5	30.19	766.8	24	— 4.4	87	SW	16	7.2	.....	.....	10s	.....	Calm	0.06	1.5	Cloudy	
Sandy Hook, New Jersey	30.00	762.0	30.04	763.0	29	— 1.7	67	SW	9	4.0	.....	0	0	.....	.....	0.10	2.5	Clear	
San Francisco, California	30.06	763.5	30.13	765.3	47	8.3	81	N	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Santa Fé, New Mexico	23.05	585.7	29.60	751.8	10	—12.2	100	Calm	0	0	.....	.....	1on	.....	Calm	Inap.	Inap.	Light snow.	
Savannah, Georgia	30.12	765.0	30.21	767.3	44	6.7	92	W	6	2.7	.....	2cs	0	SW	.....	0	0	Fair	
Shreveport, Louisiana	30.08	764.0	30.34	770.6	30	— 1.1	78	NW	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
Silver City, New Mexico	24.12	612.6	30.73	780.5	13	—10.6	62	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Smithville, North Carolina	30.15	765.8	30.19	766.8	43	6.1	92	NW	5	2.2	.....	0	1ks	.....	Calm	0	0	Clear	
Socorro, New Mexico	25.35	643.9	29.42	747.3	13	—10.6	63	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.68	753.9	30.44	773.2	4	—15.6	74	NW	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Springfield, Massachusetts	29.80	756.9	29.94	760.5	36	2.2	71	N	3	1.3	.....	0	8s	.....	W	0.03	0.8	Cloudy	
Stockton, Texas	26.99	685.5	29.99	761.7	24	— 4.4	87	S	13	5.8	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.23	742.4	30.17	766.3	—21	—29.4	100	W	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Thatcher's Island, Mass	29.84	757.9	29.89	759.2	35	1.7	70	W	19	8.5	.....	0	0	.....	.....	0.79	20.1	Clear	
Toledo, Ohio	29.42	747.3	30.15	765.8	25	— 3.9	88	W	14	6.3	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Tucson, Arizona	27.48	698.0	30.03	762.7	25	— 3.9	62	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.84	757.9	30.37	771.4	25	— 3.3	94	NW	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Uvalde, Texas	29.28	743.7	30.17	766.3	34	1.1	61	NE	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Vicksburg, Mississippi	30.02	762.5	30.29	769.4	35	1.7	80	N	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Visalia, California	29.75	755.6	30.14	765.5	36	2.2	90	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	30.00	762.0	30.12	765.0	31	— 0.6	100	SW	3	1.3	.....	.....	Fog	.....	Calm	0	0	Dense fog	
Wickenburg, Arizona	.....	.....	.....	.....	29	— 1.7	56	NW	.....	.....	1	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	30.12	765.0	30.18	766.6	45	7.2	84	W	1	0.4	.....	0	1s	.....	Calm	0	0	Clear	
Winnemucca, Nevada	25.66	651.8	30.02	762.5	29	— 1.7	78	S	6	2.7	.....	0	5ks	.....	SW	0	0	Fair	
Wood's Holl, Mass	29.90	759.4	29.94	760.5	33	0.6	89	W	22	9.8	.....	0	Haze	.....	.....	0.17	4.3	Clear	
Yankton, Dakota	28.97	735.8	30.51	774.9	—20	—28.9	64	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Yuma, Arizona	29.96	761.0	30.11	764.8	43	6.1	28	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.01	559.0	.....	.....	48.5	9.2	60	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	Thomas Herran.
Havana, Cuba, W. I.	30.06	763.5	30.11	764.8	75	23.9	81	Calm	0	0	.....	8cs	0	SW	.....	0	0	Cloudy	Charles Hasselbrink.
Jakolshavn, Greenland	30.12	765.1	30.17	766.3	19.0	— 7.2	.....	SE	.....	.....	2	.....	10	.....	.....	0	0	.....	
Kingston, Jamaica, W. I.	30.05	763.3	30.06	763.5	69.9	21.1	72	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	Maxwell Hall.
Navassa, W. I.	29.97	761.2	30.05	763.3	78	25.6	73	E	14.2	6.4	.....	2k	0	NE	.....	0	0	Clear	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	76	24.4	91	NW	.....	.....	3	.....	10n	E	.....	0.720	18.29	Raining	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.42	747.3	29.98	761.5	78	25.6	89	Calm	.....	.....	0	2ck	5ks	Calm	Calm	0	0	Smoky	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	73	23	.....	E	.....	.....	1	5ck	0	E	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.07	763.8	30.10	764.5	70	21.4	81	N	.....	.....	.....	8ck	4s	.....	.....	0	0	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	30.06	763.4	30.12	765.0	8.8	—12.9	.....	ESE	.....	.....	4	.....	0	.....	.....	0	0	.....	
York Factory, B. A.	29.71	754.6	29.75	755.9	—42.0	—41.1	.....	W	2	0.9	.....	1c	2s	NW	NW	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	c—10	c—10	c—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
M.H. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandre																			Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda																			Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J.Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.90	759.4	82	27.8	71	NW			3		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon,																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 11° 58′ W. 77° 12′	29.93	760±	65	18.3	94	Calm			0		10					3	S	Foggy	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	29.92	760.0	56.5	13.6	94	ESE			6		9	SE				5	ESE	Raining	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 25° 58′, E. 110° 29′	30.27	768.8	47.5	8.6	63	E			1		1							Blue sky	Capt. R. H. Napier.
H. M. S. Malabar, N. 15° 03′, E. 55° 05′	30.04	763.0	78	25.6	86	E			3-4		6	E				5	E	Showery	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 38° 42′, W. 9° 05′	30.11	764.8	50	10.0	86	E			4		10	NE						Overcast	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda, W. I.	30.02	762.5	70	21.1	95	W			2		9							D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Seraphis, N. 37° 81′, E. 6° 21′	30.21	767.3	53	11.7	80	WNW			3-5		8	WNW				3	W	Squally	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb, N. 37° 03′, E. 15° 18′	29.91	759.7	62	16.7	94	NW			2		5							D. clouds	Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark																			Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
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PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	30.02	762.5	76.8	26.0	80	ENE			1		7			0	0	1	SE	D. clouds	S. C. da Silva Costa, Comd't.
Sado, S. 11° 30′, E. 13° 20′	29.94	760.5	80.2	26.8	72	NNW			2		8			1 h'r	25 m.	1	NW	D. clouds	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.30	769.6	52	11.1	73	N	6	2.7			10?		NE	0.59	15.0			Clear?	
N. Yard, Portsmouth, N. H.	29.79	756.7	30	— 1.1	100	W	12	5.4			0			0	0			Clear	
Naval Hospital, Yokohama, Japan	29.58	751.3	34	1.1	52	NNW			2		0			0	0			Clear	
Adams, Ancon, Peru	29.99	761.7	68	20.0	90	NW			0-1		10		NW			Sm'h		Cloudy	
Alaska, N. Yard, Mare I'd, Cal*	30.06	763.5	43	6.1	83	E			3		0			0	0			Clear	
Alert, Hong-Kong, China	30.09	764.3	58	14.4	53	NE			1		0			0	0	Sm'h		Hazy	
Alliance, Pensacola, Fla	30.15	765.8	44	6.7	76	NNE			3		8		SE	Light		Sm'h		Cloudy	
Ashuelot, Tientsin, China	29.97	761.2	34	1.1	100	SW			1		0							Misty	
Colorado, New York, N. Y	29.99	761.7	34	1.1	90	SW	2	0.9			2		Calm	0.215	5.46			Fair	
Constitution, N. Yard, League I'd., Pa			33	0.6	89	WSW	2	0.9			10							Overcast	
Franklin, Off N. Yard, Norfolk, Va	30.04	763.0	38	3.3	91	NNW	10	4.5			10			0	0			Overcast	
Galena, N. 34° 14′, W. 20° 28′	29.65	753.1	63	17.2	83	W			4		10					Sm'h	SW	Cloudy	
Independence, N. Yard, Mare I'd, Cal	30.13	765.3	42	5.6	83	ESE	4.8	2.1			0			0	0			Clear	
Jamestown, Sitka, Alaska*	30.13	765.3	45	7.2	92	Calm			0		10			0.17	4.3	Sm'h		Drizzling	
Kearsarge, Curacoa, W. I	30.03	762.7	78	25.6	78	E			3		2		E			Sm'h		Fair	
Lackawanna, Ancon, Peru	30.09	764.3	67	19.4	95	S			0-1		10		WNW	0	0			Cloudy	
Marion, Sandy Point, Patagonia, S. A	29.13	739.9	49	9.4	57	WNW			3		10		WNW	Blank		Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	30.02	762.5	25	— 3.9		W			4		10		W					Cloudy	
Minnesota, New York, N. Y	30.01	762.2	38	3.3	63	WNW			2		5		WNW					Hazy	
Monocacy, Shanghai, China	30.19	766.8	35	1.7	63	SW			1		0							Clear	
New Hampshire, Port Royal, S. C	30.12	765.0	47	8.3	85	Calm	0	0			5		Calm	0	0			Fair	
Nipsic, Villafranca, France	30.08	764.0	55	12.8	28	N			2		2					Sm'h		D. clouds	
Onward, Chimbote Bay, Peru...†	29.90	759.4	69	20.6	85	SSE			4		2		N			Long	N; W	Fair	
Palos, Shanghai, China	30.29	769.4	34	1.1	62	S			1		0							Clear	
Passaic, Washington, D. C	30.15	765.8	31	— 0.6	89	SW			1		10		Calm					Cloudy	
Pensacola, N. 26° 59′ W. 114° 34′	30.02	762.5	62	16.7	77	NE			4		2		SE			Sm'h	NW	Clear	
Portsmouth, Washington, D. C	30.10	764.5	32	0.0	89	SW			1		10		SW					Foggy	
Powhatan, New York, N. Y	29.95	760.7	33	0.6	100	SW			2		2		SW					Clear	
Quinnebang, Alexandria, Egypt	30.11	764.8	64	17.8	73	ENE			2		10		ENE			Sm'h		Cloudy	
Richmond, Pagoda Anchorage, China	30.29	769.4	47	8.3	55	SE			2		0			0	0			Clear	
Saratoga, Baltimore, Md	30.06	763.5	32	0.0	100	SW			1		10		Calm	0	0			Cloudy	
Shenandoah, Montevideo, Uruguay.*	30.06	763.5	67	19.4	64	N			3		2					Sm'h		Fair	
St. Louis, League Island, Pa	30.03	762.7	29	— 1.7	?	SW	8	3.6			10			0.02	0.5			Misty	
Swatara, Hamada, Japan.....†	29.74	755.4	37	2.8	39	N			4		8		WNW			Mod.	NW	D. clouds	
Tennessee, N. 12° 18′, W 62° 42′	30.06	763.5	79	26.1	78	ENE	22	9.8			8			0.26	6.6	Sm'h		Cloudy	
Trenton, Villafranca, France.....*	30.06	763.5	57	13.9	77	ENE			3		8			4 h'rs	light			Fair	
Vandalia, N. 37° 50′, W. 70° 18′	30.04	763.0	53	11.7	73	WNW			3		5		WNW			Mod.	S	Fair	
Wabash, Boston, Massachusetts	29.89	759.2	34	1.1	79	W	6	2.7			2		W	0.09	2.3			Fair	
Wachusetts, Taboga near Panama.*	29.57	751.1	78	25.6	91	NW			3		8		N	0	0	Mod.	N	Fair	
Wyoming, Naples, Italy	29.93	760.2	48	8.9	63	NNE			3		10		NE			Sm'h		Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic,																			
N. 40° 25′, W. 68° 00′	29.90	759.4	42	5.6	83	W			5		2					5	W;SSW	Blue sky	Capt. H. Parsell.
Ship Baroda, ‡																			
S. 25° 22′, E. 54° 15′	30.02	762.5	81.6	27.6	74	NNE			1		4							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡																			
N. 35° 16′, W. 21° 10′	29.64	752.8	60.5	15.8	89	S			3		10							Squally	Capt. H. Youlden.
City of Agra, ‡																			
S. 54° 38′, W. 124° 05′	29.48	748.8	42.5	5.8	96	SSE			6		10							Raining	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Copename,																			
N. 38° 44′, W. 20° 24′	29.68	753.9	61.6	16.4	90	SSE			4		2							Blue sky	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 24° 59′, E. 65° 40′	30.08	764.0	77	25.0	77	ESE			5		4							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡																			
N. 48° 42′, W. 38° 01′	29.07	738.4	52	11.1	93	E			4		6					6	E	D. clouds	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross,																			
N. 51° 40′, W. 7° 30′	30.38	771.6	45.5	7.5	96	E			6		5					ENE		D. clouds	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamports																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡																			
N. 5° 35′, E. 88° 00′	29.93	760.2	80.8	27.1	74	NE			3		5							Misty	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡																			
N. 25° 12′, E. 35° 30′	29.99	761 7	74.5	23.6	77	NNW			2		2							Blue sky	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE.																			
A. Schumacher & Co.																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE.																			
Ch. G. Francklyn.																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE.																			
Ismay, Imrie & Co.																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Britanic,																			
N. 45° 59′, W. 37° 33′ †	29.06	738.1	53	11.7		SSE			5		10		S			Mod.	N	Raining	Capt. H. Perry.
S. S. Celtic,																			
N. 51° 02′, W. 23° 50′ †	29.84	757.9	53	11.7		SSW			6		10		S	5 h'rs	light	H'vy	S	Cloudy	Capt. Benj. Gleadell.
S. S. Germanic,																			
N. 44° 03′, W. 49° 32′ †	29.78	756.4	31	— 0.6		NW			4		5?		NW	0	0	H'vy	N	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN.																			
A. Schumacher & Co.																			
S. S. Hermann																			Capt. H. Baur.
S. S. Köln																			
S. S. Leipzig, ‡																			
N. 50° 12′, W. 3° 08′	30.52	775.2	46.0	7.8	69	ENE			5		2		ENE	0	0	Mod.	ENE	Clear	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolh Fredholm, ‡																			
S. 26° 37′, W. 33° 13′ *†	29.96	751.0	77.9	25.5	88	NNW			7		6							Squally	Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	30.52	775.2	38	3.3	90	ENE			3		5?		ENE					Clear?	Capt. J. W. Shackford.
S. S. Indiana, ‡ Philadelphia, Pa.†*	29.92	760.0	34	1.1	?	W			3		2		W	0	0			Fine	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 50° 51′, W. 32° 19′.*†	29.49	749.0	54	12.2	93	SE			6		8		SE	Light		Very H'vy	SE; E	Cloudy	Wm. Shakford, 1st Off'r.
S. S. Pennsylvania, ‡ N. 39° 17′, W. 70° 51′.†*	30.05	763.3	45	7.2		NW			5		8		W	0	0	Mod.	W	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 35° 37′, W. 122° 35′.†	30.16	756.1	55	12.8	80	NW			2		0			0	0	G'tl	W	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 36° 08′, E. 174° 53′.†*	30.25	768.3	54	12.2	49	NE			2		2		SW	0	0	Mod.	NW	Clear	Capt. H. Davison.
S. S. Gaelic, N. 42° 09′, W. 134° 26′.*†	30.46	773.7	56	13.3	81	E			2		2		E			Sm'h	ESE	Clear	Capt. W. H. Kidley.
S. S. Oceanic, Yokohama, Japan	30.11	764.8	48	8.9	85	Var.			3		2							Fine	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			Capt. J. M. Lachlan.
S. S. Geo. W. Elder																			Capt. Fred. Bolles.
S. S. Columbia																			Capt. E. Polemann.
S. S. Oregon																			
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal.†	30.05	763.3	46	7.8	84	NE			2		0							Clear	Capt. J. N. Ingalls.
S. S. Idaho																			C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 32° 47′, W. 117° 20′.†	30.12	765.0	57	13.9	52	Calm			0		0					Sm'h		Fair	
S. S. State of California, N. 40° 25′, W. 124° 30′.†	30.18	766.6	50	10.0	93	NW			4		2		NW			Short	NW	Clear	Capt. G. Debney.
S. S. Victoria, Nanaimo, Vancouver Id.†	30.19	766.8	37	2.8	100	Calm			0		0					Sm'h		Clear	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			A. Bannerman, 1st Officer.
S. S. Australia																			
S. S. City of New York, S. 7° —′, W. 167° 50′.†	29.73	755.1	83	28.3	87	SW			4		1		SW	0	0	Mod.	SW	Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, N. 36° 57′, W. 125° 13′.†	30.13	765.3	51	10.6	79	NW			3		2		NW	0	0	Sm'h		Fair	Capt. G. G. Berry.
S. S. City of Sidney, S. 25° 18′, E. 175° 31′.†	29.73	758.1	76	24.4	86	NW			5		8		NW	0	0	Mod.	NE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, Hong Kong, China.†	30.27	768.8	55	12.8	51	NE			1		0			0	0			Clear	A. I. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 12° 29′, W. 88° 11′.†	29.96	761.0	79	26.1	78	NW			3		10		NW	0.50	12.7	Mod.	NNW	Cloudy	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, N. 27° 50′, W. 115° 48′.†	29.98	761.5	63	17.2	67	ENE			5		0			0	0	Sm'll	WNW	Clear	
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			Capt. Sam'l Jackson.
S. S. Belgeland ‡																			Capt. S. Stokes.
S. S. Nederland																			Capt. W. Geo. Randle.
S. S. Rhynland ‡																			
S. S. Vaderland, ‡ N. 49° 30′, W. 14° 14′	30.31	769.9				SE			7		10			0	0	R'gh	SE	Cloudy	Capt. J. C. Jamison.
MISCELLANEOUS.																			Capt. A. Mehaffey.
Sch'r Abby Bentley																			
Sch'r Addie Fuller, Brunswick, Ga	30.13	765.3	47	8.3	85	Calm	0	0			28			0	0			Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, ‡ Arroyo, P. R.†	30.33	770.4	78	25.6		ENE			5		8		E	0	0	Sm'h		Clearing	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va.†	30.16	765.1	40	4.4	82	SSW	1	0.4			10n			0	0			Cloudy	
Sch'r Hattie V. Kelsey																			Capt. J. L. Randall.
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Spain ‡	30.07	763.8	51	10.6	?	ENE			6		8		W	0	0			Cloudy	Capt. Jos. Hand.

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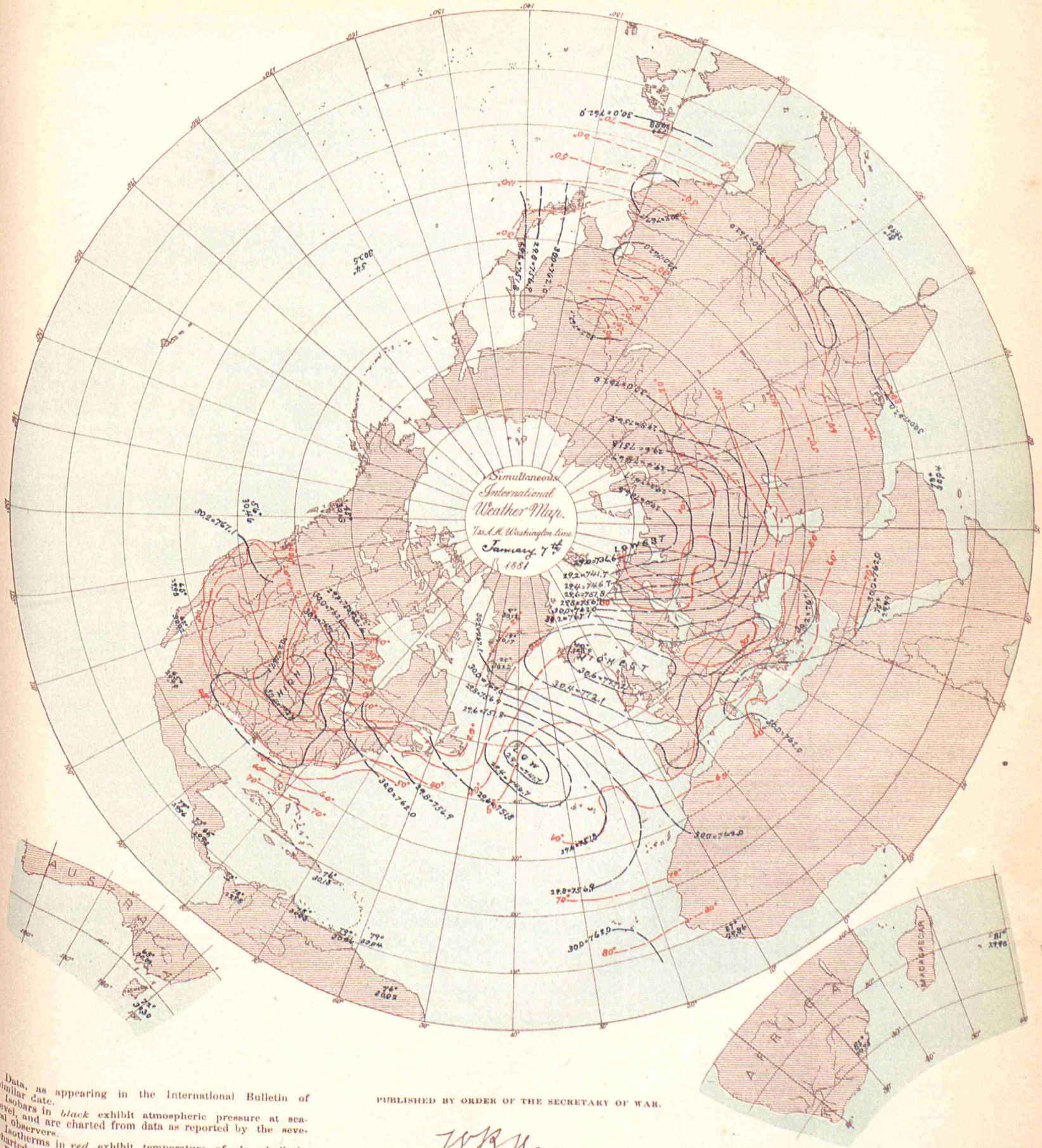
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 8, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.99	761.7	65.7	18.7	51	SE			2		5			0	0	Cloudy	Dr. Ollive.
Nemours			30.11	764.9	59.7	15.4	83	WNW			1		2			0	0	Fair	Raynhrd.
Algiers			30.11	764.8	54.7	12.6	72	N			3		8			0.154	3.9	Very cloudy	Nicolas.
La Calle			29.96	760.9	53.2	11.8	88	NW			8		10			0	0	Covered	Fonfrède.
Tunis			29.95	760.6															Jacques.
Sfax			30.04	763.1															Gau.
Saida			30.12	765.1	36.1	2.3	95	ESE			4		4			0	0	Cloudy	Dumas.
Tebessa			30.07	763.7	41.0	5.0	78	NW			4		9			0	0	Covered	Watrin.
Geryville																			Lonchamp.
Laghouat			30.18	766.6	49.6	9.8	57	WNW			1		2			0	0	Fair	Herbin.
Biskra			30.13	765.2	60.1	15.6	79	NW			5		3			0	0	Pretty fair	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.94	760.5	30.03	762.7	71.4	21.9	76	S	4	1.8			10			0	0	Dull	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			30.20	767.1	76	24.4		SE			3		8k			0.04	1.0	Covered	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.58	751.2	30.16	766.0	29.3	— 1.5	59	NE			3		0			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.34	745.3	30.15	765.8	29.3	— 1.5	98	W	5.6	2.5			0			0	0		Dr. Wiersbicki.
Eperies	29.09	738.9	30.02	762.4	30.4	— 0.9	78	Calm			0		10ks		S	0.008	0.2		Julius Mikolik.
Gratz‡	28.85	732.8	30.17	766.4	29.5	— 1.4	80	SW			2		0			0	0		Andreas Rospini.
Hermannstadt	28.54	724.8	30.07	763.8	21.7	— 5.7	96	S			1		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.81	731.8	30.24	768.2	26.2	— 3.2	78	Calm			0		0			0	0		The Staff.
Lemberg	28.92	734.5	29.95	760.7	29.8	— 1.2	86	NW			2		8			0.004	0.1		Dr. T. Stanecki.
Pola	29.86	758.5	29.98	761.5	42.1	5.6	52	ENE			1		5			0.071	1.8		I. R. HydrographicOffice
Szathmar	29.57	751.1	30.03	762.7	29.7	— 1.3	78	S			2		8			0	0		Beicht Potér, S. J.
Szegedin	29.74	755.4	30.04	762.9	33.8	1.0	89	NW			1		3			0	0		Karl Stancel.
Trieste	29.94	760.4	30.04	763.0	39.4	4.1	38	ENE			2		0			0	0	Clear	P. Busin.
Vienna	29.43	747.5	30.19	766.7	30.2	— 1.0	69	W			2		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 16, 1882.

STATIONS.	BAROMETER. Corrected for instrum't'al error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

BRITISH SERIES.

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

Aberdeen	30.50	774.7	30.60	777.2	26.5	— 3.1	94	WNW	8	3.6			4			0	0	Misty	W. Boswell.
Armagh, Observatory	30.32	770.1	30.58	776.7	26.0	— 3.3	94	NNE	1	0.4								Foggy	S. Call.
Bidston, Liverpool Obs'y			30.57	776.5	25.9	— 3.4	97	ESE	12	5.4			10					Misty	John Hartnup.
Bolton, Sharples	30.02	762.5	30.58	776.7	23.4	— 4.8	97	NE	15	6.7			10					Foggy	Thomas Mackereth.
Bradford, Yorkshire	30.18	766.6	30.57	776.5	31.0	— 0.6	85	SE			1		10			0	0	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.00	762.0	30.03	762.7	81.0	27.2	71	NE			3		3					Blue sky	Pvt. J. Surgenor, A. H. C.
Cardington			30.56	776.2	35.4	1.9	75	N			0.4		10					Overcast	John McLaren.
Chatham, School M. E.	30.39	771.9	30.53	775.4	36.2	2.3	83	NW			1		9					D. clouds	Cpl. Gwinn, R. E.
Falmouth, Observatory	30.28	769.1	30.52	775.2	40.3	4.6	79	ESE			4		8					Overcast	The Staff.
Fort Napier, Natal	27.35	694.7	29.57	751.1	74.3	23.5	†	NE			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.63	752.6	29.87	758.7	86	30.0	84	NW			1		3					D. clouds	C. E. Keane.
Galway, Queen's College			30.43	772.9	34	1.1	90	N			2		2			0.05	1.3	Blue sky	J. O'Donaghadue.
Gibraltar, Mediterranean	29.94	760.5	29.99	761.7	58.0	14.4	96	ESE			5		8					Gloomy	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.39	771.9	30.60	777.2	28.2	— 2.1	96	E			3							Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	30.36	771.1	30.54	775.7	35.7	2.1	80	N			1		10					Overcast	The Staff.
Guernsey	30.22	767.6	30.45	773.4	43	6.1	75	NE			5		5					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.53	775.4	30.56	776.2	35.6	2.0	74	ENE	12	5.4			10					Gloomy	The Met'g'l Office.
Leicester, Museum	30.31	769.9	30.58	776.7	33.0	0.6	89	NE			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.57	751.1	29.65	753.1	56.8	13.8	69	NW			2		7					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.09	764.3	76.0	24.4	86	SE			1		5					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.05	763.3	30.62	777.7	28.1	— 2.2	97	ENE			2		10					Overcast	Robert Pate.
Oxford, Radcliffe Obs'y	30.33	770.4	30.59	777.0	34	1.1	79	NE			2		10					Overcast	The Staff.
Plymouth	30.44	773.2	30.51	774.9	34.0	1.1	77	E			2		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.58	776.7	35.9	2.2	96	SE	8	3.6			8					D. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.84	757.9	29.91	759.7	44.2	6.8	85	NE			1		10					Drizzling	Serg't W. H. Lyne.
Sheffield	30.32	770.1	30.62	777.7	30.7	— 0.7	92	NE			1		10			0	0	Overcast	W. F. Cooper.
Silloth Rectory	30.51	774.9	30.54	775.7	27.6	— 2.4	59	E			2		0			0	0	Blue sky	Rev. F. Redford, A. M.
Stonyhurst, Observatory			30.58	776.7	29.5	— 1.4	89	NE	7	3.1			0*					Blue sky	Rev. S. J. Perry.
Strathfield Turgiss	30.37	771.4	30.58	776.7	33.4	0.8	84	NE			3		10					Rain & fog	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	30.42	772.7	30.50	774.7	38	3.3	81	SE			4		6					D. clouds	W. Newcombe.
Valencia, Observatory	30.39	771.9	30.41	772.4	47.9	8.8	63	ESE	26	11.6			3					Misty	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B.	29.95	760.7	29.99	761.7	7.6	—13.6		NW	10	4.5		1c	0			0.70		Clear	Hon. J. Ferguson.
Chatham, N. B.*	29.83	757.7	29.89	759.2	12	—11.1	84	W	7	3.1		0	0			0.02	0.5	Clear	G. A. Blair.
Charlottetown, P. E. Island	29.73	755.1	29.78	756.4	19	— 7.2	82	W	12	5.4		0	0			0.002	0.05	Clear	H. J. Cundall, C. E.
Chicontime, Quebec					—13.1	—25.1		NW			4	0	0			0.05	1.3	Clear	Rev. V. A. Huart.
Cornwall, Ontario	30.29	769.4	30.51	774.9	0.5	—17.5	100	NW			1		10s			Inap.	Inap.	Cloudy	James Smith, M. A.
Dalhousie, N. B.	29.86	758.4	29.90	759.4	8.5	—13.1		W			4		8s			0.60	15.2	Fair	H. A. Johnson.
Father Point, Quebec*	30.11	764.8	30.14	765.5	6	—14.4	78	NW	25	11.2			10n			0.20	5.1	Threatening	J. McWilliams.
Fredericton, N. B.	30.00	762.0	30.07	763.8	10.1	—12.2	66	NW	20	8.9		0	0			0	0	Clear	Prof. Harrison.
Fort Garry, Manitoba*	29.58	751.3	30.60	751.8	—35	—37.2	100	SW	2	0.9		0	0			0	0	Clear	James Stewart.
Granton, Ontario	29.33	745.0	30.57	776.5	5.0	—15.0	100	Calm			0		10n			0	0	Cloudy	James Grant.
Halifax, N. S.*	29.77	756.1	29.91	759.7	24	— 4.4	86	W	12	5.4		0	8ks		NW	Inap.	Inap.	Cloudy	A. Allison.
Hamilton, Ontario	30.09	764.3	30.54	775.7	3.7	—15.7	92	SW			1	3cs	0			0.10	2.5	Clear	Geo. Dickson, B. A.
Kingston, Ontario*	30.10	764.5	30.46	773.7	18	— 7.8	90	NE	6	2.7		4ck	0		NE	Inap.	Inap.	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S.	29.54	750.3	29.58	751.3	25.3	— 3.7	96	NW	6	2.7		7k	0		NW	0	0	Fair	C. H. Rigby.
Montreal, Quebec*	30.27	768.8	30.50	774.7	— 3	—19.4	73	W	17	7.6		0	0			0.02	0.3	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A.
Parry Sound, Ontario*	29.69	754.1	30.46	773.7	10	—12.2	75	E	11	4.9		5k	5ks	W	W	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.68	753.9	30.55	776.0	— 7.0	—21.7	60	N			1	0	0			0	0		J. F. Jeffers, M. A.
Port Dover, Ontario	29.77	756.1	30.56	776.2	2	—16.7	100	Calm	0	0		0	0			0.05	1.3	Clear	H. Morgan.
Port Stanley, Ontario	29.84	757.9	30.58	776.7	— 5	—20.6	100	NW	1	0.4			8ks		W	Inap.	Inap.	Cloudy	M. Payne.
Quebec, Quebec*	30.32	770.1	30.68	779.3	—10	—23.3	78	W			6	0	0			0.14	3.6	Clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.97	761.2	30.51	774.9	—12	—24.4	76	Calm	0	0			8s		SW	0	0	Cloudy	W. H. McIntyre.
St. Andrews	30.08	764.0	30.13	765.3	12	—11.1	72	NW	12	5.4		0	0			0	0	Clear	
St. John's, N. B.	29.89	759.2	30.07	763.8	13.0	—10.6	81	NW	25	11.2		0	0			0	0	Clear	G. Murdock, C. E.
Saugeen, Ontario*	29.66	753.4	30.45	773.4	12	—11.1	83	S	20	8.9			10s			0.09	2.3	Cloudy	K. Stewart.
Stratford, Ontario	29.12	739.6	30.55	776.0	5.0	—15.0	92	Calm	0	0			10s			0	0	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.53	750.0	29.58	751.3	25	— 3.9	87	NW	15	6.7		2c	2ks	NW	NW	0.21	5.3	Fair	T. C. Hill, C. E.
Toronto, Ontario*	30.09	764.3	30.52	775.2	7	—13.9	84	W	4	1.8		0	2ks			0	0	Clear	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario	29.36	745.7	30.55	776.0	4.0	—15.6	95	SW	3	1.3			10s			0.10	2.5	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*																			Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. John's, Newfoundland	29.12	739.6	29.30	744.2	22	— 5.6	100	NW					10n			1.00	25.4	Cloudy	John Delany.
St. Pierre, N. F.			29.33	745.0	24.8	— 4.0		W			3.					0	0		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																0	0		The Staff, for D. Gill.
Cape Town, C. G. H. Obs'y	29.84	757.9	29.88	758.9	78.8	26.0	53	NW	13.1	5.9		c	1k			0	0	Cloudy	John Duthie.
Cape St. Francis Lt. House	29.80	756.9			70.6	21.4	72	SW	10.8	4.8			9s						

CHINESE SERIES.

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

SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	30.11	764.9	30.14	765.5	39.2	4.0	57	W	3.6	1.6			2			0	0	Fair	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.21	665.7	29.93	760.2	61.7	16.5	89	SE			2	4c	5d	NE		0	0	Cloudy	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.22	767.7	30.27	768.9	32.2	0.1	87	N	11	5			0						
Fanöe	30.38	771.7	30.40	772.2	33.1	0.6	82	W			2		0						
Godthaab, Greenland	29.91	759.6	29.95	760.7	34.0	1.1	75	NE			6		8						
Stykkisholm, Iceland	30.48	774.2	30.52	775.3	34.9	1.6	96	Calm			0		8						
Thorshavn	30.54	775.7	30.58	776.6	39.9	4.4	89	SE	9	4			10						
Vestervig	30.30	769.6	30.42	772.6	33.4	0.8	80	Calm			0		0						
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.54	750.4	30.23	767.8	30.9	—0.6	91	NNW			1	2c		E	E	0	0	Very clear	M. Labroue, Director.
Alençon	29.93	760.3	30.48	774.3	25.9	—3.4	95	NE			3		0			0	0	Clear	M. Nicot, Director.
Arras, Engineer School	30.17	766.2	30.45	773.3	35.6	2.0	92	N	3.4	1.5			n						M. Klein, Commandant.
Avignon, Normal School	30.02	762.4	30.10	764.4	37.0	2.8	75	N			3		0			0	0	Very clear	M. Giraud, Director.
Bar-sur-Seine	29.76	755.9	30.35	770.9	31.1	—0.5	65	E			1		2			0	0	Slightly cl'dy	M. Saillard, Director.
Beauvais, Normal School	30.22	767.6	30.50	774.8	35.4	1.9	83	NE			2		10		ENE	0	0	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.22	742 3	30.17	766.4	29.5	—1.4	92	NE			4		0			0	0	Clear	M. Gobin, Director.
Bordeaux, Observatory	29.95	760.8	30.23	767.8	34.7	1.5	68	NE			1		0			0	0	Clear	M. Rayet, Director.
Bourges, Normal School	29.72	754.9	30.30	769.7	35.2	1.8	89	N			1		1		NE	0	0	Clear	M. Postel, Director.
Brest, Naval Observatory	30.19	766.8	30.43	773.0	40.6	4.8	87	NE			2		0			0	0		M. de Kermaree, Dir.
Caen, Normal School	30.35	770.8	30.43	773.0	32.2	0.1	100	ENE			1		10		ENE	0	0	Covered	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.09	764.3	30.43	772.8	32.4	0.2	93	NE			1		10			0	0	Covered	M. Jadot, Director.
Charleville, Normal School	29.84	758.0	30.38	771.7	37.8	3.2	80	NE			1		8			0	0	¾ covered	M. Baumier, Director.
Clermont-Ferrand Obs'y	28.81	731.7	30.24	768.0	33.3	0.7	37	NW			1		0			0	0		M. Alluard, Director.
Cluny, Normal School	29.35	745.4	30.21	767.4	34.2	1.2		N			3		0			0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	29.46	748.3	30.38	771.7	29.3	—1.5	75	NNE			4		km	NNE	NNE	0	0		Dr. Coulet, Director.
Gap, Normal School	27.47	697.8	30.11	764.7	34.5	1.4	85	SW			6					0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.95	735.2	30.09	764.2	42.8	5.8	75	N			1		0			0	0	Foggy	M. Kina, Director.
Grenoble, Normal School	29.39	746.6	30.21	767.2	32.5	0.3		ENE			1		ck			0	0		M. Ablard, Director.
Guéret, Normal School	28.56	725.4	30.21	767.2	34.0	1.1	75	E			1		0			0	0	Clear	M. Rivoir, Director.
Lamballe, Normal School	30.13	765.4	30.43	772.8	38.1	3.4	86	E			1		1		E	0	0	Light fog	M. Ollitrault, Director.
Lescar, Normal School	29.59	751.6	30.30	769.5	35.2	1.8	82	N			71		10			0.024	0.60	Covered	M Chauvin, Director.
Lorient, Naval Observatory	30.30	769.6	30.40	772.2	42.4	5.8	49	NE			2		0			0	0	Clear	Lt. T Carré, Director.
Lyon Obs'y, Park Station	29.13	739.8	30.03	762.7	30.9	—0.6	57	N			1		0			0	0	Clear	M. André, Director.
Mans, Normal School	30.12	765.1	30.45	773.3	30.0	—1.1	98	E			1		5		SE	0	0	Cloudy	M. Pihoen, Director.
Marseille, Observatory	29.76	756.0	30.04	763.0	42.6	5.9	69	NW			1		1			0	0	Hazy	M. Stephan, Director.
Montlouis l'Instituteur	24.73	628.1	29.97	761.1	28.4	—2.0	71	WNW	7.4	3.3			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.04	763.0	30.12	765.0	40.6	4.8	71	N			2		0			0	0	Clear	M. Galzin, Director.
Nancy, Normal School	29.53	750.0	30.34	770.5	30.2	—1.0	60	NNW			1		10ck			0	0	Covered	M. Hasse.
Nantes, Observatory	30.28	769.1	30.44	773.2	37.4	3	50	ENE			1		0			0	0	Clear	M. Lerocque, Dir.
Nice	29.95	760.6	29.98	761.5	51.8	11.0	50	W			3		1	W	W	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	30.00	762.0	30.11	764.7	39.7	4.3	66	E	7.4	3.3			4		NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.43	569.8			29.3	—1.5							0		Calm	0	0	Clear	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.09	738.8	30.21	767.3	33.8	1.0	81	NW			3		0			0	0	Clear	M. Taillen.
Puy de Dôme Obs'y, Summit	25.06	636.6			20.8	—6.2	30	ENE			8		0			0	0		M. Alluard, Director.
Rochefort, Naval Obs'y	30.28	769.2	30.32	770.0	35.6	2.0	96	NE			1		0			0	0	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.12	765.0	30.34	770.7	36.3	2.4	58	N			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.95	709.8	30.22	767.6	26.6	—3.0	70	W			2		Fog			0	0	Foggy	M. Richard, Director.
Rouen, Normal School	30.37	771.3	30.45	773.5	37.4	3.0	54	NE			2		2		NE	0	0	Slightly cl'dy	M. Pletrier, Director.
Saint Lô, Normal School	30.34	770.5	30.49	774.5	34.5	1.4	74	NE			3		8	NE	E	0	0	Very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.24	768.1	30.41	772.3	34.0	1.1	82	NNE			3		1		NE				M. Renou, Director.
Toulouse, Observatory	29.48	748.9	30.21	767.4	30.9	—0.6	100	NW			1		5			0	0	Cloudy	M. Baillaud, Director.
Tours	30.16	766.0	30.35	771.0				NE			2		1	Calm	E	0	0	Almost clear	M. de Tastes.
Versailles, Observatory	29.91	759.7	30.40	772.2	33.1	0.6		NE			1		0			0.005	0.12	Very clear	Dr. A. Bérigny, Director.
Sun-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.42	747.2	30.29	769.3	27.5	—2.5	92	SE			2		1ks?			0.004	0.1	Light snow?	Prof. Dr. Hoh.
Berlin	30.07	763.7	30.25	768.3	32.9	0.5	59	N			2		0			0.035	0.9		Prof. Dr. Arndt.
Breslau	29.64	752.9	30.18	766.5	30.0	—1.1	56	NNW			3		4			0.010	0.25		Royal University Obs'y.
Carlsruhe	30.10	764.4	30.56	776.2	18.3	—7.6	80	E			0		10	NE		0	0		Albert Senz.
Cassel	29.66	753.4	30.28	769.0	33.8	1.0	85	N			4		10	N		0.032	0.82	Snowing	Dr. H. Möhl.
Frankfort on the Main	30.04	763.1	30.43	773.0	30.6	—0.8	86	SW			0		10			0.008	0.2		Physical Society.
Friedrichshafen	28.78	730.9	30.30	769.6	27.7	—2.4	47	NE			3		0			0	0		Chief Telegrapher Wilhelm.
Hamburg	30.28	769.2	30.35	771.0	33.8	1.0	63	NE			3		0			0	0		Dr. R. Kleeman.
Kiel	30.35	770.8	30.36	771.2	34.0	1.1	66	NNW			4		0			0.005	0.12		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.84	758.0	30.29	769.3	32.9	0.5	87	N			2		9	NNW		0.059	1.5		Prof. Dr. Bruhns.
Magdeburg	30.07	763 7	30.30	769.7	30.9	—0.6	79	N			3		18	N		0.028	0.7		Dr. Assmams.
Memel	29.91	759.7	29.96	760.9	30.0	—1.1	92	N			6		10n						Reinbrecht & Issermann.
Munich	28.35	720.0	30.22	767.6	27.5	—2.5	57	Calm			0		8			0	0		Central Station.
Neufahrwasser	30.06	763.5	30.08	763.9	31.8	—0.1	98	NW			5		9			0.051	1.3	Light snow.	A Lothes.
Neustadt, Palatinate	29.71	754.5	30.24	768.0	34.2	1.2		NW			2		10			0.031	0.8		Dicknether.
Stuttgart	29.32	744.6	30.28	769.0	24.4	—4.2	81	NE			1		10			0	0		Prof. Dr. Schoder.
Thorn	28.69	728.6	30.23	767.9	27.7	—2.4	96	Calm			0		9			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	30.27	768.8	30.29	769.4	33.1	0.6	72	N			5		2s			0	0		Prof. Kemlein.
Wustrow																			Prof. S. Reimer.

‖ Observation taken 25 minutes late.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.41	746.9	29.81	757.1	47.1	8.4	.....	NE	.....	2.5	.....	.....	10	.....	.....	Bla	nk	Raining.....	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.97	761.2	30.02	762.5	72.6	22.6	60	WSW	5.0	2.2	.....	.....	0	.....	.....	0	0	Blue sky'....	
Deesa	29.48	748.8	29.96	761.0	75.1	23.9	26	NW	8.4	3.8	.....	.....	6	W	.....	0	0	D. clouds.....	
Bombay	29.91	759.7	29.95	760.7	80.3	26.8	66	NW	18.0	8.0	.....	.....	0	.....	.....	0	0	Blue sky.....	
Poona, Yarrowda	28.08	713.2	29.92	760.0	83.9	28.8	24	W	8.0	3.6	.....	.....	3	.....	W	0	0	D. clouds.....	
Belgaum	27.38	695.5	29.91	759.6	79.7	26.5	36	NE	2.1	0.9	.....	.....	4	NE	.....	0	0	D. clouds.....	
Lahore	29.23	742.4	30.01	762.3	55.6	13.1	57	NE	1.1	0.5	.....	.....	10	.....	.....	0	0	Overcast.....	
Roorkee	29.08	738.8	30.04	762.9	54.8	12.7	80	Calm	3.3	1.5	.....	.....	10	.....	.....	0	0	.....	
Agra	29.48	748.8	30.06	763.6	68.3	20.2	31	W	5.1	2.3	.....	.....	5	.....	W	0	0	.....	
Nagpur	28.93	734.8	29.98	761.6	77.7	25.4	34	E	2.4	1.1	.....	.....	0	.....	.....	0	0	Blue sky.....	
Jubbulpore	28.63	727.2	30.04	762.9	68.7	20.4	37	W	1.3	0.6	.....	.....	0	.....	.....	0	0	Blue sky.....	
Lucknow	29.65	753.0	30.04	763.0	60.3	15.7	52	NNW	2.8	1.2	.....	.....	0	.....	.....	0	0	Blue sky.....	
Allahabad	29.72	754.9	30.05	763.3	57.7	14.3	58	Calm	2.5	1.1	.....	.....	4	.....	.....	0	0	D. clouds.....	
Patna	29.79	756.8	29.99	761.7	61.7	16.5	54	W	2.3	1.0	.....	.....	0	.....	.....	0	0	Blue sky.....	
Hazaribagh	27.96	710.2	30.06	763.5	59.3	15.2	32	NW	8.9	4.0	.....	.....	0	.....	.....	0	0	Blue sky.....	
Cuttack	29.95	760.8	30.04	762.9	70.6	21.4	56	NW	0.5	0.2	.....	.....	0	.....	.....	0	0	Blue sky.....	
Calcutta, Alipore	30.02	762.4	30.04	763.0	61.4	16.3	55	NNW	1.0	0.4	.....	.....	0	.....	.....	0	0	Blue sky.....	
Goalpara	29.62	752.2	30.04	762.9	65.7	18.7	57	Calm	1.3	0.6	.....	.....	0	.....	.....	0	0	Blue sky.....	
Chittagong	29.94	760.4	30.03	762.8	65.3	18.5	52	Calm	4.1	1.8	.....	.....	0	.....	.....	0	0	Misty.....	
Sibsagar	29.70	754.3	30.06	763.4	57.9	14.4	88	S	1.4	0.6	.....	.....	0	.....	.....	0.01	0.3	Blue sky.	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce, Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.60	751.9	30.03	762.7	40.1	4.5	27	Calm	0	0	.....	.....	0	.....	.....	0	0	....	Prof. Giovanni Clodig.
Milan	29.53	750.1	30.08	763.9	34.9	1.6	74	SSW	3.1	1.4	.....	.....	0	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.94	760.4	30.05	763.3	38.3	3.5	89	NNW	4.9	2.2	.....	.....	0	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.14	740.1	30.09	764.2	36.0	2.2	81	S	0.7	0.3	.....	.....	0	.....	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.82	757.4	30.02	762.5	43.7	6.5	25	N	9.8	4.4	.....	.....	2	N	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.10	713.8	30.12	765.0	29.7	— 1.3	56	W	.....	.....	4	.....	0	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.96	761.0	30.01	762.3	36.3	2.4	58	W	19.2	8.6	.....	.....	10	.....	.....	0.181	4.6	.....	Prof. Luigi Guidi.
Florence	29.70	754.4	29.96	761.0	41.0	5.0	45	N	.....	.....	6	.....	4	.....	.....	0	0	.....	Cav. F. Meucci.
Leghorn	29.86	758.5	29.95	760.7	42.6	5.9	50	ENE	8.7	3.9	.....	.....	5	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.65	753.1	29.83	757.6	49.1	9.5	54	N	13.0	5.8	.....	.....	1	.....	.....	0.059	1.5	.....	Prof. P. S. Ferrari.
Lecce	29.45	748.0	29.71	754.6	50.9	10.5	73	ENE	9.4	4.2	.....	.....	10	.....	.....	0.532	13.5	.....	Prof. C. de Giorgi.
Cosenza	28.84	732.4	29.74	755.4	47.1	8.4	70	NW	6.3	2.8	.....	.....	10	WNW	.....	0.012	0.3	.....	Prof. D. Conti.
Cagliari	29.67	753.6	29.87	758.6	48.4	9.1	58	NW	.....	.....	2	.....	5	NE	.....	0.028	0.7	.....	Prof. A. Pacinotti.
Palermo	29.49	749.1	29.74	755.5	51.3	10.7	75	WNW	4.3	1.9	.....	.....	10	.....	.....	0.161	4.1	.....	Prof. G. Ciaccatore.
Syracuse	29.63	752.5	29.67	753.6	51.1	10.6	77	NW	13.6	6.1	.....	.....	10	NE	.....	0.339	8.6	.....	Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R.	29.25	742.9	29.78	756.4	48.7	9.3	61	ENE	10.5	4.7	.....	.....	2cs	NE	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.08	560.7	.....	.....	17.6	— 8.0	37	E	.....	.....	.....	.....	0	.....	.....	0	0	.....	P. F. Denza.
Valdobbia	22.05	559.9	.....	.....	20.7	— 6.3	43	E	.....	.....	.....	.....	0	.....	.....	0	0	.....	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	29.88	758.9	29.89	759.2	39.1	3.9	87	WSW	1.7	0.8	.....	.....	10ck	.....	W	0.007	0.18	Overcast. ...	K. Sasaki.
Kioto	29.71	754.6	29.89	759.2	35.6	2.0	89	.....	.....	.....	.....	.....	10s	.....	W	0.025	0.63	Cloudy.....	.....
Nagasaki, I. M. Obs'y	29.71	754.6	29.92	759.9	49.3	9.6	84	W	22.7	10.1	.....	ck	10s	.....	.....	0.240	6.10	Overcast....	S. Takehayashi.
Tokei Obs'y, Yeddo	29.73	755.1	29.80	756.9	38.3	3.5	52	SW	12.1	5.4	.....	0	0	.....	.....	0	0	Clear.....	The Staff.
Wakayama	29.82	757.4	29.87	758.7	39.3	4.1	71	NNE	3.0	1.3	.....	.....	9ck;ks	.....	.....	0	0	Cloudy.....	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.78	756.4	29.96	761.1	81.0	27.2	64	ENE	12.5	5.6	.....	1	4	.....	E	0	0	Cloudy.....	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. Banda, C. E.
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanaxuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Leal.
Mazatlan	29.75	755.6	30.01	762.2	66.3	19.1	59	ENE	.....	.....	1	5cs	0	.....	.....	0	0	½ Cloudy ...	F. Quijano, C. E.
Mexico, Central Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff.
Morelia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Fena, M. D.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.45	773.3	30.45	773.3	39.6	4.2	.....	NNE	.....	.....	4	.....	.....	.....	.....	0.004	0.1	.....	
Groningen	30.33	770.3	30.38	771.7	36.9	2.7	.....	NNE	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Helder	30.42	772.6	30.42	772.6	37.4	3.0	.....	N	.....	.....	4	.....	.....	.....	.....	0.024	0.6	.....	
Hellevoetsluis	30.43	772.9	30.43	772.9	37.6	3.1	93	NE	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Utrecht	30.37	771.4	30.42	772.6	37.6	3.1	83	NNW	.....	.....	2	.....	8	.....	.....	0.008	0.2	Very cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.39	771.8	30.45	773.4	32.4	0.2	60	N	12.3	5.5			3			0	0		
Christiania	30.18	766.6	30.34	770.6	31.1	— 0.5	81	NW	0	0			8			0	0		
Gjæsvær	30.00	762.1	30.03	762.7	26.1	— 3.3		NE			2		10						
Lodingen	30.10	764.6	30.15	765.8	27.5	— 2.5	70	Calm			0		5			0.138	3.5		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.25	742 9	29.41	746.9	55.8	13.2	73	NW	10.5	4.7			4			0.138	3.5		Dr. J. A. Sampaio.
Campo Major	29.06	738.1	30.09	764.2	48.6	9.2	48	ENE	6.9	3.1			10			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.59	751.6	29.68	753.8	63.1	17.3	88	SW	1.3	0.6			10			0.551	14.0	Raining	Capt. D. A. de Cunha.
Lisbon, Observatory	29.69	754.0	30.06	763.4	45.7	8.6	72	NE	16.1	7.2			10	SW		0	0		The Staff.
Ponta Delgada, Azores	29.39	746.5	29.46	748.3	55.5	13.6	73	WNW	9.8	4.4			3			0.079	2.0	Light rain	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinsk	28.67	728.3	29.84	757.8	9.7	—12.4	100	Calm	0	0			0			Blank	Blank		Capt. Lasarew.
Archangel	29.50	749.2	29.52	749.7	0.1	—17.7	70	N	13	6			8ks						Capt. Sseliwerstow.
Astrakhan	29.98	761.6	29.90	759.5	27.9	— 2.3	73	WSW	34	15			3ks						Capt. Wisganow.
Barnaul	29.33	744.9	29.84	758.0	29.3	— 1.5	62	SW	13	6			10						Meteorological Obs'y.
Dorpat	29.56	750.7	29.82	757.4	13.5	—10.3	70	N	13	6			10ks						Observatory.
Ekaterinburg	28.25	717.6	29.28	743.8	4.8	—15.1	87	SE	7	3			10					Snowing	Meteorological Obs'y.
Kasan	28.86	733.0	29.14	740.2	12.2	—11.0	78	SW	7	3			10						Observatory.
Kertch	29.90	759.5	29.92	760.0	32.2	0.1	83	W	7	3			9						Lagorio.
Kieff	29.11	739.4	29.78	756.4	27.5	— 2.5	54	NW	16	7		c	8cs;ks						Observatory.
Krotkowo, N. 58°47′, E. 48°34′																			Cand. Fatjanow.
Lugan	29.50	749.2	29.71	754.6	27.9	— 2.3	77	W	22	10			10						Meteorological Obs'y.
Moscow	28.71	729.2	29.29	744.0	15.6	— 9.1	72	N	13	6			9ks						Meteorological Obs'y.
Nertchinsk	27.76	705.1	30.41	772.4	—17.5	—27.5	73	NW	7	3			7					Light clouds	Meteorological Obs'y.
Nikolaiev	29.91	759.7	29.98	761.5	33.1	0.6	66	N	22	10			9ks;n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Nukuss	30.06	763.5	30.31	769.8	27.7	— 2.4	94	NW	4	2			8cn						Dr. Dobrochotow.
Pekin, China	29.93	760.1	30.07	763.7	26.8	— 2.9	38	Calm	0	0			5k						Physical Observatory.
St. Petersburg	29.67	753.7	29.69	754.1	12.0	11.1	86	N	11	5			8ks;n					Light snow.	Central Physical Obs'y.
Tashkend, Laboratory	28.57	725.6	30.19	766.7	42 4	5.8	56	Calm	0	0			2						Teich, A. M.
Tiflis	28.75	729.5	30.18	766.6	42.1	5.6	33	NW	4	2			0						Physical Observatory.
Warsaw	29.59	751.5	30.03	762.7	29.8	— 1.2	69	NW	13	6		ck	9ks						Astronomical Obs'y.
Wilna	29.32	744.6	29.75	755.7	29.5	— 1.4	83	WNW	7	3			10					Heavy clouds	Berg, Assistant.
Yeniseisk	29.53	750.0	29.83	757.6	25.1	— 3.3	95	S	4	2			8						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.62	777.7	31.0	— 0.6	97	SW			1		10s			0	0	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides			30.46	773.7	45	7.2	92	S			3	3	0	SE		0	0		J. Youngclause.
North Unst, Shetland Isl'ds			30.58	776.7				N			3		10			0	0		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.98	761.4	30.09	764.2	44.6	7.	79	N	1.6	0.7			9			0	0	Almost cov'd	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.18	766.5	30.24	768.0	47.8	8.8	80	E	0.3	0.14		2	3	SE		0	0	Cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.14	689.4			37.4	3.0	80	NE	3.4	1.50			0			0	0	Clear	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.80	706.1	30.11	764.7	41.0	5.0	72	S	3.8	1.7		0	0			0	0	Clear	The Staff.
Murcia, Met. Obs'y ‡	29.94	760 4	30.09	764.3	54.3	12.4	57	SW	1.3	0.6		0	2			0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.10	739.2	30.00	762.1	50.9	10.5	44	SE	22.4	10.0			5			0	0	Cloudy	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.98	761.5	30.05	763.2	71.3	21.8	91	SSE	2.7	1.2		4c	2ks	WSW		0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.95	760.7	30.00	762.0	78.6	25.9	71	E	4.4	2.0		3c	4ck	W	E	0	0	Partly clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.95	760.7	30.05	763.3	57.2	14.0	65	ESE	15.2	6.8		0	8		SE	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.07	763.7	30.16	766.0	75.9	24.4	94	SE	6.6	2.97		5cs	1k	SE	SE	0	0	D. clouds	Enrique Gadea, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.10	764.5	30.14	765.5	9.7	—12.4	92	N			2		10			0	0		
Umea	30.15	765.9	30.21	767.2	15.1	— 9.4	81	N			2		0			0.051	1.3		
Hernosand	30.23	767.8	30.28	769.1	22.1	— 5.6	68	NNW			2		1			0	0		
Stockholm	29.98	761.4	30.15	765.9	25.5	— 3.6	69	NNE			4		10			0	0		
Wisby	29.99	751.8	30.05	763.3	30.2	— 1.0	73	NNE			7		5			0	0		
Sub-Series.																			
Upsala	30.08	764.0	30.17	766.2	26.2	— 3.2	67	N	16.8	7.5			9		N	0.005	0.12		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.71	729.2	30.21	767.3	30.2	— 1.0	77	E			2		0			0	0	Clear	The Observatory.
Zurich	28.55	725.2	30.28	769.2	28.0	— 2.2	55	NE			1		0			0	0	Clear	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. +1.5 mm.; Ther. —2°.3 cent.; Hum. —3 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.98	761.5	43.0	6.1	85	NE	7	3.0			10		N	0.622	15.8		The Observatory.
Valona			29.72	754.8	52.2	11.2		SW			2		10			0.28	7.	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.01	762.3	64.4	18.0	56	NW			1	1c				0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.42	772.7	30.51	774.9	24	— 4.4	74	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Alpena, Michigan	29.77	756.1	30.50	774.7	5	—15.0	75	SW	7	3.1	.....	.....	8s	.....	W	0.02	0.5	Cloudy	
Atlanta, Georgia	29.05	737.9	30.24	768.1	40	4.4	73	E	13	5.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.53	775.4	30.54	775.7	20	— 6.7	70	N	8	3.6	.....	7c;cs	0	Calm	.....	0	0	Fair	
Augusta, Georgia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Baltimore, Maryland	30.52	775.2	30.57	776.5	24	— 4.4	74	N	3	1.3	.....	5os	5s;fg	W	Calm	0	0	Cloudy	
Barnegat, New Jersey	30.50	774.7	30.52	775.2	19	— 7.2	85	NW	12	5.4	.....	8ck	Haze	W	Calm	0	0	Fair	
Benton, Montana	27.61	701.3	.....	.....	—14	—25.6	72	NW	1	0.4	.....	0	0	.....	.....	0.02	0.5	Clear	
Bismarck, Dakota	28.62	726.9	30.47	773.9	—27	—32.8	.....	W	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Boise City, Idaho	27.47	697.7	30.43	772.9	16	— 8.9	83	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Boston, Massachusetts	30.27	768.8	30.44	773.2	18	— 7.8	68	NW	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Brackettville, Texas	28.94	735.1	30.05	763.3	31	— 0.6	72	E	6	2.7	.....	0	5s	.....	Calm	0	0	Fair	
Brownsville, Texas	30.04	763.0	30.09	764.3	45	7.2	92	NW	8	3.6	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
Buffalo, New York	29.76	755.9	30.56	776.2	7	—13.9	77	SW	8	3.6	.....	0	5s	.....	SW	0.01	0.3	Fair	
Burlington, Vermont	30.26	768.6	30.59	777.0	6	—14.4	76	NE	11	4.9	.....	.....	10s	.....	NE	Inap.	Inap.	Cloudy	
Cairo, Illinois	29.99	761.7	30.43	772.9	14	—10.0	64	N	12	5.4	.....	2ck	2s	S	N	0	0	Fair	
Campo, California	27.44	697.0	30.01	762.2	21	— 6.1	86	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Camp Thomas, Arizona	27.24	691.9	.....	.....	19	— 7.2	85	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	30.50	774.7	30.52	775.2	34	1.1	61	NE	17	7.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Cape May, New Jersey	30.51	774.9	30.53	775.4	24	— 4.4	74	N	13	5.8	.....	2c	1s	SW	NW	0	0	Fair	
Castroville, Texas	29.36	745.7	30.11	764.8	29	— 1.7	78	NW	4	1.8	.....	0	2s	.....	Calm	0	0	Fair	
Cedar Keys, Florida	30.02	762.5	30.04	763.0	56	13.3	94	NE	10	4.5	.....	.....	10n	.....	NE	2.79	70.0	Heavy rain	
Champaign, Illinois	29.61	752.1	30.52	775.2	5	—15.0	50	NE	13	5.8	.....	.....	10c	.....	NE	0	0	Cloudy	
Charleston, S. Carolina	30.21	767.3	30.27	768.8	47	8.3	100	N	11	4.9	.....	.....	10n	.....	Calm	0.20	5.1	Light rain	
Charlotte, N. Carolina	29.47	748.5	30.33	770.4	36	2.2	61	NE	8	3.6	.....	.....	10s	.....	N	0	0	Cloudy	
Chattanooga, Tennessee	29.46	748.3	30.30	769.6	36	2.2	71	NE	4	1.8	.....	.....	10s	.....	SW	0	0	Cloudy	
Cheyenne, Wyoming	23.96	608.6	29.90	759.4	—10	—23.3	76	N	8	3.6	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
Chicago, Illinois	29.77	756.1	30.56	776.2	4	—15.6	74	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Chincoteague, Virginia	30.52	775.2	30.54	775.7	27	— 2.8	76	N	15	6.7	.....	.....	10s	.....	NW	0	0	Cloudy	
Cincinnati, Ohio	29.82	757.4	30.56	776.2	13	—10.6	62	NE	5	2.2	.....	.....	Fog;sm	.....	Calm	0	0	Dense smoke	
Cleveland, Ohio	29.76	755.9	30.59	777.0	0	—17.8	85	SE	5	2.2	.....	.....	10s;fg	.....	Calm	Inap.	Inap.	Cloudy	
Coleman City, Texas	28.34	719.8	30.13	765.3	22	— 5.6	58	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Columbus, Ohio	29.61	752.1	30.56	776.2	8	—13.3	78	N	2	0.9	.....	2ck	2s	W	Calm	0	0	Fair	
Concho, Texas	28.16	715.3	29.95	760.7	23	— 5.0	86	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Corsicana, Texas	29.76	755.9	30.26	768.6	28	— 2.2	77	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Davenport, Iowa	29.83	757.7	30.56	776.2	6	—14.4	76	NE	4	1.8	.....	.....	10n	.....	Calm	Inap.	Inap.	Light snow	
Dayton, Washington T'y	28.65	727.7	30.47	773.9	20	— 6.7	100	Calm	0	0	.....	0	5s	.....	Calm	0	0	Fair	
Deadwood, Dakota	25.49	647.4	.....	.....	—14	—25.6	45	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Decatur, Texas	29.01	736.8	30.27	768.8	24	— 4.4	87	NE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Delaware Breakwater, Del.	30.51	774.9	30.53	775.4	26	— 3.3	88	N	14	6.3	.....	.....	10s	.....	NW	0	0	Cloudy	
Denison, Texas	29.44	747.8	30.30	769.6	22	— 5.6	86	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Denver, Colorado	24.83	630.7	30.05	763.3	— 5	—20.6	82	N	12	5.4	.....	0	5n	.....	Calm	Inap.	Inap.	Light snow	
Des Moines, Iowa	29.86	758.8	30.55	776.0	8	—13.3	78	Calm	0	0	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy	
Detroit, Michigan	29.80	756.9	30.57	776.5	0	—17.8	70	SW	2	0.9	.....	2k	0	Calm	.....	0	0	Clear	
Dodge City, Kansas	27.50	698.5	29.97	761.2	16	— 8.9	66	E	10	4.5	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Dubuque, Iowa	29.79	756.7	30.61	777.5	— 3	—19.4	100	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Threatening	
Duluth, Minnesota	29.76	755.9	30.58	776.7	—16	—26.7	88	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Eagle Pass, Texas	29.40	746.7	30.18	766.6	28	— 2.2	88	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Eagle Rock, Texas	25.39	644.9	30.04	763.0	—25	—31.7	54	N	14	6.3	.....	0	0	.....	.....	0	0	Clear	
Eastport, Maine	30.04	763.0	30.12	765.0	12	—11.1	61	NW	21	9.4	.....	0	0	.....	.....	0	0	Clear	
Edinburg, Texas	.....	.....	.....	.....	46	7.8	62	N	.....	.....	4	.....	10s	.....	Calm	0	0	Cloudy	
El Paso, Texas	26.16	664.4	.....	.....	23	— 5.0	60	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Erie, Pennsylvania	29.76	755.9	30.56	776.2	7	—13.9	77	S	6	2.7	.....	0	0	.....	.....	0.02	0.5	Clear	
Escanaba, Michigan	29.77	756.1	30.54	775.7	—15	—26.1	100	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Florence, Arizona	28.53	724.6	30.13	765.3	30	— 1.1	57	W	2	0.9	.....	10k	0	W	.....	0	0	Cloudy	
Fort Apache, New Mexico	24.93	633.2	30.38	771.6	18	— 7.8	53	E	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Assiniboine, Montana	27.54	699.5	.....	.....	—23	—30.6	.....	NW	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Fort Bennett, Dakota	28.90	734.0	.....	.....	—15	—26.1	72	NW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Fort Buford, Dakota	28.56	725.4	30.88	784.3	—35	—37.2	100	Calm	0	0	.....	2cs	0	Calm	.....	0	0	Clear	
Fort Custer, Montana	27.19	690.6	.....	.....	—27	—32.8	.....	S	2	0.9	.....	0	0	.....	.....	0.12	3.0	Clear	
Fort Davis, Texas	25.04	636.0	30.00	762.0	24	— 4.4	74	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Elliott, Texas	27.28	692.9	29.72	754.9	18	— 7.8	53	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Gibson, Indian T'y	29.72	754.9	30.33	770.4	9	—12.8	78	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Grant, Arizona	25.10	637.5	29.90	759.4	25	— 3.9	75	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Griffin, Texas	28.80	731.5	30.17	766.3	22	— 5.6	72	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Keogh, Montana	27.94	709.7	.....	.....	—26	—32.2	.....	W	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Macon, North Carolina	30.36	771.1	30.37	771.4	42	5.6	74	N	27	12.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Missoula, Montana	27.01	686.0	.....	.....	—11	—23.9	100	Calm	0	0	.....	.....	10s	.....	Calm	0.19	4.8	Cloudy	
Fort McKavett, Texas	27.82	706.6	29.88	758.9	22	— 5.6	72	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Shaw, Montana	26.64	676.6	.....	.....	—12	—24.4	100	W	6	2.7	.....	0	0	.....	.....	0.02	0.5	Clear	
Fort Sill, Indian Territory	28.92	734.6	30.14	765.5	13	—10.6	81	N	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Fort Stevenson, Dakota	28.58	725.9	.....	.....	—29	—33.9	100	W	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Fort Verde, Arizona	.....	.....	.....	.....	18	— 7.8	53	NW	.....	.....	1	0	0	.....	.....	0	0	Clear	
Fredericksburg, Texas	28.34	719.8	30.01	762.2	25	— 3.9	87	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Galveston, Texas	30.12	765.0	30.17	766.3	39	3.9	82	NE	13	5.8	.....	0	2s	.....	Calm	0	0	Clear	
Grand Haven, Michigan	29.80	756.9	30.53	775.4	10	—12.2	79	N	4	1.8	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
Hatteras, North Carolina	30.36	771.1	30.38	771.6	43	6.1	83	NE	28	12.5	.....	.....	10s	.....	Calm	0	0	Cloudy	
Helena, Montana	26.05	661.7	.....	.....	—20	—28.9	100	SW	1	0.4	.....	0	0	.....	.....	0.01	0.3	Clear	
Henrietta, Texas	29.20	741.7	30.24	768.1	15	— 9.4	65	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Indianapolis, Indiana	29.62	752.3	30.51	774.9	3.5	—15.8	61	N	5	2.2	.....	5ck	Haze	Calm	Calm	0	0	Fair	
Indianola, Texas	30.14	765.5	30.17	766.3	39	3.9	82	N	20	8.9	.....	0	2s	.....	N	0	0	Fair	
Jacksboro, Texas	29.01	736.8	30.24	768.1	20	— 6.7	70	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Jacksonville, Florida	30.09	764.3	30.14	765.5	55	12.8	93	NE	4	1.8	.....	.....	10n	.....	Calm	2.08	52.8	Light rain	
Keokuk, Iowa	29.80	756.9	30.53	775.4	8	—13.3	78	NE	3	1.3	.....	.....	10n	.....	Calm	0.04	1.0	Light snow	
Key West, Florida	30.04	763.0	30.07	763.8	74	23.3	90	E	4	1.8	.....	5k	0	SE	.....	Inap.	Inap.	Fair	
Kittyhawk, North Carolina	30.44	773.2	30.46	773.7	39	3.9	73	NE	27	12.1	.....	2c	0	Calm	.....	0	0	Clear	
Knoxville, Tennessee	29.28	743.7	30.34	770.6	34	1.1	85	NE	6	2.7	.....	.....	10n	.....	Calm	0.02	0.5	Light rain	
La Crosse, Wisconsin	29.76	755.9	30.65	778.5	—20	—28.9	100	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
La Mesilla, New Mexico	26.06	661.9	30.21	767.3	19	— 7.2	62	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Laredo, Texas	29.70	754.4	30.05	763.3	40	4.4	49	NE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Leavenworth, Kansas	29.50	749.3	30.44	773.2	12	—11.1	80	N	4	1.8	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Lewiston, Idaho	29.63	752.6	30.33	770.4	23	— 5.0	60	W	1	0.4	.....	0	5s	.....	Calm	0	0	Fair	
Little Rock, Arkansas	29.97	761.2	30.32	770.1	22	— 5.6	86	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Los Angeles, California	29.70	754.4	30.05	763.3	42	5.6	74	N	7	3.1	.....	0	1s	.....	Calm	0	0	Clear	
Louisville, Kentucky	29.82	757.4	30.45	773.4	10	—12.2	79	N	11	4.9	.....	5k	5s	W	Calm	0	0	Cloudy	
Lynchburg, Virginia	29.81	757.2	30.55	776.0	32	0.0	79	NE	5	2.2	.....	.....	10s	.....	NE	0	0	Cloudy	
Madison, Wisconsin	29.43	747.5	30.58	776.7	— 5	—20.6	63	W	4	1.8	.....	0	2s	.....	Calm	0	0	Fair	
Marquette, Michigan	29.64	752.8	30.46	773.7	— 8	—22.2	58	W	16	7.2	.....	0	0	.....	.....	0	0	Clear	
Mason, Texas	28.40	721.3	30.28	769.1	24	— 4.4	74	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Memphis, Tennessee	29.97	761.2	30.34	770.6	22	— 5.6	72	N	5	2.2	.....	0	5s	.....	Calm	0	0	Fair	
Milwaukee, Wisconsin	29.73	755.1	30.58	776.7	— 4	—20.0	65	NW	8	3.6	.....	1c	5s	Calm	Calm	0	0	Fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.04	763.0	30.12	765.0	43	6.1	100	N	9	4.0			10n		Calm	0.62	15.7	Light rain	
Montgomery, Alabama	29.98	761.5	30.22	767.6	44	6.7	84	N	9	4.0			10s		Calm	0	0	Cloudy	
Morgantown, W. Virginia	29.47	748.5	30.57	776.5	16	— 8.9	83	Calm	0	0			10s		W	Inap.	Inap.	Cloudy	
Moorhead, Minnesota	29.49	749.0	30.66	778.7	—25	—31.7	53	NW	8	3.6		0	0			0	0	Clear.	
Mt. Washington, N. H.	23.40	594 4	29.76	755.9	—15	—26.1	71	NW	84	37.5			Fog		NW	0.38	9.7	Light fog	
Nashville, Tennessee	29.73	755.1	30.31	769.9	28	— 2.2	88	NE	2	0.9		8ck;cs	0	Calm		0	0	Fair	
New Haven, Connecticut	30.38	771.6	30.51	774.9	14	—10.0	72	W	5	2.2		0	0			0	0	Clear	
New London, Connecticut	30.42	772.7	30.47	773.9	16	— 8.9	66	W	6	2.7		0	0			0	0	Clear.	
New Orleans, Louisiana	30.06	763.5	30.13	765.3	45	7.2	84	N	8	3.6			10s		Calm	0.22	5.6	Cloudy	
Newport, Rhode Island	30.39	771.9	30.44	773.2	22	— 5.6	72	W	15	6.7		0	0			0	0	Clear	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.46	773.7	30.50	774.7	26	— 3.3	63	NW	16	7.2		0	0			0	0	Clear	
New York, New York	30.34	770.6	30.54	775.7	20	— 6.7	85	W	4	1.8		2cs	Fog	Calm		0	0	Fair	
Norfolk, Virginia	30.45	773.4	30.51	774.9	31	— 0.6	79	NE	16	7.2			10s		Calm	0	0	Cloudy	
North Platte, Nebraska	27.35	694.7	30.31	769.9	— 7	—21.7	80	NE	15	6.7			10s		Calm	0	0	Cloudy	
Olympia, Washington T'y	30.39	771.9	30.43	772.9	32	0.0	100	N	1	0.4			10s		Calm	Inap.	Inap.	Cloudy	
Omaha, Nebraska	29.24	742.7	30.49	774.4	3	—16.1	100	N	9	4.0			10n		Calm	0.10	2.5	Light snow	
Oswego, New York	30.13	765.3	30.47	773.9	23	— 5.0	73	SW	12	5.4			10s		W	0.18	4.6	Cloudy	
Pensacola, Florida	30.10	764.5	30.14	765.5	48	8.9	93	NE	7	3.1			10n		Calm	0.35	8.9	Light rain	
Philadelphia, Pa	30.49	774.4	30.55	776.0	21	— 6.1	86	N	9	4.0		1c	Fog	Calm	Calm	0	0	Clear.	
Phœnix, Arizona	28.91	734.3	30.84	783.3	26	— 3.3	63	E	6	2.7		5k	2s	S	S	0	0	Cloudy	
Pike's Peak, Colorado	17.20	436.9	29.41	747.0	—16	—26.7	70	SW	12	5.4		0	0			0	0	Clear.	
Pilot Point, Texas	29.44	747.8	30.35	770.9	23	— 5.0	73	NE	4	1.8		0	0			0	0	Clear.	
Ploche, Nevada	23.94	608.1	29.71	754.6	17	— 8.3	89	N	10	4.5		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.66	753.4	30.57	776.5	11	—11.7	80	W	1	0.4			10s		Calm	Inap.	Inap.	Cloudy	
Port Huron, Michigan	29.78	756.4	30.54	775.7	4	—15.6	60	S	4	1.8		10cs	0	Calm		0.01	0.3	Cloudy	
Portland, Maine	30.28	769.1	30.34	770.6	22	— 5.6	72	NW	4	1.8		0	0			0	0	Clear.	
Portland, Oregon	30.37	771.4	30.45	773.4	38	3.3	91	NW	4	1.8		0	5s		NW	Inap.	Inap.	Fair	
Portsmouth, N. Carolina					44	6.7	84	NE	28	12.5		10k	0	Calm		0	0	Cloudy	
Prescott, Arizona	24.66	626.4	30.02	762.5	19	— 7.2	69	SW	1	0.4		1c	0	SW		0	0	Clear.	
Punta Rassa, Florida	30.02	762.5	30.04	763.0	65	18.3	94	E	10	4.5			Fog			0.30	7.6	Dense fog	
Red Bluff, California	29.85	758 4	30.22	767.6	44.0	6.7	52	N	14	6.3		0	0			0	0	Clear.	
Rio Grande City, Texas	30.01	762.2	30.24	768.1	45	7.2	68	N	4	1.8			10s		Calm	0	0	Cloudy	
Rochester, New York	29.82	757.4	30.50	774.7	13	—10.6	81	W	8	3.6		0	1s;hz		W	0.03	0.8	Clear	
Roseburg, Oregon	29.83	757.7	30.43	772.9	37.5	3.1	86	E	3	1.3			10s		Calm	0	0	Cloudy	
Sacramento, California	30.11	764.8	30.19	766.8	41	5.0	100	N	9	4.0			Fog			0	0	Foggy	
St. Louis, Missouri	29.83	757.7	30.48	774.2	7	—13.9	77	N	8	3.6		8ck	0	W		0	0	Fair	
St. Paul, Minnesota	29.59	751.6	30.58	776.7	—14	—25.6	72	Calm	0	0		0	0			0	0	Clear.	
Salt Lake City, Utah	25.66	651.8	29.99	761.7	18	— 7.8	53	NW	9	4.0			10s		Calm	0.15	3.8	Cloudy	
San Antonio, Texas	29.48	748.8	30.22	767.6	29	— 1.7	78	NW	4	1.8		0	0			0	0	Clear	
San Diego, California	30.01	762.2	30.09	764.3	46	7.8	62	NE	5	2.2		0	8ks		Calm	0	0	Fair	
Sandusky, Ohio	29.80	756.9	30.56	776.2	10	—12.2	79	SW	3	1.3			10s		Calm	0	0	Cloudy	
Sandy Hook, New Jersey	30.48	774.2	30.52	775.2	21	— 6.1	87	NW	10	7.2		0	0			0	0	Clear.	
San Francisco, California	30.10	764.5	30.16	766.1	46	7.8	84	NW	12	5.4		0	0			0	0	Clear	
Santa Fé, New Mexico	23.04	585.2	29.58	751.3	6	—14.4	52	Calm	0	0		0	0			0.01	0.3	Clear	
Savannah, Georgia	30.12	765.0	30.22	767.6	49	9.4	93	N	9	4.0			10n		Calm	0.22	5.6	Light rain	
Shreveport, Louisiana	29.99	761.7	30.25	768.3	29	— 1.7	89	NE	5	2.2		0	0			0	0	Clear	
Silver City, New Mexico	24.11	612.4	30.69	779.5	14	—10.0	64	Calm	0	0		0	0			0	0	Clear	
Smithville, North Carolina	30.27	768.8	30.31	769.9	45	7.2	76	N	15	6.7			10s		Calm	0	0	Cloudy	
Socorro, New Mexico	25.49	647.4	29.56	750.8	6	—14.4	55	NW	1	0.4		0	0			0	0	Clear.	
Springfield, Illinois	29.78	756.4	30.54	775.7	7	—13.9	77	NE	6	2.7		0	5s		W	0	0	Fair	
Springfield, Massachusetts	30.33	770.4	30.47	773 9	22	— 5.6	58	NW	2	0.9		0	0			0	0	Clear	
Stockton, Texas	26.95	684.5	29.95	760.7	23	— 5.0	86	S	3	1.3		0	0			0	0	Clear	
St. Vincent, Minnesota	29.58	751.3	30.55	776.0	—28	—33.3	100	S	4	1.8		0	0			0	0	Clear	
Thatcher's Island, Mass	30.25	768.3	30.31	769.9	20	— 6.7	27	W	28	12.5		0	0			0	0	Clear	
Toledo, Ohio	29.77	756.1	30.55	776.0	5	—15.0	76	W	3	1.3		0	0			0	0	Clear	
Tucson, Arizona	27.45	697.2	30.00	762.0	25	— 3.9	62	Calm	0	0		0	0			0	0	Clear	
Umatilla, Oregon	30.18	766.6	30.73	780.5	15	— 9.4	100	E	2	0.9			Fog		Calm	0	0	Dense fog	
Uvalde, Texas	29.22	742.2	30.11	764.8	29	— 1.7	78	Calm	0	0		0	5s		Calm	0	0	Fair	
Vicksburg, Mississippi	29.95	760.7	30.23	767.8	36	2.2	80	N	5	2.2		5cs	0	Calm		0	0	Fair	
Visalia, California	29.73	755.1	30.12	765.0	33.5	0 8	84	E	1	0.4		0	Fog		Calm	0	0	Clear	
Washington, D. C.	30.45	773.4	30.57	776.5	19	— 7.2	85	NE	3	1.3			10s;fg		SW;W	0	0	Cloudy	
Wickenburg, Arizona					30	— 1.1	78	NW			1	1c	2s	Calm	Calm	0	0	Clear.	
Wilmington, N. Carolina	30.28	769.1	30.34	770.6	45	7.2	68	E	8	3.6			10s		Calm	0	0	Cloudy	
Winnemucca, Nevada	25.78	654.8	30.14	765.5	19	— 7.2	69	NE	4	1.8		0	0			0	0	Clear	
Wood's Holl, Mass	30.39	771.9	30.43	772.9	23	— 5.0	86	NW	20	8.9		1cs	0	W		0	0	Clear	
Yankton, Dakota	29.20	741.7	29.74	755.4	—11	—23.9	76	N	6	2.7			10s		Calm	0	0	Cloudy	
Yuma, Arizona	29.89	759.2	30.05	763.3	37	2.8	53	NE	4	1.8		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.00	558.8			48.5	9.2	64	Calm	0	0		10cs	0			Inap.	Inap.	Cloudy	Thomas Herran.
Havana, Cuba, W. I.	30.03	762.7	30.08	764.0	75	23.9	81	Calm	0	0		8cs	0			0	0	Foggy	Charles Hasselbrink.
Jakobshavn, Greenland	30.21	767.4	30.27	768.8	15.4	— 9.2		Calm			0		5			0.06	1.5		
Kingston, Jamaica, W. I.	30.04	763.0	30.05	763 3	69.3	20.7	71	Calm	0	0		0	0			0	0	Fair	Maxwell Hall.
Navassa, W. I.	29.95	760.7	30.03	762.7	77.5	25.3	69	E	7.2	3.2		5k	2s	NE	E	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	77	25.0	91	SE			2		10n	E		0.360	9.14	Raining	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.41	747.0	29.97	761.2	77	25.0	89	Calm			0		10ks;s		C;NE	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					73	23		E			1	0	10k		E	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.06	763.5	30.08	764.0	74	23.3	75	Calm	0	0		Haze	0			0	0		Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	30.49	774.5	30.55	776.0	— 3.5	—19.7		W			2		2			0.071	1.8		
York Factory, B. A.	29.99	761.7	30.05	763.3	—40.0	—40.0		NW	13	5.8		2k	0	NW		0	0	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	c—10	c—10	c—10	From.	From.	Inch.	Mill.				
H. M. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandra																			Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. S. Hope.
H. M. S Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. J. F. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda																			Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.95	760.7	79	26.1	70	NW			3		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Callao Bay, Peru	29.92	760.0	65	18.3	94	Calm			0		10							Misty	Comm. E. E. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	29.72	754.9	56.5	13.6	81	ESE			2		10	SE				3	ESE	Raining	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 25° 58′, E. 119° 29′	30.19	766.8	52.0	11.1	63	ENE			1		3							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 15° 54′, E. 58° 15′	30.06	763.5	76	24.4	77	ENE			4-5		4	E				4	E	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 38° 42′, W. 9° 06′	30.03	762.7	50	10.0	79	ENE			3		9	E						D. clouds	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	o—10	o—10	o—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda, W. I.	30.22	767.6	66	18.9	68	N			3-4		8							D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes, N. 37° 24′, W. 9° 11′	29.97	761.2	58.5	14.7	83	SE			5-6		8	SE				6	SE	D. clouds	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis, N. 38° 13′, W. 9° 11′	29.98	761.5	58	14.4	100	E			4		8	Calm				4	SW	D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 12° 55′, E 45° 39′	29.63	752.6	79	26.1	91	ENE			3-4		1					4	ENE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis, N. 37° 22′, E. 10° 16′	29.89	759.2	55	12.8	74	N			5		5	N				4	N	Squally	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb, N. 37° 03′, E. 15° 18′	29.69	754.1	51	10.6	79	NNW			4-5		7	NE						Showery	Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane,
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark																			Capt. R. D. Cumming.
H. M. S. Zephys																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
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PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	29.96	761 0	77.0	25.0	85	E			1		8			0	0			Foggy	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando	29.86	758.4	79.7	26.6	88	NW			3		6			1 h'r	5 m.	1	NW	D. clouds	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.18	766.6	53	11.7	86	N	6	2.7		10			NE	0	0			Cloudy	
N. Yard, Portsmouth, N. H	30.36	771.1	18	— 7.8	37	NW	14	6.3		0				0	0			Clear	
Naval Hospital, Yokohama, Japan	29.63	752.6	48.5	9.2	60	SW			4		0			0	0			Clear	
Adams, Ancon, Peru	30.00	762.0	68	20.0	90	Calm			0		10					Sm'h		Cloudy	
Alaska, N. Yard, Mare I'd, Cal*	30.10	764.5	43	6.1	92	E			2		0			0	0			Clear	
Alert, Hong-Kong, China	30.05	763.3	61	16.1	45	Calm			0		10		W	0	0	Sm'h		Cloudy	
Alliance, Pensacola, Fla	30.13	765.3	50	10.0	93	NE			2		10			Li	ght	Sm'h		Raining	
Ashuelot, Tientsin, China	30.08	764.0	28	— 2.2	100	NNW			1		5?							Cloudy?	
Colorado, New York, N. Y	30.51	774 9	21	— 6.1	86	NW	3	1.3			8		Calm	0	0			Cloudy	
Constitution, N. Yard, League I'd., Pa			19	— 7.2		N	1	0.4			8							Hazy	
Franklin, Off N. Yard, Norfolk, Va	30.41	772.4	33	0.6		NE	8	3.6			10		NE	0	0			Overcast	
Galena, N. 34° 20′, W. 17° 50′	29.70	754.4	64	17.8	73	S			3		10					Mod.	SW	Cloudy	
Independence, N. Yard, Mare I'd, Cal	30.17	766.3	41	5.0	91	E	11.2	5.0			0			0	0			Clear	
Jamestown, Sitka, Alaska*	30.13	765.3	45	7.2	92	E			1		10			0.49	12.4			Cloudy	
Kearsarge, Curacoa, W. I	30.04	763.0	78	25.6	78	E			2		2		E			Sm'h		Fair	
Lackawanna, Ancon, Peru	30.10	764.5	67	19.4	?	S			0-1		10		SSW	0	0			Cloudy	
Marion, Sandy Point, Patagonia, S. A	29.45	748.0	49	9.4	71	SSW			3		8					Mod.		Fair	
Michigan, Erie, Pennsylvania	30.59	777.0	8	—13.3		S			3		2		S					Clear	
Minnesota, New York, N. Y	30.54	775.7	22	— 5.6		NW			0-1		2							Hazy	
Monocacy, Shanghai, China	30.10	764.5	43	6.1	51	W			2		10							Overcast	
New Hampshire, Port Royal, S. C	30.18	766.6	47	8.3	92	NE	18	8.0			10		Calm	0.20	5.1			Raining	
Nipsic, Villafranca, France	29.98	761.5	53	11.7	42	W			2		0					Sm'h		Blue sky	
Onward, Chimbote Bay, Peru	29.94	760.5	70	21.1	90	S			2		5		N			Long	N;W	Fair	
Palos, Shanghai, China	30.17	766.3	40	4.4	64	W			1		2							Fair	
Passaic, Washington, D. C	30.58	776.7	21	— 6.1	86	NE			2		8		NE					Cloudy	
Pensacola, N. 24° 47′ W. 112° 31′	30.00	762.0	67	19.4	69	E			1-2		5		E			Sm'h		Fair	
Portsmouth, Washington, D. C	30.54	775.7	17	— 8.3	83	NE			1		10		N					Cloudy	
Powhatan, New York, N. Y	30.47	773.9	20	— 6.7		WSW			1		2							Hazy	
Quinnebaug, Alexandria, Egypt	29.93	760.2	66	18.9	59	SSW			2		8		WNW			Sm'h		Cloudy	
Richmond, Pagoda Anchorage, China	30.20	767.1	52	11.1	54	E			1		2		SW	0	0			Clear	
Saratoga, Baltimore, Md	30.46	773.7	21	— 6.1	100	NW			1		8		NW	0	0			Hazy	
Shenandoah, Montevideo, Uruguay*	29.84	757.9	71	21.7	66	N			3		2					Mod.	N	Fair	
St. Louis, League Island, Pa	30.48	774.2	15	— 9.4	82	NNW	4	1.8			2			0	0			Clear	
Swatara, N. 34° 40′ E. 135° 50′	29.79	756.7	51	10.6	52	WSW			4		0					Mod.	WSW	Blue sky	
Tennessee, N. 13° 54′, W. 63° 26′	30.06	763.5	78	25.6	82	NE	22	9.8			8		E	0	0	Sm'h		Cloudy	
Trenton, Villafranca, France*	29.95	760.7	62	16.7	73	WSW			0-1		0			0	0			Clear	
Vandalia, N. 35° 48′, W. 68° 00′	30.36	771.1	55	12.8	74	N			5		8		NNW			Mod.	N	Fair	
Wabash, Boston, Massachusetts	30.47	773.9	17	8.3	67	NW	8	3.6			2		Calm	0.	0			Hazy	
Wachusetts, Taboga near Panama*	29.57	751.1	78	25.6	86	NNW			3		0			0	0	Sm'h		Clear	
Wyoming, Naples, Italy	29.77	756.1	51	10.6	59	NNE			4		5		NE			Sm'h		Fair	

LINES AND VESSELS.	Barometer reduced to Sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Asturia																			Capt. G. F. Parson.
S. S. Baltic,																			
N. 41° 10′, W. 60° 00′	29.91	759.7	42	5.6	100	WNW			6		9					6	WNW	Squally	Capt. H. Parsell.
Ship Baroda, ‡																			
S. 25° 47′, E. 52° 10′	29.99	761.7	78.6	25.9	83	ENE			5		7							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Bellelsle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡																			
N. 35° 33, W. 21° 12′	29.53	750.0	61	16.1	66	WSW			6		5							D. clouds	Capt. N. Youlden.
City of Agra, ‡																			
S. 54° 20′, W. 118° 44′	29.76	755.9	40.7	4.8	82	SSE			3		10							Overcast	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Coppename,																			
N. 37° 20′, W. 21° 05′	29.49	749.0	58.8	14.9	76	W			6		4							D. clouds	Capt. A. Ruchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra, ‡																			
S. 25° 24′, E. 63° 50′	30.07	763.8	78	25.6	69	ENE			4		5							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡																			
N. 51° 15′, W. 33° 32′	29.48	748.8	51	10.6	93	E			6		10					6	E	Overcast	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams
Ship Iron Cross,																			
N. 51° 40′, W 6° 30′	30.51	774.9	47	8.3	100	ESE			4		1					3	SW	Misty	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kvesith																			Capt. Alex. Wilson.
S. S. Lancerta																			Capt. G. H. Jones.
Lanonone																			Capt. W. P. Hughes.
Ship Lochee ‡																			
N. 7° 45′, E. 87° 00′	29.88	758.9	79.5	26.4	81	NNE			4		8							Showery	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland ‡																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡																			
N. 28° 18′, E. 33° 14′	29.93	760.2	73.5	22.5	85	E			2		2							Blue sky	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE.																			
A. Schumacher & Co.																			
S. S. Hibernian																			Capt. F. Archer.
Moravian																			
S. S. Peruvian																			Capt. W. H. Smith, R.N.R.
CUNARD LINE.																			
Ch. G. Francklyn.																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE.																			
Ismay, Imrie & Co.																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Britanic,																			
N. 48° 23′, W. 29° 31′ †	29.55	750.6	57	13.9		SE			5		5		SE			H'vy	SE	Raining	Capt. H. Perry.
S. S. Celtic,														4 hours					
N. 50° 05′, W. 32° 28′ †	29.50	749.3	55	12.8		SSE			5		10		S	Drizzles		Mod.	S	Cloudy	Capt. Benj. Gleadell.
S. S. Germanic,																			
N. 42° 31′, W. 55° 19′ †	29.60	751.8	39	3.9		WNW			8		8		WNW	Snow		H'vy	WNW	Clear	Capt. Ch. W. Kennedy.
S. S. Republic														Showers					Capt. B. I. Irving.
GERMAN MERCHANT--MARINE SERIES.																			
NORTH GERMAN LLOYD--Of Bremen.																			
A. Schumacher & Co.																			
S. S. Braunschweig																			Capt. C. Undütsch.
S. S. Hermann																			Capt. H. Maur.
S. S. Köln																			
S. S. Leipzig ‡																			
N. 49° 46′, W. 10° 3′	30.33	770.4	53.0	11.7	63	SE			5		2		SE	0	0	Mod.	SE	Clear	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT--MARINE SERIES.																			
Barque Adolph Fredholm, ‡																			
S. 25° 25′, W. 31° 38′ *†	29.92	760.0	77.9	25.5	80	WSW			4		6?							Overcast	Capt. Albert Fredholm.
Ship Peru, ‡																			
N. 21° 35′, W. 84° 37′	30.00	762.0	79.0	26.1	90	SSE			3		9ks							Overcast	Capt. O. F. Sköterbrand

UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	30.50	774.7	30	— 1.1	90	SE			4		10		SE					Foggy	Capt. J. W. Shackford.
S. S. Indiana, ‡ Philadelphia, Pa			20	— 6.7		NW			3		2		NW	0	0			Fine	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 51° 23′, W. 27° 09′...*†	29.76	755.9	53	11.7	100	ESE			6		10		SE	Hea	Very	Very h'vy	ESE	Raining	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, ‡ N. 41° 21′, W. 64° 15′...†	29.89	759.2	34	1.1		NW			7		8		NW	0	0	R'gh	NW	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 32° 15′, W. 120° 28′....†	30.14	765.5	59	15.0	76	NW			2		2		NW	0	0	G'tl	WNW	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 36° 00′, E. 170° 13′....†	29.75	755.6	64	17.8	68	WSW			3		0			0	0	High	S		Capt. H. Davison.
S. S. Gaelic, N. 40° 05′, W. 129° 09′..*†	30.34	770.6	56	13.3	94	N			4		10?		N			Sm'h	N	Clear?	Capt. W. H. Kidley.
S. S. Oceanic, N. 35° 44′, E. 141° 24′	29.67	753.6	51	10.6	86	W			5		2		W	0	0	Mod.	W	Fine	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia, Willamette River, Or...†	30.41	772.4	38	3.3	90	NNW			2		10		NNW					Overcast	Capt. Fred. Bolles
S. S. Oregon																			Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Anðon, San Francisco, Cal.....†	30.08	764.0	46	7.8	92	NE			3		0							Clear	Capt. J. N. Ingalls.
S. S. Idaho																			C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 33° 43′, W. 118° 33′....†	30.12	765.0	58	14.4	64	NW			4		8		NW			Sm'h		Fair	
S. S. State of California, N. 45° 15′, W. 124° 05′...†	30.41	772.4	43	6.1	100	N			3		0					Light	NW	Clear	Capt. G. Debney.
S. S. Victoria, Nanaimo, Vancouver I'd....†	30.48	774.2	33	0.6	100	WSW			1		0					Sm'h		Clear	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, S. 11° 30′, W. 170° 50′....†	29.76	755.9	85	29.4	87	S			3		1		S	0	0	Light	S	Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, N. 35° 19′, W. 130° 28′...†..	30.35	770.9	53	11.7	73	N			4		2		NW	0	0	Sm'h		Fair	Capt. G. G. Berry.
S. S. City of Sidney, S. 21° 24, W. 173° 20′.....†	29.81	757.2	78	25.6	69	ENE			4		5		NW	0	0	Long	NE	Fair	Capt. H. C. Dearborn
S. S. City of Tokio, Hong Kong, China.....†	30.31	769.9	59	15.0	65	W			1		10′			0	0			Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ San José, de Guatemala†	29.97	761.2	76	24.4	77	Calm			0		8		NW	0	0	Mod.	SSE	Clear	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, N. 24° 32′, W. 112° 35′...†	29.98	761.5	69	20.6	85	Calm			0		5		SE	0	0			Hazy	
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland ‡																			Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland †.																			Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 49° 30′, W. 8° 58′	30.41	772.4				ESE			7		10			0	0	Mod.	SE	Cloudy	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Brunswick, Ga.	30.13	765.3	53	11.7	93	ENE	14	6.3			10n			0.22	5.6			Raining	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, ‡ Arroyo, P. R. †..	30.32	770.1	78	25.6		ENE			5		2		E	0	0	Sm'h		Clear	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va†	30.47	773.9	32	0.0	?	NE	3	1.3			10n			0.06	1.5			Cloudy	
Sch'r Hattie V. Kelsey, ...																			Capt. J. L. Randall.
Ship Jumna																			Capt. James S. Gawin
Bark Sunbeam, ‡ Lisbon, Portugal.....†	29.92	760.0	56	13.3	?	ENE			6		8		W	0	0			Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 9, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instru-m'tal error and tem-perature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.87	758.6	62.6	17.0	84	SW			4		9			0.315	8.0	Cloudy	Dr. Ollive.
Nemours			30.05	763.2	59.9	15.5	79	WNW			1		2			0	0	Fair	Raynard.
Algiers			30.07	763.7	54.0	12.2	74	E			2		0			0	0	Clear	Nicolas.
La Calle			29.95	760.8	52.9	11.6	40	W			4		9			0	0	Covered	Fonfrède.
Tunis			29.91	759.6															Jacques.
Sfax			29.98	761.6															Gau.
Saida			30.06	763.4	57.9	14.4	45	ESE			3		1			0	0	Very fair	Dumas.
Tebessa			30.04	763.1	47.1	8.4	50	W			2		3			0	0	Pretty fair	Watrin.
Gerville																			Lonchamp.
Laghouat			30.16	766.1	47.1	8.4	78	E			1		0			0	0	Clear	Herbin.
Biskra			30.11	764.7	58.6	14.8	78	NW			1		0			0	0	Clear	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.84	757.9	29.93	760.2	72.8	22.7	78	E	8	3.6			10			0.01	0.3	Dull	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania			30.30	769.6	72	22.2		SE			2		10k			0	0	Covered	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.60	751.7	30.18	766.5	31.5	— 0.3	81	Calm			0		7			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.43	747.5	30.26	768.5	19.6	— 6.9	97	NNW	1.3	0.6			0			0.008	0.2		Dr. Wiersbicki.
Eperies	29.21	741.9	30.16	766.0	27.1	— 5.7	60	N			2		0			0	0		Julius Mikolik.
Gratz‡	28.87	733.4	30.21	767.2	28.6	— 1.9	86	SW			1		8			0	0		Andreas Rospini.
Hermannstadt	28.56	725.3	30.08	764.0	24.6	— 4.1	89	NW			1		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.77	730.8	30.20	767.1	25.9	— 3.4	82	Calm			0		0			0	0		The Staff.
Lemberg	29.08	738.6	30.15	765.9	17.1	— 8.3	76	NW			2		6			0	0		Dr. T. Stanecki.
Pola	29.91	759.7	30.03	762.7	36.7	2.6	53	E			2		0			0	0		I. R. HydrographicOffice
Szathmar	29.60	751.9	30.06	763.4	27.1	— 2.7	64	NW			3		0			0	0		Beicht Peter, S. J.
Szegedin	29.82	757.4	30.11	764.9	32.0	0.0	67	E			1		5			0	0		Karl Stancel.
Trieste	29.93	760.3	30.04	762.9	34.9	1.6	69	ENE			5		0			0	0	Clear	P. Busin.
Vienna	29.48	748.7	30.24	768.1	27.7	— 2.4	65	NNE			1		9			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 16, 1882.

BRITISH SERIES.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Aberdeen	30.27	768.8	30.38	771.6	23.0	— 5.0	90	W	6	2.7	.....	.....	0	.....	.....	0.010	0.25	Misty	W. Boswell.
Armagh, Observatory	30.16	766.1	30.42	772.7	29.1	— 1.6	99	SSE	1	0.4	.....	.....	.....	.....	.....	.....	.....	.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.38	771.6	32.2	0.1	87	SSE	8	3.6	.....	.....	1	.....	.....	.....	.....	Blue sky	John Hartnup.
Bolton, Sharples	29.81	757.2	30.37	771.4	33.5	0.8	84	S	15	6.7	.....	.....	10	.....	.....	.....	.....	Overcast	Thomas Mackereth.
Bradford, Yorkshire	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	30.00	762.0	30.03	762.7	79.0	26.1	78	NE	.....	.....	2	.....	8	.....	.....	.....	.....	Overcast	Pvt. J. Surgenor, A. H. C.
Cardington	.....	.....	30.33	770.4	37.0	2.8	90	N	.....	.....	0.4	.....	10	.....	.....	.....	.....	Overcast	John McLaren.
Chatham, School M. E.	30.23	767.8	30.36	771.1	36.2	2.3	81	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	Gloomy ?	Cpl. Gwinn, R. E.
Falmouth, Observatory	30.09	764.3	30.33	770.4	39.3	4.1	74	ENE	.....	.....	4	.....	10	.....	.....	.....	.....	Overcast	The Staff.
Fort Napier, Natal	27.49	698.2	29.71	754.6	70.2	21.2	75	SE	.....	.....	1	.....	10	.....	.....	.....	.....	Overcast	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.88	758.9	85	29.4	83	SW	.....	.....	1	.....	5	.....	.....	.....	.....	D. clouds	C. E. Keane.
Galway, Queen's College	.....	.....	30.30	769.6	25	— 3.9	87	NE	.....	.....	2	.....	2	.....	.....	0.05	1.3	Blue sky	J. O'Donaghadue.
Gibraltar, Mediterranean	29.87	758.7	29.92	760.0	56.5	13.6	94	E	.....	.....	1	.....	10	.....	.....	.....	.....	Raining	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.20	767.1	30.41	772.4	24.8	— 4.0	94	E	.....	.....	2	.....	.....	.....	.....	.....	.....	Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	30.14	765.5	30.32	770.1	36.3	2.4	83	NNE	.....	.....	1	.....	7	.....	.....	.....	.....	D. clouds	The Staff.
Guernsey	30.02	762.5	30.24	768.1	41.5	5.3	65	NE	.....	.....	4	.....	5	.....	.....	.....	.....	D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.29	769.4	30.33	770.4	37.3	2.9	81	ENE	11	4.9	.....	.....	7	.....	.....	.....	.....	D. clouds	The Met'g'l Office.
Leicester, Museum	30.10	764.5	30.37	771.4	34.7	1.5	95	N	.....	.....	1	.....	10	.....	.....	.....	.....	Overcast	J. E. Carryer.
Malta, Mediterranean	29.76	755.9	29.83	757.7	59.0	15.0	59	NW	.....	.....	2	.....	4	.....	.....	.....	.....	D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	.....	.....	30.07	763.8	67.5	19.7	100	S	.....	.....	0	.....	4	.....	.....	.....	.....	D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.83	757.7	30.38	771.6	33.9	1.1	98	NNW	.....	.....	1	.....	9	.....	.....	.....	.....	Snowing	Robert Pate.
Oxford, Radcliffe Obs'y	30.11	764.8	30.36	771.1	35	1.7	90	N	.....	.....	1	.....	10	.....	.....	.....	.....	Misty	The Staff.
Plymouth	30.25	768.3	30.32	770.1	36.5	2.5	76	ENE	.....	.....	3	.....	10	.....	.....	.....	.....	Overcast	John Merrifield.
Sandwick Manse, Orkneys	.....	.....	30.38	771.6	35.4	1.9	97	SE	1	0.4	.....	.....	5	.....	.....	.....	.....	D. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.70	754.4	29.76	755.9	37.0	2.8	95	NE	.....	.....	2	.....	10	.....	.....	.....	.....	Raining	Serg't W. H. Lyne.
Sheffield	30.08	764.0	30.37	771.4	37.5	3.1	80	N	.....	.....	1	.....	10	.....	.....	0	0	Overcast	W. F. Cooper.
Silloth Rectory	30.36	771.1	30.39	771.9	24.8	— 4.0	45	Calm	.....	.....	0	.....	0	.....	.....	0	0	Blue sky	Rev. F. Redford, A. M.
Stonyhurst, Observatory	.....	.....	30.37	771.4	31.2	— 0.4	87	NE	1	0.4	.....	.....	10	.....	.....	.....	.....	Squally	Rev. S. J. Perry.
Strathfield Turgiss	30.11	764.8	30.34	770.6	36.9	2.7	95	NE	.....	.....	2	.....	10	.....	.....	.....	.....	Foggy	Rev. C. H. Griffith, F. M. S.
Truro, Royal Institution	30.24	768.1	30.32	770.1	38	3.3	81	SE	.....	.....	4	.....	10	.....	.....	.....	.....	Gloomy	W. Newcombe.
Valencia, Observatory	30.29	769.4	30.32	770.1	42.6	5.9	66	ESE	10	4.5	.....	.....	4	.....	.....	.....	.....	Misty	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Chatham, N. B.*	30.32	770.1	30.39	771.9	— 1	—18.3	94	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	G. A. Blair.
Charlottetown, P. E. Island	30.22	767.6	30.26	768.6	2	—16.7	83	W	9	4.0	.....	0	0	.....	.....	0	0	Clear	H. J. Cundall, C. E.
Chicontime, Quebec	.....	.....	.....	.....	23.7	— 4.6	.....	Calm	0	0	.....	0	18	.....	.....	0	0	Clear	Rev. V. A. Huart.
Cornwall, Ontario	30.27	768.8	30.49	774.4	— 1.0	—18.3	100	NE	.....	.....	1	.....	108	.....	.....	0	0	Cloudy	James Smith, M. A.
Dalhousie, N. B.	.....	.....	.....	.....	— 2.5	—19.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. A. Johnson.
Father Point, Quebec*	30.47	773.9	30.49	774.4	3	—16.1	89	NW	9	4.0	.....	0	0	.....	.....	0	0	Clear	J. McWilliams.
Fredericton, N. B.	30.44	773.2	30.52	775.2	— 3.9	—19.2	100	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	Prof. Harrison.
Fort Garry, Manitoba*	29.37	746.0	30.35	770.9	—24	—31.1	100	S	3	1.3	.....	Haze	0	.....	.....	0	0	Hazy	James Stewart.
Granton, Ontario	29.10	739.1	30.32	770.1	10.5	—11.9	62	NE	.....	.....	1	7cs	0	NE	.....	0	0	Fair	James Grant.
Halifax, N. S.*	30.21	767.3	30.36	771.1	9	—12.8	82	NW	12	5.4	.....	0	0	.....	.....	0	0	Clear	A. Allison.
Hamilton, Ontario	29.89	759.2	30.30	769.6	15.5	— 9.2	85	NW	.....	.....	1	.....	10k	.....	.....	0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	30.09	764.3	30.46	773.7	9	—12.8	82	E	5	2.2	.....	10ck	0	Calm	.....	0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S.	29.98	761.5	30.02	762.5	15.0	— 9.4	93	NW	7	3.1	.....	5k	0	NW	.....	0	0	Fair	C. H. Rigby.
Montreal, Quebec*	30.32	770.1	30.55	776.0	— 3	—19.4	87	S	4	1.8	.....	Haze	2s	NW	.....	0	0	Hazy	C. H. McLeod, C. E.
Moose Factory, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. R. Nason.
Norwood, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Rev. T. F. Fotheringham, M. A.
Parry Sound, Ontario*	29.61	752.1	30.37	771.4	11	—11.7	80	E	8	3.6	.....	2k	5ks	W	W	0.06	1.5	Fair	Rev. R. Moseley.
Peterboro, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. F. Jeffers, M. A.
Port Dover, Ontario	29.55	750.6	30.31	769.9	13	—10.6	81	NE	7	3.1	.....	.....	10n	.....	.....	0	0	Threatening	H. Morgan.
Port Stanley, Ontario	29.58	751.3	30.29	769.4	13	—10.6	65	E	8	3.6	.....	.....	10n	.....	E	0	0	Cloudy	M. Payne.
Quebec, Quebec*	30.19	766.8	30.57	776.5	—10	—23.3	78	NW	.....	.....	1	2k	2s	NW	NW	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.94	760.5	30.45	773.4	5	—15.0	75	SE	3	1.3	.....	.....	10s	.....	SW	0	0	Cloudy	W. H. McIntyre.
St. Andrews	30.47	773.9	30.52	775.2	0	—17.8	69	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
St. John's, N. B.	30.33	770.4	30.52	775.2	0.0	—17.8	69	NW	9	4.0	.....	0	0	.....	.....	0	0	Clear	G. Murdock, C. E.
Saugeen, Ontario*	29.55	750.6	30.34	770.6	8	—13.3	87	E	4	1.8	.....	.....	10ks	.....	.....	0	0	Cloudy	K. Stewart.
Stratford, Ontario	28.88	733.5	30.29	769.4	10.1	—12.2	96	SE	8	3.6	.....	.....	10s	.....	.....	0	0	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.95	760.7	29.99	761.7	16	— 8.9	83	NW	23	10.3	.....	0	2ks	.....	NW	0.01	0.3	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.91	759.7	30.33	770.4	17	— 8.3	81	NE	15	6.7	.....	.....	10s	.....	E	0	0	Cloudy	Magnetic Observatory.
Windsor, N. S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Woodstock, Ontario	29.12	739.6	30.29	769.4	10.2	—12.0	96	N	7	3.1	.....	0	10s	.....	.....	0	0	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.39	746.5	29.56	750.8	24	— 4.4	100	NE	2	0.9	.....	10k	10s	.....	.....	0	0	Cloudy	John Delany.
St. Pierre, N. F.	.....	.....	29.61	752.1	17.6	— 8.0	.....	NW	.....	.....	6	.....	.....	.....	.....	0	0	.....	N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff, for D. Gill.
Cape Town, C. G. H. Obs'y.	30.02	762.5	30.05	763.3	75.3	24.1	49	SSE	22.9	10.2	.....	0	0	.....	.....	0.04	1.0	Clear	
Cape St. Francis Lt. House	30.02	762.5	.....	.....	63.9	17.7	76	SSE	25.9	11.6	.....	.....	10s	.....	.....	0.165	4.19	Rainy	John Duthie.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.15	765.8	30.17	766.4	32.9	0.5	66	WSW	1.6	0.7	.....	.....	0	.....	.....	0	0	Clear	M. Marc Dechevrens, S J.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.

COSTA RICA SERIES.

By authority of the MINISTER OF FOREIGN AFFAIRS.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.18	665.0	29.91	759.7	64.4	18.0	90	NE			1	8d		NE		0	0	Cloudy	Federico Maison.

DANISH SERIES.

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

Copenhagen	30.07	763.8	30.12	765.0	31.3	—0.4	81	NW	18	8			0						
Fanöe	30.15	765.7	30.17	766.2	35.1	1.7	75	WNW			4		9						
Godthaab, Greenland	29.98	761.6	30.03	762.7	39.4	4.1	59	ENE			2		7						
Stykkisholm, Iceland	30.51	775.0	30.56	776.1	34.5	1.4	96	Calm			0		8						
Thorshavn	30.35	771.0	30.39	771.9	38.1	3.4	85	NNE	7	3			10						
Vestervig	30.01	762.2	30.10	764.6	34.9	1.6	80	SW			4		4						

FRENCH SERIES.

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

Agen, Normal School	29.33	745.0	30.02	762.5	24.8	—4	95	SE			1	Fog		NE		0	0	Dense fog	M. Labroue, Director.
Alençon	29.75	755.6	30.30	769.6	34.5	1.4	93	NE			1	5k		SW		0	0	Cloudy	M. Nicot, Director.
Arras, Engineer School																			M. Klein, Commandant.
Avignon, Normal School	29.91	759.6	29.98	761.6	38.5	3.6	57	N			3	0				0	0	Very clear	M. Giraud, Director.
Bar-sur-Seine	29.58	751.2	30.16	766.0	33.8	1.0	79	E			1	0				0	0	Clear	M. Saillard, Director.
Beauvais, Normal School	30.10	764.4	30.38	771.6	32.7	0.4	81	E			1	2		E		0	0	Slightly cl'dy	M. Frère Eugene Marie.
Besançon, Normal School	29.18	741.2	30.12	765.0	32.2	0.1	100	NNE			3	10n				0	0	Covered	M. Gobin, Director.
Bordeaux, Observatory	29.79	756.7	30.06	763.6	36.1	2.3	66	NE			1	2		ENE		0	0	Slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.58	751.4	30.17	766.2	33.4	0.8	96	NNE			3	5kn		NE		0	0	Cloudy	M. Postel, Director.
Brest, Naval Observatory	30.00	762.0	30.24	768.2	40.6	4.8	71	ENE			2	6		NE		0	0		M. de Rermaree, Dir.
Caen, Normal School	30.04	763.1	30.16	766.0	37.0	2.8	100	NE			1	10		NE		0.059	1.5	Covered	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.88	759.0	30.22	767.6	35.2	1.8	89	NE			1	2				0	0	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.69	754.0	30.22	767.5	34.5	1.4	96	NE			1	0				0	0	Clear	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.69	728.7	30.13	765.3	28.4	—2.0	74	NW			1	10				0	0		M. Alluard, Director.
Cluny, Normal School	29.21	742.0	30.10	764.4	32.0	0		N			3	10				0	0	Covered	M. de Villemontée, Dir.
Commercy, Normal School	29.30	744.2	30.21	767.4	28.6	—1.9	87	NNE			4	kn		NNE	NNE	0	0		Dr. Coulet, Director.
Gap, Normal School	27.39	695.6	30.01	762.3	33.8	1.0	57	W			6					0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.82	731.9	29.96	760.9	49.5	9.7	54	SE			2	2		SE		0	0		M. Kina, Director.
Grenoble, Normal School	29.28	743.6	30.08	764.1	31.3	—0.4		NE			1	ck				0	0		M. Ablard, Director.
Guéret, Normal School	28.46	722.8	30.16	766.0	26.2	—3.2	91	E			3	10				0	0	Covered	M. Rivoir, Director.
Lamballe, Normal School	29.86	758.5	30.15	765.7	38.3	3.5	80	SSE			1	5		SSE		0	0	Cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.44	747.7	30.14	765.5	34.5	1.4	90	N			1	10				0	0	Covered	M. Chauvin, Director.
Lorient, Naval Observatory	30.11	764.8	30.21	767.4	42.4	5.8	62	ENE			3	5		ENE		0	0	½ covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	29.01	736.8	30.08	764.1	30.6	—0.8	70	N			2	n		N		0	0		M. André, Director.
Mans, Normal School	29.90	759.5	30.22	767.7	34.2	1.2	73	ENE			3	8		NE		0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.65	753.1	29.92	760.0	47.7	8.7	56	W			0-1	0				0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.69	627.0	29.92	760.0	29.3	—1.5	64	W	3.8	1.7		0				0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.89	759.1	30.00	761.9	38.8	3.8	57	N			2	0				0	0	Clear	M. Galzin, Director.
Nancy, Normal School	29.58	751.4	30.39	771.8	28.8	—1.8	68	NW			1	0				0	0	Clear	M. Hasse.
Nantes, Observatory	30.10	764.5	30.26	768.6	36.0	2.2	69	ENE			2	10				0	0	Gloomy	M. Larocque, Dir.
Nice	29.91	759.8	29.95	760.6	53.2	11.8	56	SE			2	1	E	SE		0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.87	758.8	29.98	761.5	39.9	4.4	54	SE	5.6	2.5		0				0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.33	567.4			39.4	4.1						0				0	0	Clear	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.98	736.2	30.11	764.7	31.3	—0.4		N			1	10	SE	SE		0	0	Covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.98	634.4			15.8	—9.0	100	E			3	10				0.075	1.9	Light fog	M. Alluard, Director.
Rochefort, Naval Obs'y	30.10	764.4	30.13	765.2	35.6	2.0	82	NE			2	0				0	0	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.97	761.2	30.19	766.7	34.5	1.4	65	N			1	10				0	0	Covered	M. Moulliot, Director.
Rodez, Normal School	27.76	705.2	30.04	763.1	23.7	—4.6	86	E			1	Fog				0	0	Foggy	M. Richard, Director.
Rouen, Normal School	30.16	766.0	30.24	768.2	36.3	2.4	63	ENE			1	2		NE		0	0	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	30.12	765.0	30.28	769.0	37.6	3.1	75	E			1	10		E		0	0	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.05	763.3	30.22	767.5	34.0	1.1	85	NE			2	4		E		0	0		M. Renou, Director.
Toulouse, Observatory	29.35	745.5	30.08	763.9	25.0	—3.9	100	SE			1	10				0	0	Covered	M. Baillaud, Director.
Tours	29.96	761.0	30.16	766.0	34.5	1.4	71	NE			2	10	Calm	E		0	0	Covered	M. de Tastes.
Versailles, Observatory	29.71	754.7	30.21	767.2	32.7	0.4		ENE			2					0	0		Dr. A. Bérigny, Director.
SUB-SERIES.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	29.32	744.8	30.19	766.8	28.2	—2.1	87	E			4	5k	E			0	0		Prof. Dr. Hoh.
Berlin	30.09	764.3	30.28	769.0	30.4	—0.9	66	SW			2	0				0	0		Prof. Dr. Arndt.
Breslau	29.72	754.9	30.26	768.5	25.0	—3.9	64	N			1	3				0	0		Royal University Obs'y.
Carlsruhe	29.80	756.9	30.25	768.4	28.4	—2.0	76	NE			0	0				0	0		Albert Senz.
Cassel	29.63	752.7	30.24	768.2	27.7	—2.4	81	N			2	4	NE			0	0		Dr. H. Möhl.
Frankfort on the Main	29.91?	759.8?	30.43?	772.8?	28.4	—2.0	74	N			1	4				0	0		Physical Society.
Friedrichshafen	28.62	726.9	30.13	765.4	27.9	—2.3	66	NE			6	8	NE			0	0		Chief Telegrapher Wilhelm.
Hamburg	30.21	767.2	30.28	769.0	29.8	—1.2	86	WSW			3	0				0	0		Dr. R. Kleeman.
Kiel	30.43	772.8	30.44	773.2	30.4	—0.9	89	W			6	10				0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.87	758.7	30.32	770.2	23.9	—4.5	98	SW			1	10				0	0	Foggy	Prof. Dr. Bruhns.
Magdeburg	30.06	763.6	30.30	769 7	25.7	—3.5	87	Calm			0	0				0	0		Dr. Assmans.
Memel	29.93	760.2	29.98	761.4	31.8	—0.1	96	W			6	10n							Reinbrecht & Issermann.
Munich	28.26	717.7	30.12	765.1	26.1	—3.3	73	E			3	7	E			0.016	0.4		Central Station.
Neufahrwasser	30.12	765.1	30.14	765.5	29.5	—1.4	70	WSW			2	8				0.051	1.3		A Lothes.
Neustadt, Palatinate	29.65	753.0	30.17	766.4	38.3	3.5		E			3	0				0	0		Dicknether.
Stuttgart	29.20	741.7	30.15	765.8	27.7	—2.4	71	N			1	2	N			0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.61	726.8	30.15	765.8	26.2	—3.2	79	E			4	3	E			0	0		Prof. Kemlein.
Wustrow	30.18	766.5	30.20	767.1	32.7	0.4	87	W			5	8				0	0		Prof. S. Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.38	746.3	29.79	756.6	47.5	8.6		E			2.5		5					¼ clear	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of *H. F. Blanford, Meteorological Reporter to the Government of India*, at Calcutta.																			
Kurrachee	30.01	762.3	30.06	763.6	75.5	24.2	31	SSW	4.0	1.8			0			0	0	Blue sky	
Deesa	29.50	749.4	29.99	761.8	72.0	22.2	20	N	9.3	4.2			0			0	0	Blue sky	
Bombay	29.89	759.2	29.93	760.2	78.1	25.6	60	NNW	26.0	11.6			0			0	0	Blue sky	
Poona, Yarrowda	28.05	712.5	29.89	759.3	84.0	28.9	22	WSW	6.0	2.7			2		W	0	0	D. clouds	
Belgaum	27.37	695.2	29.90	759.4	78.9	26.1	35	SE	3.0	1.3			4	NE	NE	0	0	D. clouds	
Lahore	29.30	744.2	30.08	764.0	60.6	15.9	50	Calm	1.1	0.5			0			0	0	Blue sky	
Roorkee	29.12	739.5	30.06	763.4	59.8	15.4	57	W	1.0	0.4			0			0	0		
Agra	29.47	748.5	30.06	763.4	67.4	19.7	42	N	2.1	0.9			0			0	0		
Nagpur	28.90	734.2	29.95	760.8	80.2	26.8	41	Calm	2.3	1.0			0			0	0	Blue sky	
Jubbulpore	28.60	726.4	29.99	761.8	72.3	22.4	66	Calm	1.8	0.8			5			0	0	D. clouds	
Lucknow	29.64	752.8	30.04	762.9	60.3	15.7	42	N	1.0	0.4			0			0	0	Blue sky	
Allahabad	29.70	754.3	30.02	762.6	62.1	16.7	59	Calm	0.7	0.3			0			0	0	Blue sky	
Patna	29.83	757.7	30.02	762.5	62.1	16.7	47	W	1.5	0.7			2	W	W	0	0		
Hazaribagh	27.95	710.0	30.04	762.9	62.0	16.7	33	NW	3.6	1.6			0			0	0	Blue sky	
Cuttack	29.93	760.1	30.01	762.3	71.4	21.9	58	NW	0.5	0.2			0			0	0	Blue sky	
Calcutta, Alipore	29.99	761.8	30.02	762.4	61.8	16.6	67	Calm	0	0			0			0	0	Blue sky	
Goalpara	29.68	753.8	30.10	764.4	65.4	18.6	63	Calm	1.3	0.6			0			0	0	Blue sky	
Chittagong	29.89	759.3	29.99	761.7	64.3	17.9	59	WNW	2.7	1.2			0			0	0	Blue sky	
Sibsagar	29.68	753.7	30.03	762.8	58.3	14.6	91	SSW	1.5	0.7			2			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.68	753.8	30.10	764.6	34.9	1.6	52	E	3.8	1.7			0			0	0		Prof. Giovanni Clodig.
Milan	29.53	750.1	30.08	763.9	35.6	2.0	60	ESE	6.9	3.1			1			0	0		Prof. Schiaparelli.
Padua	29.98	761.5	30.10	764.4	36.9	2.7	72	NNE	11.9	5.3			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.13	740.0	30.08	764.1	33.8	1.0	85	NE	1.3	0.6			0			0	0		Prof. P. F. Denza.
Genoa	29.77	756.2	29.97	761.3	43.3	6.3	38	N	8.1	3.6			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.07	713.0	30.09	764.2	29.5	— 1.4	53	W			2		0			0	0		Prof. D. C. Bruno.
Pesaro	29.96	561.0	30.01	762.3	41.7	5.4	60	N	12.5	5.6			8	N		0	0		Prof. Luigi Guidi.
Florence	29.75	755.6	30.01	762.2	43.3	6.3	45	NE			4					0	0		Cav. F. Meucci.
Leghorn	29.83	757.7	29.92	759.9	44.6	7.0	39	E	6.9	3.1			0			0	0		Prof. P. Monte.
Rome	29.69	754.0	29.86	758.5	49.1	9.5	39	N	9.4	4.2			0			0	0		Prof. P. S. Ferrari.
Lecce	29.59	751.5	29.85	758.1	50.0	10.0	60	N	20.6	9.2			7	N		0.102	2.6		Prof. C. de Giorgi.
Cosenza	28.93	734.7	29.83	757.7	48.2	9.0	71	NW	2.5	1.1			7	NNW		0.031	0.8		Prof. D. Conti.
Cagliari	29.69	754.2	29.89	759.2	51.3	10.7	48	NW			2		2			0	0		Prof. A. Pacinotti.
Palermo	29.63	752.5	29.88	758.9	52.9	11.6	77	NW	1.3	0.6			10	NW		0.500	12.7		Prof. G. Cincciatore.
Syracuse	29.77	756.2	29.82	757.3	54.3	12.4	75	E	3.8	1.7			7	WNW		0.047	1.2		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R.	29.34	545.2	29.87	758.7	48.6	9.2	55	ENE	7.4	3.3			0			0	0		Prof. F. Brioschi.
Stelvio	22.04	559.8			13.6	—10.2	41	E					0			0	0		P. F. Denza.
Valdobbia	21.52	556.8			31.5	— 0.3	40	E					0			0	0		
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y†	29.99	761.7	30.01	762.2	32.4	0.2	76	WNW	2.3	1.0			18			0.008	0.20	Clear	K. Sasaki.
Kioto	29.71	754.6	29.90	759.4	38.8	3.8	62						9ck;k8		W	0.004	0.10	Cloudy	
Nagasaki, I. M. Obs'y	29.85	758.2	30.06	763.5	33.6	0.9	92	N	1.2	0.5		c	7n			0.450	11.43	Snowing	S. Takehayashi.
Tokei Obs'y, Yeddo	29.66	753.3	29.73	755.1	32.7	0.4	71	NW	5.8	2.6		0	0			0	0	Clear	The Staff.
Wakayama	29.91	759.7	29.96	761.0	40.0	4.4	62	WNW	13.9	6.2			0			0	0	Clear	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.78	756.4	29.97	761.3	80.9	27.2	61	E	15.5	6.9		0	4		ESE	0.01	0.3	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.66	753.3	29.92	760.0	62.2	16.8	75	NNE			2	0	6n		SW	0.045	1.15	½ cloudy	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.33	770.4	30.33	770.4	33.6	0.9		E			3					0.020	0.5		
Groningen	30.25	768.4	30.31	769.8	32.7	0.4		WSW			1					0	0		
Helder	30.32	770.2	30.32	770.2	33.4	0.8		ENE			1					0	0		
Hellevoetsluis	30.32	770.2	30.32	770.2	32.2	0.1	78	ENE			1					0	0		
Utrecht	30.28	769.2	30.33	770.4	32.2	0.1	78	E			1		0			0	0	Clear	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.97	761.1	30.03	762.7	30.9	— 0.6	96	NNW	4.5	2.0	.....	.....	10	.....	.....	0.197	5.0	Snowing.....	
Christiania	29.58	751.3	29.74	755.3	21.4	— 5.9	80	NNE	2	1	.....	.....	0	.....	.....	0	0	.....	
Gjæsvær	29.61	752.0	29.63	752.6	19.0	— 7.2	.....	Calm	.....	.....	0	.....	10	.....	.....	.....	.....	Light snow.	
Lodingen	29.25	743.0	29.30	744.2	23.9	— 4.5	95	SE	.....	.....	7	.....	10	.....	.....	0.154	3.9	Light snow.	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	28.90	734.1	29.06	738.1	58.6	14.8	84	S	22.4	10.0	.....	.....	4	.....	.....	0.217	5.5	.....	Dr. J. A. Sampaio.
Campo Major	28.79	731.2	29.82	757.5	40.6	4.8	81	ENE	9.8	4.4	.....	.....	10	SSW	.....	0.185	4.7	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.65	753.2	29.74	755.4	63.1	17.3	68	W	.....	.....	.....	.....	6	.....	.....	0.150	3.8	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.37	745.9	29.73	755.2	43.5	6.4	100	ENE	13.6	6.1	.....	.....	10	.....	.....	0.283	7.2	.....	The Staff.
Ponta Delgada, Azores	29.08	738.7	29.15	740.5	59.7	15.4	83	S	28.6	12.8	.....	.....	10	.....	.....	0.299	7.6	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinsk	28.93	734.9	30.10	764.4	15.8	— 9.0	100	SW	31	14	.....	.....	10	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.51	749.6	29.53	750.1	—10.7	—23.7	83	NW	2	1	.....	.....	0	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	29.88	758.9	29.80	756.8	34.0	1.1	72	ENE	2	1	.....	.....	10cp	.....	.....	.....	.....	.....	Capt. Wisganow.
Barnaul	29.63	752.7	30.17	766.2	26.1	— 3.3	76	SW	4	2	.....	.....	10	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.37	746.1	29.64	752.8	17.8	— 7.9	89	SSW	11	5	.....	.....	10n	.....	.....	.....	.....	Snowing.....	Observatory.
Ekaterinburg	28.45	722.7	29.50	749.2	5.5	—14.7	81	SW	4	2	.....	10c	.....	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.18	741.1	29.48	748.7	— 2.7	—19.3	76	WSW	2	1	.....	.....	9	.....	.....	.....	.....	.....	Observatory.
Kertch	29.79	756.7	29.81	75[illegible]	31.6	— 0.2	74	NNW	7	3	.....	.....	10	.....	.....	.....	.....	.....	Lagorio.
Kieff	29.28	743.6	29.97	761.8	12.0	—11.1	75	N	11	5	.....	.....	1cks	.....	.....	.....	.....	.....	Observatory.
Krotkowo, N. 53°47′, E. 48°34′	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.52	749.8	29.73	755.2	28.9	— 1.7	58	W	4	2	.....	.....	2	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	29.00	736.7	29.60	751.8	8.4	—13.1	76	SSE	4	2	.....	.....	3ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.83	706.8	30.37	771.4	2.1	—16.6	50	NW	9	4	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikoltiev	29.84	757.9	29.91	759.7	29.8	— 1.2	76	N	22	10	.....	.....	9ks;n	.....	.....	.....	.....	.....	1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.34	745.2	29.43	747.4	0.0	—17.8	78	W	20	9	.....	.....	10n	.....	.....	.....	.....	.....	Lieut. Iwanow.
Nukuss	29.99	761.7	30.23	767.9	35.2	1.8	66	SE	4	2	.....	.....	2s	.....	.....	.....	.....	.....	Dr. Dobrochotow.
Pekin, China	30.23	767.9	30.37	771.5	12.4	—10.9	28	NW	27	12	.....	.....	0	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.60	751.7	29.61	752.1	15.1	— 9.4	87	W	2	1	.....	.....	9sn	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.67	728.3	30.32	770.2	35.2	1.8	71	Calm	0	0	.....	.....	3	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.50	723.8	29.97	761.2	36.1	2.3	61	Calm	0	0	.....	.....	10	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.75	755.7	30.21	767.4	18.5	— 7.5	75	WNW	9	4	.....	.....	10ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.58	751.2	30.03	762.7	16.9	— 8.4	77	WSW	4	2	.....	.....	8	.....	.....	.....	.....	.....	Berg, Assistant.
Yeniseisk	29.68	753.9	29.98	761.6	23.4	— 4.8	75	WSW	4	2	.....	.....	7	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	30.39	771.9	26.0	— 3.3	98	W	.....	.....	.....	.....	1	.....	.....	0	0	Cloudy.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.34	770.6	46	7.8	92	SE	.....	.....	.....	.....	4	.....	.....	0	0	.....	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	30.22	767.6	.....	.....	.....	NNW	.....	.....	.....	.....	4	.....	.....	0	0	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y.‡	29.89	759.2	30.00	761.9	48.7	9.3	63	WNW	2.2	1.0	.....	.....	0	.....	.....	0	0	Clear.....	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.01	762.2	30.07	763.7	43.3	6.3	72	E	1.3	0.57	.....	3	2	SE	.....	0	0	Cloudy.....	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.95	684.5	.....	.....	37.0	2.8	52	NE	2.0	1.15	.....	.....	0	.....	.....	0	0	Clear.....	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.70	703.6	29.95	760.6	42.8	6.0	59	S	5.1	2.3	.....	0	3	.....	.....	0	0	Light clouds	The Staff.
Murcia, Met. Obs'y.‡	29.86	758.4	30.01	762.3	51.4	10.8	66	NW	2.5	1.1	.....	4	5	SE	.....	0.315	8.0	Raining.....	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.82	732.0	29.71	754.7	50.7	10.4	31	ENE	24.2	10.8	.....	.....	6	.....	.....	0	0	Cloudy.....	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.95	760.6	30.01	762.3	72.4	22.4	91	NE	8.3	3.7	.....	4c;cs	1k	SW	.....	0	0	Fair.....	Benito Vines, S. J.
Manilla, Phillippine Islands	29.95	760.7	30.00	762.0	80.0	26.7	82	SW	5.5	2.5	.....	.....	8kn	.....	W	0.01	0.2	.....	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.73	755.2	29.83	757.7	56.1	13.4	73	ESE	23.2	10.4	.....	.....	10	.....	ESE	0.378	9.6	Raining	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.02	762.6	30.11	764.9	78.1	25.6	80	SE	2.7	1.21	.....	4c	1k	SE.	SE	0.059	1.50	Clear.....	Enrique Gadea, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.41	746.9	29.45	747.9	14.0	—10.0	100	E	.....	.....	4	.....	10	.....	.....	.....	.....	Snowing.....	
Umea	29.30	744.3	29.35	745.6	17.6	— 8.0	94	Calm	.....	.....	0	.....	8	.....	.....	0.114	2.9	.....	
Hernosand	29.45	748.0	29.50	749.3	33.6	0.9	60	W	.....	.....	4	.....	10	.....	.....	0.004	0.1	.....	
Stockholm	29.50	749.4	29.68	753.9	30.6	— 0.8	51	NNW	.....	.....	6	.....	10	.....	.....	0.004	0.1	Snowing.....	
Wisby	29.76	756.0	29.82	757.5	32.0	0.0	78	WNW	.....	.....	6	.....	10	.....	.....	.....	.....	Snowing.....	
Sub-Series.																			
Upsala	29.52	749.9	29.61	752.1	28.9	— 1.7	75	WSW	17.9	8.0	.....	.....	10	.....	.....	0.007	0.17	.....	Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.61	726.7	30.12	765.0	28.6	— 1.9	73	NE	.....	.....	3	.....	10	.....	.....	0	0	Covered.....	The Observatory.
Zurich	28.42	721.8	30.15	765.9	27.3	— 2.6	77	NE	.....	.....	2	.....	10	.....	.....	0	0	Covered.....	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —1.0 mm.; Ther. —3°.2 cent.; Hum. —7 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.78	756.4	36.1	2.3	93	N	27	12.0	.....	.....	10	.....	N	0.496	12.6	Rain & snow	The Observatory.
Valona	.....	.....	29.74	755.4	53.2	11.8	.....	NW	.....	.....	2	.....	2	.....	.....	0	0	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.90	759.4	67.3	19.6	60	SW	.....	.....	4	.....	10cs	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instru-m'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.48	774.2	30.57	776.5	7	—13.9	54	NE	3	1.3		8cs	0	Calm		0	0	Fair	
Alpena, Michigan	29.62	752.3	30.34	770.6	6	—14.4	76	NW	6	2.7			10s		Calm	0	0	Threatening	
Atlanta, Georgia	28.94	735.4	30.14	765.5	35	1.7	90	E	11	4.9			10s		Calm	0.01	0.3	Cloudy	
Atlantic City, New Jersey	30.42	772.7	30.44	773.2	33	0.6	89	NE	20	8.9			10s		Calm	0	0	Threatening	
Augusta, Georgia	30.03	762.7	30.24	768.1	36	2.2	80	NE	7	3.1			10s		NE	0.02	0.5	Cloudy	
Baltimore, Maryland	30.39	771.9	30.44	773.2	26	— 3.3	88	NE	6	2.7			10n		Calm	Inap.	Inap.	Light snow.	
Barnegat, New Jersey	30.42	772.7	30.44	773.2	32	0.0	94	E	18	8.0			10s		Calm	0	0	Cloudy	
Benton, Montana	26.96	684.8			—10	—23.3	76	Calm	0	0			10s		Calm	0	0	Cloudy	
Bismarck, Dakota	28.28	718.3	30.14	765.5	—33	—36.1		Calm	0	0		0	0			0	0	Clear	
Boise City, Idaho	27.32	693.9	30.28	769.1	20	— 6.7	85	Calm	0	0			10s		Calm	0	0	Cloudy	
Boston, Massachusetts	30.41	772.4	30.58	776.7	7	—13.9	77	W	8	3.6		0	0			0	0	Clear	
Brackettville, Texas	28.85	732.8	29.95	760.7	38	3.3	91	E	4	1.8			10s		Calm	Inap.	Inap.	Cloudy	
Brownsville, Texas	29.85	758.2	29.90	759.4	47	8.3	92	W	8	3.6			10s		Calm	0	0	Cloudy	
Buffalo, New York	29.53	750.0	30.30	769.6	10	—12.2	79	NE	6	2.7			10s		Calm	0	0	Cloudy	
Burlington, Vermont	30.29	769.4	30.63	778.0	1	—17.2	71	E	3	1.3		0	0			0	0	Clear	
Cairo, Illinois	29.93	760.2	30.36	771.1	16	— 8.9	83	W	7	3.1			10s		Calm	0	0	Cloudy	
Campo, California	27.49	698.2	30.06	763.5	30	— 1.1	68	E	4	1.8		5s	0	Calm		0	0	Fair	
Camp Thomas, Arizona	27.28	692.9			22	— 5.6	72	Calm				0	0			0	0	Clear	
Cape Henry, Virginia	30.21	767.3	30.23	767.8	38	3.3	91	N	14	6.3			10s		Calm	0.20	5.1	Cloudy	
Cape May, New Jersey	30.36	771.1	30.39	771.9	34	1.1	80	NE	20	8.9			10n		W	0.01	0.3	Light snow.	
Castroville, Texas	29.23	742.4	29.96	761.0	39	3.9	82	N	10	4.5			10n		Calm	0.08	2.0	Light rain	
Cedar Keys, Florida	30.01	762.2	30.03	762.7	53	11.7	93	NE	9	4.0			10s		E	0.81	20.6	Cloudy	
Champaign, Illinois	29.41	747.0	30.30	769.6	5	—15.0	75	N	9	4.0			10s		N	0	0	Cloudy	
Charleston, S. Carolina	30.08	764.0	30.14	765.5	39	3.9	91	NW	12	5.4			Fog			1.46	37.1	Foggy	
Charlotte, N. Carolina	29.37	746.0	30.23	767.8	30	— 1.1	89	NE	10	4.5			10s;fg		NE	.20	5.1	Cloudy	
Chattanooga, Tennessee	29.33	745.0	30.17	766.3	39	3.9	91	NE	5	2.2			10s		Calm	0	0	Cloudy	
Cheyenne, Wyoming	23.79	604.3	29.73	755.1	— 3	—19.4	66	W	10	4.5		0	0			0	0	Clear	
Chicago, Illinois	29.54	750.3	30.30	769.6	10	—12.2	79	N	7	3.1			10n		Calm	0.02	0.5	Light snow.	
Chincoteague, Virginia	30.29	769.4	30.31	769.9	35	1.7	100	NE	28	12.5			10n		NE	0.02	0.5	Light rain	
Cincinnati, Ohio	29.53	750.0	30.23	767.8	24	— 4.4	74	NE	1	0.4			10ks;sn		NE;C	0	0	Cloudy	
Cleveland, Ohio	29.45	748.0	30.25	768.3	9.5	—12.5	78	E	2	0.9			10s		SW	Inap.	Inap.	Cloudy	
Coleman City, Texas	28.35	720.1	30.18	766.6	13	—10.6	81	N	30	13.4			10n		Calm	0.02	0.5	Light snow.	
Columbus, Ohio	29.32	744.7	30.22	767.6	20	— 6.7	85	N	2	0.9			10ks		Calm	0	0	Cloudy	
Concho, Texas	28.21	716.5	30.05	763.3	14	—10.0	82	N	12	5.4			10s		N	0	0	Cloudy	
Corsicana, Texas	29.74	755.4	30.24	768.1	31	— 0.6	79	N	16	7.2			10s		Calm	0	0	Cloudy	
Davenport, Iowa	29.68	753.9	30.41	772.4	0	—17.8	85	NW	11	4.9			10s		Calm	0.03	0.8	Cloudy	
Dayton, Washington T'y	28.34	719.8	30.08	764.0	32	0.0	100	S	8	3.6			10n		Calm	0.12	3.0	Heavy snow	
Deadwood, Dakota	25.08	637.0			—10	—23.3	54	S	2	0.9		0	0			0	0	Clear	
Decatur, Texas																			
Delaware Breakwater, Del.	30.36	771.1	30.38	771.6	31	— 0.6	100	NE	16	7.2			10n		NE	0.02	0.5	Heavy snow	
Denison, Texas	29.48	748.8	30.36	771.1	14	—10.0	82	N	12	5.4		10cs	0	Calm	Calm	Inap.	Inap.	Cloudy	
Denver, Colorado	24.66	626.4	29.88	758.9	— 7	—21.7	59	S	4	1.8		0	0			Inap.	Inap.	Clear	
Des Moines, Iowa	29.50	749.3	30.55	776.0	—13	—25.0	74	N	6	2.7		0	0			0.04	1.0	Clear	
Detroit, Michigan	29.53	750.0	30.26	768.6	11	—11.7	80	NE	5	2.2			10s		Calm	0	0	Cloudy	
Dodge City, Kansas	27.64	702.0	30.29	769.4	—10	—23.3	52	N	4	1.8		0	0			0.06	1.5	Clear	
Dubuque, Iowa	29.65	753.1	30.46	773.7	— 6	—21.1	100	NW	4	1.8			10n		Calm	0.08	2.0	Light snow.	
Duluth, Minnesota	29.64	752.8	30.46	773.7	—21	—29.4		SW	1	0.4		0	0			0	0	Clear	
Eagle Pass, Texas	29.28	743.7	30.04	763.0	41	5.0	100	NE	4	1.8			10n		Calm	Inap.	Inap.	Light rain	
Eagle Rock, Texas	25.27	641.8	29.92	760.0	—11	—23.9	75	Calm	0	0			10s		Calm	0	0	Cloudy	
Eastport, Maine	30.45	773.4	30.53	775.4	2	—16.7	72	NW	10	4.5		0	0			0	0	Clear	
Edinburg, Texas					45	7.2	100	N			4		10n		N	0.02	0.5	Light rain	
El Paso, Texas	26.16	664.4			33	0.6	79	NE	2	0.9		0	1s		Calm	0	0	Clear	
Erie, Pennsylvania	29.48	748.8	30.25	768.3	18	— 7.8	84	NE	5	2.2			10n		Calm	0.01	0.3	Light snow.	
Escanaba, Michigan	29.62	752.3	30.37	771.4	— 3	—19.4	83	NW	4	1.8			10s		Calm	Inap.	Inap.	Cloudy	
Florence, Arizona	28.49	723.6	30.09	764.3	26	— 3.3	52	Calm	0	0		0	0			0	0	Clear	
Fort Apache, New Mexico	24.96	634.0	30.40	772.1	11	—11.7	40	Calm	0	0		0	0			0	0	Clear	
Fort Assiniboine, Montana	26.97	685.0			— 9	—22.8	56	Calm	0	0			10s		Calm	0	0	Cloudy	
Fort Bennett, Dakota	28.60	726.4			—29	—33.9	100	Calm	0	0		0	0			0	0	Clear	
Fort Buford, Dakota	28.01	711.4	30.28	769.1	—40	—40.0	100	Calm	0	0		0	0			0	0	Clear	
Fort Custer, Montana	26.64	676.6			—25	—31.7		SE	3	1.3		0	0			0	0	Clear	
Fort Davis, Texas	25.00	635.0	29.96	761.0	13	—10.6	100	N	16	7.2			10n		Calm	0.07	1.8	Light snow.	
Fort Elliott, Texas	27.49	698.2	30.08	764.0	— 3	—19.4	32	NW	32	14.3		0	0			0.02	0.5	Clear	
Fort Gibson, Indian T'y	29.81	757.2	30.42	772.7	7	—13.9	77	N	16	7.2			10s		Calm	0	0	Cloudy	
Fort Grant, Arizona	25.15	638.8	29.95	760.7	24	— 4.4	74	NE	3	1.3		0	0			0	0	Clear	
Fort Griffin, Texas	28.98	736.1	30.41	772.4	9	—12.8	57	N	24	10.7			10n		Calm	Inap.	Inap.	Light snow.	
Fort Keogh, Montana	27.39	695.7			—32	—35.6		Calm	0	0		0	0			0	0	Clear	
Fort Macon, North Carolina	30.08	764.0	30.09	764.3	46	7.8	100	N	24	10.7			10n		Calm	0.89	22.6	Light rain	
Fort Missoula, Montana	26.64	676.6			— 1	—18.3	100	Calm	0	0			10n		Calm	0.35	8.9	Heavy snow	
Fort McKavett, Texas	27.80	706.1	29.87	758.7	19	— 7.2	85	N	12	5.4			10n		Calm	Inap.	Inap.	Light snow.	
Fort Shaw, Montana	26.07	662.2			16	— 8.9	83	SW	24	10.7		10cs	0	Calm		0	0	Cloudy	
Fort Sill, Indian Territory	29.03	737.3	30.28	769.1	4	—15.6	74	N	30	13.4			10s		N	0	0	Cloudy	
Fort Stevenson, Dakota	28.21	716.5			—38	—38.9	100	W	2	0.9		0	0			0	0	Clear	
Fort Verde, Arizona					16	— 8.9	66	NW			2	0	0			0	0	Clear	
Fredericksburg, Texas	28.30	718.8	29.93	760.2	35	1.7	80	NE	12	5.4			10n		NE	0.09	2.3	Light snow.	
Galveston, Texas	29.94	760.5	29.99	761.7	45	7.2	76	NE	14	6.3			10s		Calm	0	0	Cloudy	
Grand Haven, Michigan	29.59	751.6	30.32	770.1	9	—12.8	78	NE	3	1.3			10s		Calm	0	0	Cloudy	
Hatteras, North Carolina	30.06	763.5	30.08	764.0	54	12.2	93	E	20	8.9			10s		E	0.72	18.3	Cloudy	
Helena, Montana	25.58	649.7			— 8	—22.2	100	NW	1	0.4			10s		Calm	0	0	Cloudy	
Henrietta, Texas	29.33	745.0	30.39	771.9	7	—13.9	77	NE	21	9.4			10s		Calm	0	0	Cloudy	
Indianapolis, Indiana	29.37	746.0	30.22	767.6	15	— 9.4	82	N	1	0.4			10s		Calm	0	0	Cloudy	
Indianola, Texas	29.92	760.0	29.95	760.7	45	7.2	76	NE	26	11.6			10n		Calm	Inap.	Inap.	Light rain	
Jacksboro, Texas	29.26	743.2	29.44	747.8	9	—12.8	78	N	16	7.2			10s		N	0	0	Cloudy	
Jacksonville, Florida	30.06	763.5	30.10	764.5	47	8.3	85	NE	8	3.6			10s		Calm	1.04	26.4	Cloudy	
Keokuk, Iowa	29.68	753.9	30.42	772.7	2	—16.7	72	NW	9	4.0		0	5n		Calm	0.03	0.8	Light snow.	
Key West, Florida	30.02	762.5	30.05	763.3	68	20.0	95	E	16	7.2		5k	0	E		0.30	7.6	Fair	
Kittyhawk, North Carolina	30.17	766.3	30.19	766.8	41	5.0	100	N	16	7.2			10n		Calm	0.36	9.1	Light rain	
Knoxville, Tennessee	29.13	739.9	30.17	766.3	39	3.9	82	NE	1	0.4			10s		Calm	Inap.	Inap.	Cloudy	
La Crosse, Wisconsin	29.60	751.8	30.45	773.4	— 8	—22.2	100	Calm	0	0		0	5s		Calm	Inap.	Inap.	Fair	
La Mesilla, New Mexico	26.05	661.7	30.20	767.1	29	— 1.7	56	N	3	1.3			10s		Calm	0	0	Cloudy	
Laredo, Texas	29.53	750.0	29.88	758.9	43	6.1	100	NE	8	3.6			10n		NE	0.04	1.0	Light rain	
Leavenworth, Kansas	29.56	750.8	30.54	775.7	— 7	—21.7	59	NW	12	5.4		0	1s			0.01	0.3	Clear	
Lewiston, Idaho	29.26	743.2	29.95	760.7	27	— 2.8	67	E	2	0.9		0	5s		Calm	0.13	3.3	Fair	
Little Rock, Arkansas	29.92	760.0	30.26	768.6	27	— 2.8	88	N	12	5.4		0	8ks		Calm	0	0	Fair	
Los Angeles, California	29.77	756.1	30.13	765.3	38	3.3	72	NE	4	1.8		0	0			0	0	Clear	
Louisville, Kentucky	29.61	752.1	30.21	767.3	21	— 6.1	86	N	6	2.7			10s			Inap.	Inap.	Cloudy	
Lynchburg, Virginia	29.62	752.3	30.35	770.9	29	— 1.7	89	N	3	1.3			10n		Calm	0.01	0.3	Light snow.	
Madison, Wisconsin	29.26	743.2	30.39	771.9	— 6	—21.1	61	N	9	4.0			10n		Calm	0.04	1.0	Light snow.	
Marquette, Michigan	29.57	751.1	30.38	771.6	— 3	—19.4	83	W	7	3.1			10n		Calm	0.02	0.5	Light snow.	
Mason, Texas	28.40	721.3	30.25	768.3	26	— 3.3	89	NE	14	6.3			10n		NE	0.02	0.5	Light sleet	
Memphis, Tennessee	29.89	759.2	30.25	768.3	25	— 3.9	75	NW	7	3.1			10s		Calm	0	0	Cloudy	
Milwaukee, Wisconsin	29.54	750.3	30.37	771.4	2	—16.7	72	W	7	3.1			10n		Calm	0.04	1.0	Light snow.	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.97	761.2	30.04	763.0	50	10.0	93	E	5	2.2			10m;fog		Calm	0.01	0.3	Fair	
Montgomery, Alabama	29.87	758.7	30.11	764.8	42	5.6	91	NE	9	4.0			10s		Calm	0	0	Cloudy	
Morgantown, W. Virginia	29.21	741.9	30.27	768.8	25	— 3.9	87	Calm	0	0		5cs	0	W		Inap.	Inap.	Fair	
Moorhead, Minnesota	29.33	745.0	30.48	774.2	—25	—31.7	53	S	6	2.7		0	0			0	0	Clear	
Mt. Washington, N. H.	23.77	603.8	30.13	765.3	0	—17.8	54	NW	28	12.5		2cs	0	Calm		0	0	Clear	
Nashville, Tennessee	29.66	753.4	30.23	767.8	28	— 2.2	77	NW	2	0.9		10cs	0			0	0	Cloudy	
New Haven, Connecticut	30.41	772.4	30.54	775.7	5	—15.0	75	NE	17	7.6		5cs	0	SW		0	0	Fair	
New London, Connecticut	30.46	773.7	30.52	775.2	8	—13.3	55	N	7	3.1		0	0			0	0	Clear	
New Orleans, Louisiana	29.94	760.5	30.09	764.3	52	11.1	79	NE	5	2.2			10s		Calm	0	0	Cloudy	
Newport, Rhode Island	30.50	774.7	30.56	776.2	13	—10.6	81	N	4	1.8		0	0			0	0	Clear	
New River, N. Carolina					42	5.6	91	NE			4		10s		Calm			Cloudy	
New Shoreham, Rhode I'd	30.49	774.4	30.52	775.2	23	— 5.0	60	NE	23	10.3		0	0			0	0	Clear	
New York, New York	30.30	769.6	30.50	774 7	20	— 6.7	85	N	13	5.8		2cs	5s	Calm	W	0	0	Fair	
Norfolk, Virginia	30.18	766.6	30.24	768.1	33	0.6	89	N	12	5.4			10s;fg		N;C	0.14	3.6	Cloudy	
North Platte, Nebraska	27.18	690.4	30.23	767.8	—24	—31.1	56	W	11	4.9		0	0			0.02	0.5	Clear	
Olympia, Washington T'y	30.14	765.5	30.18	766.6	37.0	2.8	90	S	4	1.8			10n		Calm	0.02	0.5	Light rain	
Omaha, Nebraska	29.24	742.7	30.55	776.0	—16	—26.7	69	NW	1	0.4		0	0			0.04	1.0	Clear	
Oswego, New York	30.05	763.3	30.40	772.1	16	— 8.9	83	SE	11	4.9			10s		Calm	0.15	3.8	Cloudy	
Pensacola, Florida	30.05	763.3	30.09	764 3	48	8.9	93	NE	6	2.7			10s;fg		Calm	0.03	0.8	Cloudy	
Philadelphia, Pa	30.40	772.0	30.45	773.4	21	— 6.1	86	E	14	6.3			10s		Calm	0	0	Cloudy	
Phœnix, Arizona	29.00	736.6	30.95	786.1	27	— 2.8	64	NW	2	0.9		0	0			0	0	Clear	
Pike's Peak, Colorado	17.16	435.8	29.37	746.0	—30	—34.4	40	N	16	7.2		0	0			0	0	Clear	
Pilot Point, Texas	29.48	748.8	30.40	772.1	18	— 7.8	53	NW	16	7.2			10s		NW	0	0	Cloudy	
Ploche, Nevada	24.01	609.8	29.78	756.4	7	—13.9	54	SW	3	1.3		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.40	746.7	30.26	768.6	27	— 2.8	82	Calm	0	0		5cs	Fog	W	Calm	0	0	Fair	
Port Huron, Michigan	29.54	750.3	30.28	769.1	10	—12.2	79	NE	5	2.2			10s		Calm	0	0	Cloudy	
Portland, Maine	30.52	775.2	30.58	776.7	12	—11.1	61	NE	2	0.9		2cs	0	Calm		0	0	Clear	
Portland, Oregon	30.21	767.3	30.28	769.1	[illegible]	2.8	85	SE	3	1.3			10s		Calm	0.03	0.8	Cloudy	
Portsmouth, N. Carolina					[illegible]	7.8	100	NE	20	8.9			10n		Calm	0.35	8.9	Light rain	
Prescott, Arizona	24.72	627.9	30.08	764.0	12	—11.1	61	Calm	0	0		0	0			0	0	Clear	
Punta Rassa, Florida	29.96	761.0	29.97	761.2	66	18.9	84	E	7	3.1		10cs	0	SW		1.09	27.7	Cloudy	
Red Bluff, California	29.85	758.2	30.21	767.3	40.0	4.4	65	NE	3	1.3			10s		Calm	0	0	Cloudy	
Rio Grande City, Texas	29.70	755.9	29.98	761.5	46	7.8	92	NW	7	3.1			10s		Calm	0.02	0.5	Cloudy	
Rochester, New York	29.67	753.6	30.34	770.6	15	— 9.4	82	SE	6	2.7		9cs	Haze	SW		0	0	Cloudy	
Roseburg, Oregon	29.74	755.4	30.34	770.6	38	3.3	86	NE	3	1.3			10s		Calm	0	0	Cloudy	
Sacramento, California	30.14	765.5	30.22	767.6	39	3.9	91	SE	6	2.7			10s		Calm	0	0	Cloudy	
St. Louis, Missouri	29.71	754.6	30.36	771.1	8	—13.3	89	N	9	4.0		Haze	Fog			0	0	Fair	
St. Paul, Minnesota	29.46	748.3	30.44	773.2	—16	—26.7	70	SW	3	1.3		0	2s		SW	0.02	0.5	Fair	
Salt Lake City, Utah	25.72	653.3	30.05	763.3	10	—12.2	38	SE	2	0.9			10s		Calm	0	0	Cloudy	
San Antonio, Texas	29.34	745.2	30.08	764.0	38	3.3	100	NE	8	3.6			10s		Calm	0.19	4.8	Cloudy	
San Diego, California	30.09	764.3	30.17	766.3	36	2.2	61	E	2	0.9		0	0			0	0	Clear	
Sandusky, Ohio	29.50	749.3	30.32	770.1	19	— 7.2	85	E	6	2.7			10s		Calm	0	0	Cloudy	
Sandy Hook, New Jersey	30.43	772.9	30.46	773.7	23	— 5.0	73	NE	17	7.6			10s		Calm	0	0	Cloudy	
San Francisco, California	30.11	764.8	30.18	766.6	47	8.3	73	SE	1	0.4			10s		Calm	0	0	Cloudy	
Santa Fé, New Mexico	23.05	585.5	29.59	751.6	— 2	—18.9	66	Calm	0	0		0	0			0	0	Clear	
Savannah, Georgia	30.05	763.3	30.14	765.5	39	3.9	91	N	10	4.5			10s		Calm	0.45	11.4	Threatening	
Shreveport, Louisiana	29.91	759.7	30.16	766.1	34	1.1	61	NE	5	2.2			10s		Calm	0	0	Cloudy	
Silver City, New Mexico	24.11	612.4	30.56	776.2	23	— 5.0	60	NW	7	3.1		0	0			0	0	Clear	
Smithville, North Carolina	30.07	763.8	30.11	764.8	41	5.0	91	N	18	8.0			Fog			0.62	15.7	Light fog	
Socorro, New Mexico	25.45	646.4	29.51	749.5	14	—10.0	64	NW	1	0.4		0	0			0	0	Clear	
Springfield, Illinois	29.60	751.8	30.35	770.9	9	—12.8	78	NW	10	4.5			10s			0	0	Cloudy	
Springfield, Massachusetts	30.42	770.7	30.58	776.7	2	—16.7	44	N	3	1.3		0	0			0	0	Clear	
Stockton, Texas	27.04	686.8	30.04	763.0	16	— 8.9	83	N	16	7.2			10n		Calm	0.01	0.3	Light snow	
St. Vincent, Minnesota	29.34	745.2	30.27	768.8	—17	—27.2	100	SW	4	1.8		0	0			0	0	Clear	
Thatcher's Island, Mass	30.51	774.9	30.57	776.5	29	— 1.7	67	W	18	8.0		0	8ks		W	0	0	Cloudy	
Toledo, Ohio	29.49	749.0	30.24	768.1	15	— 9.4	83	N	11	4.9			10s		Calm	Inap.	Inap.	Threatening	
Tucson, Arizona	27.58	700.5	30.13	765.3	23	— 5.0	69	S	7	3.1		0	0			0	0	Clear	
Umatilla, Oregon	29.81	757.2	30.34	770.6	24	— 4.4	87	W	4	1.8			10s		Calm	0	0	Cloudy	
Uvalde, Texas	29.12	739.6	29.98	761.5	39	3.9	82	N	8	3.6			10n		Calm	0.15	3.8	Light rain	
Vicksburg, Mississippi	29.87	758.7	30.14	765.5	39	3.9	82	N	5	2.2			10s		Calm	0	0	Cloudy	
Visalia, California	29.82	757.4	30.21	767.3	41	5.0	91	NE	2	0.9			10s		Calm	0	0	Cloudy	
Washington, D. C.	30.29	769.4	30.42	772.7	22	— 5.6	100	N	4	1.8			10n		Calm	0.12	3.0	Light snow	
Wickenburg, Arizona					26	— 3.3	75	NW			1	0	0			0	0	Clear	
Wilmington, N. Carolina	30.06	763.5	30.11	764.8	40	4.4	91	N	10	4.5			10s		Calm	0.45	11.4	Cloudy	
Winnemucca, Nevada	25.70	652.8	30.06	763.5	27	— 2.8	76	NW	12	5.4			10s		Calm	0	0	Cloudy	
Wood's Holl, Mass	30.42	772.7	30.47	773.9	14	—10.0	82	NW	6	2.7		0	2s		Calm	0	0	Fair	
Yankton, Dakota	29.04	737.6	30.63	778.0	—31	—35.0	100	Calm	0	0		0	0			Inap.	Inap.	Clear	
Yuma, Arizona	30.01	762.2	30.16	766.1	44	6.7	23	NE	15	6.7		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	21.99	558.5			47.0	8,3	51	Calm	0	0		2c	0			0	0	Clear	Thomas Herran.
Havana, Cuba, W. I.	29.98	761.5	30.03	762.7	76	24.4	81	Calm	0	0		8cs	0	SW		0	0	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	30.17	766.2	30.23	767.8	17 2	— 8.2		Calm			0		3			0	0		
Kingston, Jamaica, W. I.	30.00	762.0	30.01	762.2	68.7	20.4	85	Calm	0	0		0	2s			0.05	1.3	Cloudy	Maxwell Hall.
Navassa, W. I.	29.98	760.5	30.02	762.5	76	24.4	77	NE	10	4.5		0	2s		NE	0	0	Clear	F. M. Everett.
Paramaribo, S. A.	29.94	761.5	29.98	761.5	76	24.4	91	E			1		10n	E		0.230	5.84	Raining	Dr. O. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	746.2	29.94	760.5	80	26.7	80	Calm			0		10ks		N	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					73	23		NE			3	0	1k		NE	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.06	763.5	30.09	764.3	73	22.8	85	Calm	0	0		Haze	0			0	0		Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	30.24	768.2	30.30	769.6	1.4	—17		Calm			0		3			0	0		
York Factory, B. A.	30.18	766.6	30.24	768.1	—47.0	—43.9		NW	10	4.5		0	0			0	0	Clear	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
M.H. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandre																			Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda																			Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J.Garforth
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.94	760.5	77	25.0	69	NNW			4		0							Squally	Capt. R. D. King.
H. M. S. Falcon,																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Callao Bay, Peru	29.93	760.2	67.5	19.7	89	SSW			1		4							Misty	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	29.73	755.1	55	12.8	68	SSE			1		3	S				1	E	D. clouds	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P.Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 25° 58′, E. 119° 29′	30.23	767.8	52.2	11.2	64	ESE			1		2							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 16° 46′, E. 63° 02′	30.04	763.0	78	25.6	69	NNE			3-4		2	E				3	NE	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 38° 42′, W. 9° 06′	29.72	754.9	47.5	8.6	96	ENE			3		10	E						Raining	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 20° 40′, W. 64° 02′	30.22	767.6	67	19.4	95	ESE			4		8					3	E	Showery	Capt. J. A. Fisher.
H. M. S. Orontes, N. 42° 10′, W. 9° 25′	29.73	755.1	56.5	13.6	83	E			3-4		9	W				5	E	D. clouds	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 13° 26′, E. 47° 07′	29.66	753.4	78	25.6	78	E			4		1					5	ESE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb, N. 37° 03′, E. 15° 18′	29.76	755.9	62	16.7	61	NNW			1-2		6							D. clouds	Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark																			Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Prayn, C. Verd Id's.	29.95	760.8	76.6	24.8	83	NE			2		5			0	0	1	SE	D. clouds	S. C da Silva Costa, Comd't.
Sado, St. Paul de Loando	29.89	759.1	82.0	27.8	83	NNE			2		8			1 h'r	20 m.	1	N	D. clouds	G. A de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	29.89	759.2	51	10.6	93	NE	4	1.8			10		NE	0.20	5.1			Cloudy	
N. Yard, Portsmouth, N. H.	30.53	775.4	3	—16.1	73	N	2	0.9		10c		Calm		0	0			Clear	
Naval Hospital, Yokohama, Japan	29.57	751.1	46.5	8.1	87	WSW			3		0			0	0			Clear	
Adams, Ancon, Peru	29.98	761.5	68	20.0	90	Calm			0		10					Sm'h		Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.15	765.8	45	7.2	84	ESE			2		10		SE	0	0			Cloudy	
Alert, Hong-Kong, China *.	30.05	763.3	62	16.7	56	Calm			0		0			0	0	Sm'h		Clear	
Alliance, Pensacola, Fla	30.03	762.7	49	9.4	100	NE			2		10			Light		Sm'h		Cloudy	
Ashuelot, Tientsin, China	30.32	770.1	14	—10.0	100	NNW			6		0							Clear	
Colorado, New York, N. Y.	30.47	773.9	20	— 6.7	85	NNE	5	2.2			8			0	0			Cloudy	
Constitution, N. Yard, League I'd., Pa			20	— 6.7		NE	3	1.3			10							Overcast	
Franklin, Off N. Yard, Norfolk, Va	30.21	767.3	34	1.1	100	NNE	13.2	5.9			10			0.15	3.8			Overcast	
Galena, N. 34° 45′, W. 15° 16′	29.66	753.4	65	18.3	73	SSW			3		2		S			Sm'h	SSW	Clear	
Independence, N. Yard, Mare I'd, Cal.	30.15	765.8	44	6.7	76	SE	12	5.4			8		SE	0	0			Cloudy	
Jamestown, Sitka, Alaska *	29.77	756.1	37	2.8	100	Calm			0		10			1.00	25.4			Cloudy	
Kearsarge, N. 13° 47′, W. 70° 47′	30.01	762.2	79	26.1	82	ENE			4		5		SE			Long	E	Fair	
Lackawanna, Ancon, Peru †.	30.08	764.0	70	21.1	75	Calm			0		10		S	0	0			Cloudy	
Marion, S. 53° 10′, W. 70° 53′	29.63	752.6	49	9.4	64	SW			1		10		SW			Mod.		Cloudy	
Michigan, Erie, Pennsylvania	30.25	768.3	17	— 8.3		E			2		10							Snowing	
Minnesota, New York, N. Y.	30.51	774.9	23	— 5.0		NE			2		8		NW					Hazy	
Monocacy, Shanghai, China	30.18	766.6	39	3.9	55	W			1		0							Clear	
New Hampshire, Port Royal, S. C.	30.11	764.8	49	9.4	31	NNW	14	6.3			10		Calm	0.02	0.5			Raining	
Nipsic, Villafranca, France	29.95	760.7	61	16.1	45	ESE			1		2					Sm'h		D. clouds	
Onward, Chimbote Bay, Peru †	29.89	759.2	70	21.1	80	S			2		2		NW			Long	N;W	Fair	
Palos, Shanghai, China	30.19	766.8	37	2.8	62	W			1		0							Clear	
Passaic, Washington, D. C.	30.46	773.7	24	— 4.4	87	NE			1		10		NE					Snowing	
Pensacola, N. 22° 58′ W. 110° 19′	29 95	760.7	66	18.9	74	ENE			3		2		E			Sm'h		Fair	
Portsmouth, Washington, D. C.	30.39	771.9	23	— 5.0	100	NE			1		10							Snowing	
Powhatan. New York, N. Y.	30.48	774.2	18	— 7.8		NNE			2		5		NE					Fair	
Quinnebaug, Alexandria, Egypt	29.94	760.5	65	18.3	49	WSW			6		1					Chop		Clear	
Richmond, Pagoda Anchorage, China	30.22	767.6	53	11.7	61	SE			1		0			0	0			Clear	
Saratoga, Baltimore, Md	30.42	772.7	23	— 5.0	100	NE			2		10			Mod.	snow			Snowing	
Shenandoah, Montevideo, Uruguay *	29.77	756.1	74	23.3	72	NNW			2		2					Sm'h		Fair	
St. Louis, League Island, Pa	30.42	772.7	21	— 6.1	86	NNE	13	5.8			10		WSW	c	o			Cloudy	
Swatara, N. 34° 31′, E. 135° 31′	29.85	758.2	43	6.1	75	WNW			5		2		W			Mod.	NW	Squally	
Tennessee, N. 15° 25′, W. 64° 18′	30.06	763.5	82	27.8	71	ENE	18	8.0			2		E	0.26	6.6	Sm'h		Fair	
Trenton, Villafranca, France *	29.91	759.7	61	16.1	45				0-1		0			0	0			Clear	
Vandalia. N. 34° 13′, W. 65° 52′	30.38	771.6	56	13.3	100	E			5		10		E			Mod.	NE	Raining	
Wabash, Boston, Massachusetts	30.57	776.5	6	—14.4	76	WNW	4	1.8			0			0	0			Clear	
Wachusetts, Taboga near Panama. *	29.54	750.3	78	25.6	86	NW			2		2		N	0	0	Sm'h		Fair	
Wyoming, Naples, Italy	29.86	758.4	51	10.6	59	NNE			3		2		NE			Sm'h		Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic, N. 41° 20′, W. 52° 10′	29.62	752.3	38	3.3	100	NW			6		10					7	W	Rain & snow	Capt. H. Parsell.
Ship Baroda, ‡ S. 26° 16′, E. 49° 37′	29.93	760.2	79.8	26.6	82	NNE			5		7							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡ N. 34° 30′, W. 200° 09′	29.55	750.6	63.2	17.3	66	SSW			5		5							D. clouds	Capt. H. Youlden.
City of Agra, ‡ S. 54° 13′, W. 116° 30′	29.65	753.1	43.5	6.4	96	S			4		10							Raining	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Coppename, N. 35° 25′, W. 190° 16′	29.59	751.6	63.3	17.4	69	SW			5		3							D. clouds	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡ S. 25° 56′, E. 61° 30′	30.09	764.3	78	25.6	65	E			4-5		4							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡ N. 52° 45′, W. 27° 42′	29.53	750.0	51	10.6	93	E			8		10					8	ESE	Overcast	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross, N. 51° 45′, W. 5° 10′	30.35	770.9	41.5	5.3	96	Var.			1		8					1	SW	Misty	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ N. 10° 04′, E. 85° 50′	29.88	758.9	78.5	25.8	82	NNE			5		9							Overcast	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, N. 55° 45′, W. 8° 50′	30.37	771.4	46.5	8.1	70	NNW			1		10							Misty	Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ Entrance Suez Canal	29.91	759 7									3							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Britanic, N. 49° 59′, W. 23° 26′ †	29.67	753.6	56	13.3		SE			7		10		SE			Very H'vy	SE	Showery	Capt. H. Perry.
S. S. Celtic, N. 48° 29′, W. 40° 30′ †	28.84	732.5	52	11.1		NE			2		10		W	4 hours Drizzles		Mod.	S	Cloudy	Capt. Benj. Gleadell.
S. S. Germanic, N. 41° 47′, W. 58° 11′ †	30.09	764.3	38	3.3		WNW			7		5?		WNW	Snow Showers		H'vy	WNW	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Köln																			
S. S. Leipzig, ‡ N. 49° 45′, W. 17° 42′	29.94	760.5	52.5	11.4	76	SE			7		5		SE	0	0	R'gh	SE	Fair	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡ S. 24° 45′, W. 30° 56′ ... *†	30.00	762.0	78.4	25.8	83	ESE			1		6?							Overcast?	Capt. Albert Fredholm.
Ship Peru, ‡ N. 22° 54′, W. 85° 46′	29.96	760.9	77.4	25.2	50	SE			2		10ns								Capt. O. F. Sködelrand.

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						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 51° 34′, W. 8° 28′	30.31	769.9	44	6.7	84	SSE			3		8?		SSE			Sm'h	S	Clear?	Capt. J. W. Shackford.
S. S. Indiana, ‡ Philadelphia, Pa. †			22	— 5.6		NE			3		8		E	0	0				Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 51° 53′, W. 22° 50′ *†	29.88	758.9	54	12.2	93	SSE			6		10		SE	Light		H'vy	SE	Raining	Wm. Shakford, 1st Off'r.
S. S. Pennsylvania, ‡ N. 43° 15′, W. 57° 25′ †	29.63	752.6	27	— 2.8		NW			8		10		NW	0	0	Very R'gh	NW	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 29° 20′, W. 117° 30′ †	30.12	765.0	59	15.0	70	N			3		0			0	0	G'tl	WNW	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 35° 56′, E. 165° 47′ †	30.13	765.3	61	16.1	77	WSW			3		2		WSW	0	0	Mod.	W	Clear	Capt. H. Davison.
S. S. Gaelic, N. 38° 00′, W. 123° 15′ *†	30.30	769.6	58	14.4	88	E			2		10		E			Sm'h	N	Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 38° 35′, E. 147° 27′	29.87	758.7	40	4.4	91	NE			4		10		WSW	0.05	1.3	Mod.	NW	Fine	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia, Astoria, Oregon †	30.22	767.6	39	3.9	82	SSE			2		8		SSE					Cloudy	Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, N. 35° 18′, W. 120° 58′ †	30.10	764.5	51	10.6	65	N			2		0					Sm'h		Clear	Capt. J. N. Ingalls.
S. S. Idaho																			C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 34° 23′, W. 119° 38′ †	30.15	765.8	59	15.0	82	Calm			0		0					Sm'h		Fair	
S. S. State of California, Portland, Oregon	30.34	770.6	37	2.8	83	Calm			0		10		SE					Cloudy	Capt. G. Debney.
S. S. Victoria, Nanaimo, Vancouver Id. †	30.13	765.3	36	2.2	90	W			1		0					Sm'h		Clear	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, S. 16° —′, W. 172° 50′ †	29.83	757.7	82	27.8	96	SE			3		1		SE	0	0	Light	SE	Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, N. 33° 46′, W. 135° 24′ †	30.29	769.4	58	14.4	82	S			3		5		SW	0	0	Sm'h		Fair	Capt. G. G. Berry.
S. S. City of Sidney, S. 17° 08′, W. 171° 39′ †	29.79	756.7	80	26.7	66	ESE			3		2		E	0	0	Long	NE	Clear	Capt. H. C. Dearborn.
S. S. City of Tokio, Hong Kong, China †	30.29	769.4	56	13.3	87	E			1		0			0	0			Clear	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 15° 28′, W. 93° 22′ †	29.91	759.7	78	25.6	78	NNW			3		5		Calm	0	0	Sm'll	S	Misty	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffithe.
S. S. Granada, N. 23° 00′, W. 108° 10′ †	29.84	757.9	70	21.1	75	NNE			4		2		ENE	0	0	Sm'll	N	Clear	
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland ‡																			Capt. Sam'l Jackson.
S. S. Nederland ‡																			Capt. S. Stokes.
S. S. Rhyniand ‡																			Capt. W. Geo. Randle.
S. S. Vaderland ‡																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Brunswick, Ga.	30.12	765.0	46	7.8	92	NE			4		Fog			0.51	13.0			Foggy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, ‡ Arroyo, P. R. †	30.33	770.4	79	26.1		ENE			4		2		E	0	0	Sm'h		Clearing	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va. †	30.24	768.1	34	1.1	100	NE	2	0.9			10n							Raining	
Sch'r Hattie V. Kelsey,																			Capt. J. L. Randall.
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Spain †	29.70	754.4	48	8.9	100	NE			7		10		W	Hea	vy			Rainy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 10, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours		Weather	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.84	757.8	65.5	18.6	79	SW			6		8			0	0	Cloudy	Dr. Ollive.
Nemours			29.90	759.4	61.5	16.4	83	WNW			1		3			0.126	3.2	Pretty fair	Raynard.
Algiers			29.93	760.2	56.5	13.6	75	SE			1		4			0.098	2.5	Cloudy	Nicolas.
La Calle			29.95	760.8	58.6	14.8	74	SW			1		5			0	0	Cloudy	Fonfréde.
Tunis			29.95	760.6															Jacques.
Sfax			30.06	763.5															Gau.
Saida			30.11	764.9	57.6	14.2	95	SW			4		2			0	0	Fair	Dumas.
Tebessa			30.05	763.3	45.7	7.6	69	WSW			4		10			0	0	Covered	Watrin.
Gerville																			Lonchamp.
Laghouat			30.00	762.0	60.8	16.0	81	SE			1		1			0	0	Very fair	Herbin.
Biskra			30.08	764.1	55.0	12.8	75	E			1		5			0	0	Cloudy	Baudassé.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.68	753.9	29.78	756.4	74.3	23.5	61	ESE	3	1.5			10			0	0	Dull	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			30.30	769.6	73	22.8		S			2		5k			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.39	746.5	29.97	761.3	28.4	— 2.0	80	NE			2		8			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.92	734.5	29.72	755.0	24.8	— 4.0	91	W	11.9	5.3			9			0	0		Dr. Wiersbicki.
Eperies	28.85	732.8	29.78	756.4	24.1	— 4.4	77	S			5		9ks		N	0	0		Julius Mikolike.
Gratz‡	28.61	726.6	29.92	760.0	25.9	— 3.4	70	SSE			3		0			0	0		Andreas Rospini.
Hermannstadt	28.45	722.6	30.00	762.1	13.3	—10.4	100	W			1		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.54	724.8	29.97	761.2	21.4	— 5.9	90	WNW			2		5			0	0		The Staff.
Lemberg	28.65	727.8	29.70	754.3	23.2	— 4.9	64	SW			3		5			0	0		Dr. T. Stanecki.
Pola	29.83	757.6	29.95	760.6	37.0	2.8	91	N			1		5			0	0		I. R. HydrographicOffice
Szathmar	29.44	747.8	29.89	759.3	24.1	— 4.4	95	S			2		8			0	0		Beicht Peter, S. J.
Szegedin	29.65	753.1	29.95	760.6	29.7	— 1.3	89	S			1		0			0	0		Karl Stancel.
Trieste	29.88	758.9	29.98	761.5	34.9	1.6	64	Calm			0		7			0	0	Almost cl'dy	P. Busin.
Vienna	29.17	740.8	29.93	760.2	23.4	— 4.8	71	W			3		0			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 17, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.98	761.5	30.08	764.0	32.7	0.4	82	NW	15	6.7			9			0.040	1.02	Snowy	W. Boswell.
Armagh, Observatory	29.91	759.7	30.16	766.1	31.0	— 0.6	95	SW	1	0.4			10					Foggy	S. Call.
Bidston, Liverpool Obs'y			30.10	764.5	30.5	— 0.8	85	WNW	5	2.2			10					Overcast	John Hartnup.
Bolton, Sharples	29.52	749.8	30.08	764.0	32.6	0.3	79	N	15	6.7			5					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.59	751.6	29.98	761.5	33.9	1.1	85	NW			1		10			Blank	Blank	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.01	762.2	30.04	763.0	80.0	26.7	74	NE			3		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			30.00	762.0	33.6	0.9	88	NW			0.4		10					Overcast	John McLaren.
Chatham, School M. E.	29.89	759.2	30.02	762.5	35.2	1.8	72	W			1		0			Blank	Blank	Blue sky	Cpl. Gwinn, R. E.
Falmouth, Observatory	29.82	757.4	30.06	763.5	37.0	2.8	67	ENE			4		9					Overcast	The Staff.
Fort Napier, Natal	27.74	704.6	29.96	761.0	65.4	18.6	77	NE			3		8					Overcast	Pvt. E. K.Anniss, A.H.C.
Free-Town, Sierra Leone	29.64	752.8	29.88	758.9	85	29.4	87	SE			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			30.07	763.8	25	— 3.9	87	N			2		0					Foggy	J. O'Donaghadue.
Gibraltar, Mediterranean	29.89	759.2	29.94	760.5	59	15.0	95	ENE			3		10					Gloomy	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.92	760.0	30.12	765.0	25.9	— 3.4	100	ENE			1							Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.86	758.4	30.04	763.0	33.6	0.9	71	WNW			1		8					Gloomy	The Staff.
Guernsey	29.97	761.2	30.00	762.0	37.5	3.1	76	ENE			2		7					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.01	762.2	30.05	763.3	33.6	0.9	70	NNW	11	4.9			4					Blue sky	The Met'g'l Office.
Leicester, Museum	29.74	755.4	30.01	762.2	34.9	1.6	74	NE			2		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.88	758.9	29.95	760.7	60.2	15.7	60	SW			1		8					Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas			30.05	763.5	73.0	22.8	100	S			1		2					Blue sky	C. S. Duncombe.
Oscott, St. Mary's College	29.52	749.8	30.08	764.0	31.2	— 0.4	87	NNW			2		9					Misty	Robert Pate.
Oxford, Radcliffe Obs'y	29.81	757.2	30.06	763.5	32	0.0	79	NW			1		0					Misty	The Staff.
Plymouth	29.98	761.5	30.06	763.5	36.0	2.2	69	NE			2		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.09	764.3	34	1.1	80	N	25	11.2			7					Snowing	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.92	760.0	29.99	761.7	39.0	3.9	74	NNE			1		10					Gloomy	Serg't W. H. Lyne.
Sheffield	29.76	755.9	30.05	763.3	36.8	2.7	78	N			1		10					Overcast	W. F. Cooper.
Silloth Rectory	30.15	765.8	30.18	766.6	29.2	— 1.6	59	Calm			0		10			0	0	Overcast	Rev. F. Redford, A. M.
Stonyhurst, Observatory			30.09	764.3	28.6	— 1.9	94	NE	1	0.4			10					Overcast	Rev. S. J. Perry.
Strathfield Turgiss					33.6	0.9	79	NW			1		8					D. clouds	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	29.98	761.5	30.08	764.0	39	3.9	73	NE			4		4					D. clouds	W. Newcombe.
Valencia, Observatory	30.08	764.0	30.10	764.5	37.4	3.0	71	E	6	2.7			0					Misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	30.40	772.1	30.44	773.2	— 2.5	—19.2		Calm	0	0			10n			0	0	Cloudy	Hon. J. Ferguson.
Chatham, N. B.*	30.38	771.6	30.45	773.4	— 6	—21.1	92	Calm	0	0		2k	8ks	Calm	Calm	0	0	Cloudy	G. A. Blair.
Charlottetown, P. E. Island	30.38	771.6	30.43	772.9	— 1	—18.3	100	W	2	0.9		0	0			0	0	Clear	H. J. Cundall, C. E.
Chicontime, Quebec					8.1	—13.3		SE			5		10n			0.01	0.3	Light snow	Rev. V. A. Huart.
Cornwall, Ontario	29.71	754.6	29.92	760.0	20.0	— 6.7	94	NE			1		10n			0.30	7.6	Snowing	James Smith, M. A.
Dalhousie, N. B	30.34	770.6	30.38	771.6	10.0	—12.2		Calm			0		10s			0	0	Cloudy	H. A. Johnson.
Father Point, Quebec*	30.29	769.4	30.31	769.9	4	—15.6	82	NE	3	1.3			10n			Inap.	Inap.	Light snow	J. McWilliams.
Fredericton, N. B.	30.35	770.9	30.42	772.7	1.3	—17.1	91	E	2	0.9			10s			0	0	Cloudy	Prof. Harrison.
Fort Garry, Manitoba*	29.07	738.4	30.06	763.5	—32	—35.6	100	Calm	0	0		0	0			0	0	Clear	James Stewart.
Granton, Ontario	28.92	734.6	30.10	764.5	16.0	— 8.9	100	NW			1		10n			0.10	2.5	Cloudy	James Grant.
Halifax, N. S.*	30.30	769.6	30.45	773.4	8	—13.3	86	N	4	1.8		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario	29.64	752.8	30.06	763.5	19.7	— 6.8	92	SW			1		10k			0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.55	750.6	29.90	759.4	27	— 2.8	93	S	2	0.9			10n			0.34	8.6	Light snow	S. Woods, M. A.
Little Glace Bay, N. S.	30.30	769.6	30.34	770.6	18.5	— 7.5	94	N	3	1.3		2k	0	N		0	0	Clear	C. H. Rigby.
Montreal, Quebec*	29.78	756.4	29.99	761.7	17	— 8.3	94	E	5	2.2			10n			0.72	18.3	Light snow	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A.
Parry Sound, Ontario*	29.33	745.0	30.09	764.3	11	—11.7	80	N	10	4.5			10n		N	0.12	3.0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.26	743.2	30.07	763.8	19.4	— 7.0	84	N			1		10n			0.40	10.2	Snowing	J. F. Jeffers, M. A.
Port Dover, Ontario	29.31	744.5	30.05	763.3	18	— 7.8	98	NW	6	2.7			10n			0.36	9.1	Light snow	H. Morgan.
Port Stanley, Ontario	29.40	746.7	30.09	764.3	17	— 8.3	95	W	8	3.6			10n		W	0.22	5.6	Light snow	M. Payne.
Quebec, Quebec*	29.79	756.7	30.14	765.5	12	—11.1	100	NE			7		10n		NE	0.12	3.0	Threatening	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.54	750.3	30.05	763.3	11	—11.7	88	W	4	1.8			10n			0.44	11.2	Light snow	W. H. McIntyre.
St. Andrews	30.31	769.9	30.37	771.4	15	— 9.4	86	SE	6	2.7			10n			0	0	Cloudy	
St. John's, N. B	30.20	767.1	30.38	771.6	8.0	—13.3	78	NE	8	3.6		0	10s			0	0	Cloudy	G. Murdock, C. E.
Saugeen, Ontario*	29.40	746.7	30.18	766.6	12	—11.1	95	N	14	6.3			10s			0.31	7.9	Cloudy	K. Stewart.
Stratford, Ontario	28.74	730.0	30.12	765.0	13.8	—10.1	96	Calm	0	0			10s			0.20	5.1	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	30.30	769.6	30.34	770.6	13	—10.3	90	W	4	1.8		0	0			0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.62	752.3	30.03	762.7	20	— 6.7	91	NW	4	1.8			10n			0.02	0.5	Light snow	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario	28.92	734.6	30.07	763.8	16.6	—27.0	92	W	9	4.0			10s			0.45	11.4	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*																			Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.94	760 5	30.12	765.0	24	— 4.4	100	NE	1	0.4		10k	10s			0	0	Cloudy	John Delany.
St. Pierre, N. F.			30.08	764.0	16.5	— 8.6		NW			3					0	0		N. F. Land, Comd't.
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.82	757.4	29.85	758.2	87.0	30.6	41	NW	10.1	4.5		4ck	6ks			0	0		The Staff, for D. Gill.
Cape St. Francis Lt. House	29.85	758.4			68.0	20.0	83	E	17.6	8.0			0			0.140	3.56	Blue sky	John Duthie.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.54	775.6	30.56	776.2	22.1	— 5.5	55	NW	2.9	1.3		4cs		W		0	0	Cloudy	M. Marc Dechevrens, S J.

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

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.22	666.0	29.94	760.5	59.0	15.0	94	NE			1					0	0	Clear	Federico Maison.

DANISH SERIES.

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

Copenhagen	29.48	748.9	29.53	750.1	31.5	—0.3	68	NW	20	9		1							
Faröe	29.63	752.5	29.65	753.0	33.4	0.8	87	NW			6	1							
Godthaab, Greenland	30.10	764.5	30.14	765.6	38.1	3.4	76	ENE			2	10							
Stykkisholm, Iceland	30.51	775.0	30.56	776.1	25.2	—3.8	95	E			4	8						Snowing	
Thorshavn	30.22	767.6	30.26	768.5	29.3	—1.5	64	NNE	22	10		7							
Vestervig	29.53	750.1	29.63	752.5	33.1	0.6	73	NNW			2	0							

FRENCH SERIES.

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

Agen, Normal School	29.16	740.6	29.84	757.8	33.1	0.6	89	E			1	n		E		0	0		M. Labroue, Director.
Alençon	29.48	748.8	30.03	762.8	24.8	—4	95	NE			1	k				0	0	Clear	M. Nicot, Director.
Arras, Engineer School	29.73	755.2	30.00	762.1	30.6	—0.8	89	SSE				n							M. Klein, Commandant.
Avignon, Normal School	29.82	757.3	29.89	759.3	37.4	3	66	N			1	10				0	0	Covered	M. Giraud, Director.
Bar-sur-Seine ‖	29.40	746.7	29.98	761.6	27.3	—2.6	84	ESE			1	0				0	0	Clear	M. Saillard, Director.
Beauvais, Normal School	29.76	755.8	30.04	763.0	25.7	—3.5	89	NE			1	0				0	0	Clear	M. Frère Eugene Marie.
Besançon, Normal School	29.02	737.2	29.96	761.0	30.4	—0.9	81	NNE			1	0				0	0	Clear	M. Gobin, Director.
Bordeaux, Observatory	29.54	750.4	29.82	757.4	25.9	—3.4	93	ESE			1	10				0	0	Foggy	M. Rayet, Director.
Bourges, Normal School	29.31	744.4	29.89	759.2	31.6	—0.2	83	N			1	1		N		0	0	Clear	M. Postel, Director.
Brest, Naval Observatory	29.76	755.9	30.00	762.1	35.6	2.0	67	NNE			2	0				0	0		M. de Kermaree, Dir.
Caen, Normal School	29.88	758.9	29.97	761.1	32.4	0.2	100	NE			1	1		NE		0	0	Clear	M. Bétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.72	754.9	30.06	763.4	32.0	0.0	78	NW			1	0				0	0	Clear	M. Jadot, Director.
Charleville, Normal School	29.51	749.5	30.05	763.2	30.6	—0.8	89	S			1	0				0	0	Clear	M. Baumier, Director.
Clermont-Ferrand Obs'y	28.47	723.2	29.89	759.2	31.3	—0.4	83	SSW			1	0				0	0		M. Allnard, Director.
Cluny, Normal School	29.06	738.1	29.92	760.0	35.2	1.8		NE			1	0				0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	29.10	739.2	30.02	762.5	24.1	—4.4	81	ENE			1					0	0		Dr. Coulet, Director.
Gap, Normal School	27.27	692.6	29.88	759.0	33.8	1	65	S			1	k		N		0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.77	730.8	29.91	759.8	43.5	6.4	74	NE			1	10		SE		0	0		M. Kina, Director.
Grenoble, Normal School	29.15	740.4	29.95	760.8	32.4	0.2		E			1	0				0	0	Clear	M. Ablard, Director.
Guéret, Normal School	28.22	716.9	29.88	758.9	32.9	0.5	61	SE			1	0				0	0	Clear	M. Rivoir, Director.
Lamballe, Normal School	29.70	754.3	29.98	761.6	32.0	0.0	76	E			1	1		E		0	0	Very clear	M. Ollitrault, Director.
Lescar, Normal School	29.25	742.9	29.95	760.8	33.8	1	81	NW				2		W		0	0	Slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	29.92	760.0	30.02	762.6	34.9	1.6	74	NE			2	0				0	0	Clear	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.85	732.9	29.92	760.0	31.3	—0.4	81	N			1	0				0	0	Hazy	M. André, Director.
Mans, Normal School	29.69	754.2	30.02	762.4	27.3	—2.6	94	E			1	0				0	0	Clear	M. Piboeu, Director.
Marseille, Observatory	29.58	751.4	29.85	758.3	50.2	10.1	62	E			1	10		W		Inap.	Inap.		M. Stephan, Director.
Montlouis l'Instituteur	24.49	622.1	29.73	755.1	28.4	—2.0	64	W	9.4	4.2		8	NW			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.75	755.6	29.86	758.4	38.5	3.6	76	N			3	10				0.177	4.5	Raining	M. Galzin, Director.
Nancy, Normal School	29.15	740.5	29.97	761.2	25.9	—3.4	74	NW			1	0				0	0	Clear	M. Hasse.
Nantes, Observatory	29.82	757.5	29.98	761.6	32.0	0.0	78	NE			2	0				0	0	Clear	M. Lavocque, Dir.
Nice	29.86	758.4	29.89	759.3	48.9	9.4	61	SE			1	5	W	W		0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.65	753.1	29.76	755.8	41.4	5.2	8	NE	5.6	2.5		10		N		0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.19	563.6			26.6	—3.0						10		SW		0.057	1.7	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.84	732.5	29.94	760.5	32.9	0.5	88	NE			1	10	NE	NE		0	0	Foggy	M. Tallien.
Puy de Dôme Obs'y, Summit	24.85	631.1			26.4	—3.1	62	W			1	0				0.008	0.2		M. Allnard, Director.
Rochefort, Naval Obs'y	29.81	757.2	29.84	758.0	33.8	1.0	86	E			2	0				0	0	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.69	754.0	29.91	759.7	29.8	—1.2	92	NNE			2	0				0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.63	701.8	29.85	758.2	36.7	2.6	58	W			1			W		0	0		M. Richard, Director.
Rouen, Normal School	29.91	759.7	30.00	761.9	32.7	0.4	93	SE			1	2		NE		0	0	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	29.91	759.8	30.07	763.8	29.3	—1.5	92	E			1	0				0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.84	758.0	30.01	762.2	25.9	—3.4	79	NE			1	0						Clear	M. Renou, Director.
Toulouse, Observatory	29.10	739.1	29.82	757.4	28.9	—1.7	100	N			1	5				0	0	Cloudy	M. Baillaud, Director.
Tours	29.72	754.8	29.91	759.8				NE			2	0				0	0	Clear	M. de Tastes.
Versailles, Observatory	29.49	749.1	29.98	761.6	25.5	—3.6	77	NE			1	0				0	0	Clear	Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	29.04	737.5	29.89	759.3	28.0	—2.2	90	SSE			5	8k	E		0.004	0.1	Light snow	Prof. Dr. Hoh.
Berlin	29.46	748.2	29.63	752.7	32.7	0.4	80	SW			3	3			0.059	1.5	Snowing	Prof. Dr. Arndt.
Breslau	29.14	740.2	29.67	753.5	25.4	—3.1	78	WSW			2	10			0	0		Royal University Obs'y.
Carlsruhe	29.57	751.0	30.02	762.5	24.4	—4.2	78	SW			2	0			0	0		Albert Senz.
Cassel	29.18	741.1	29.78	756.4	28.0	—2.2	92	SW			4	10	NW		0	0		Dr. H. Möhl.
Frankfort on the Main	29.64	752.9	30.02	762.6	29.5	—1.4	67	SSW			2	3			0	0		Physical Society.
Friedrichshafen	28.48	723.4	29.98	761.6	29.7	—1.3	54	NE			3	9	SSW		0	0		Chief Telegrapher Wilhelm.
Hamburg	29.61	752.2	29.69	754.0	33.1	0.6	82	WNW			3	6			0.067	1.7		Dr. R. Kleeman.
Kiel	29.57	751.1	29.59	751.5	33.1	0.6	60	NW			5	2			0.015	0.38		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.33	745.0	29.77	756.2	28.0	—2.2	83	SW			3	10					Snowing	Prof. Dr. Bruhns.
Magdeburg	29.49	749.0	29.72	754.9	30.9	—0.6	90	W			5	10ks			0.035	0.9		Dr. Assmans.
Memel	29.24	742.6	29.28	743.7	26.6	—3.0	83	NNW			6-7	10k					Snow-squalls	Reinbrecht & Issermann.
Munich	28.05	712.5	29.91	759.6	23.2	—4.9	69	W			2	9	W		0	0		Central Station.
Neufahrwasser	29.42	747.3	29.44	747.7	29.5	—1.4	80	W			2	7			0.083	2.1		A Lothes.
Neustadt, Palatinate	29.31	744.5	29.84	757.8	27.7	—2.4		S			2	0			0	0		Dicknether.
Stuttgart	28.97	735.8	29.91	759.8	25.3	—3.7	71	S			1	0			0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.37	720.5	29.89	759.3	24.6	—4.1	79	W			2	3	W		0	0			Prof. Kemlein.
Wustrow	29.58	751.4	29.61	752.0	33.1	0.6	75	NW			5	10s			0.039	1.0			Prof. S. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force. 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.61	752.2	30.02	762.4	49.8	9.9		NE			1.0		10					Covered	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.04	762.9	30.09	764.2	71.5	21.9	56	SW	10.0	4.5			0			0	0	Blue sky	
Deesa	29.53	750.0	30.01	762.3	74.4	23.6	22	NNW	9.7	4.3			0			0	0	Blue sky	
Bombay	29.92	760.0	29.96	761.0	76.7	24.8	55	NNW	28.0	12.5			0			0	0	Blue sky	
Poona, Yarrowda	28.06	712.8	29.91	759.7	82.2	27.9	25	SW	9.0	4.0			3		WSW	0	0	D. clouds	
Belgaum	27.38	695.4	29.91	759.6	78.8	26.0	36	ENE	5.0	2.2			4		NE	0	0	D. clouds	
Lahore	29.30	744.3	30.08	764.0	61.6	16.4	41	Calm	0.8	0.4			0			0	0	Blue sky	
Roorkee	29.11	739.4	30.05	763.3	59.8	15.4	86	W	1.9	0.8			0			0	0		
Agra	29.49	749.0	30.08	763.9	66.4	19.1	41	W	3.5	1.6			0			0	0		
Nagpur	28.92	734.6	29.97	761.3	78.7	25.9	40	SE	2.9	1.3			1			0	0	Blue sky	
Jubbulpore	28.61	726.8	30.00	762.0	73.6	23.1	58	Calm	1.3	0.6			3		E	0	0	D. clouds	
Lucknow	29.62	752.2	30.01	762.3	61.3	16.3	38	Calm	1.3	0.6			0			0	0	Blue sky	
Allahabad	29.72	754.9	30.05	763.2	62.8	17.1	62	Calm	0.6	0.3			0			0	0	Blue sky	
Patna	29.83	757.8	30.02	762.6	61.7	16.5	51	W	1.0	0.4			0			0	0	Blue sky	
Hazaribagh	27.98	710.7	30.06	763.5	64.0	17.8	35	N	6.1	2.7			0			0	0	Blue sky	
Cuttack	29.96	761.0	30.04	763.1	75.0	23.9	56	WNW	0.6	0.3			0			0	0	Blue sky	
Calcutta, Alipore	30.03	762.8	30.05	763.3	68.3	20.2	65	W	0.5	0.2			0			0	0	Blue sky	
Goalpara	29.66	753.2	30.08	763.9	65.1	18.4	64	Calm	1.3	0.6			0			0	0	Blue sky	
Chittagong	29.98	761.4	30.07	763.8	65.8	18.8	68	NW	3.4	1.5			2			0	0	Misty	
Sibsagar	29.69	754.2	30.05	763.2	58.1	14.5	90	SW	1.3	0.6			4			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.55	750.5	29.97	761.3	30.2	— 1.0	52	Calm	0	0			2			0	0		Prof. Giovanni Clodig.
Milan	29.40	746.7	29.94	760.5	33.8	1.0	87	SSE	1.3	0.6			3			0	0		Prof. Schiaparelli.
Padua	29.85	758.3	29.97	761.2	32.4	0.2	83	NNE	3.1	1.4			5		SSW	0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.00	736.6	29.95	760.7	34.3	1.3	76	ENE	1.8	0.8			0			0	0		Prof. P. F. Denza.
Genoa	29.73	755.2	29.93	760.3	39.7	4.3	45	NE	3.8	1.7			10		SE	0	0		Prof. G. M. Garibaldi.
Mondovi	27.96	710.1	29.97	761.3	29.1	— 1.6	72	W			2		0			0	0		Prof. D. C. Bruno.
Pesaro	29.91	759.7	29.96	761.0	38.5	3.6	57	W	7.4	3.3			10		S	0	0		Prof. Luigi Guidi.
Florence	29.67	753.5	29.93	760.1	39.4	4.1	54	NNE			2		10		W	0	0		Cav. F. Meucci.
Leghorn	29.85	758.1	29.93	760.3	41.2	5.1	59	NE	9.4	4.2			7			0	0		Prof. P. Monte.
Rome	29.71	754.6	29.89	759.1	48.6	9.2	60	NNE	3.8	1.7			1			0.012	0.3		Prof. P. S. Ferrari.
Lecce	29.73	755.1	29.99	761.7	48.4	9.1	55	SW	1.8	0.8			7		W	0.039	1.0		Prof. C. de Giorgi.
Cosenza	29.07	738.4	29.98	761.4	44.6	7.0	71	Calm	0	0			10		W	0.205	5.2		Prof. D. Conti.
Cagliari	29.64	752.9	29.84	757.9	55.2	12.9	70	Calm			0		6		SW	0	0		Prof. A. Pacinotti.
Palermo	29.67	753.5	29.92	759.9	57.7	14.3	49	SW	10.5	4.7			9			0	0		Prof. G. Cacciatore.
Syracuse	29.90	759.4	29.94	760.5	58.1	14.5	67	WSW	6.3	2.8			7		WNW	0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R.	29.37	746.0	29.91	759.6	47.8	8.8	63	NNW	3.1	1.4			10		W	0	0		Prof. F. Brioschi.
Stelvio	21.97	558.0			12.9	—10.6	69	E					0			0	0		P. F. Denza.
Valdobbia	21.83	554.5			17.6	— 8.0	62	SE					0			0	0		
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.09	764.3	30.10	764.5	28.0	— 2.2	58	NNW	2.8	1.3			5ck		W	0	0	Fair	K. Sasaki.
Kioto	29.75	755.6	29.93	760.2	27.2	— 2.7	68						4s;ck			0.088	2.24	Fair	
Nagasaki, I. M. Obs'y	29.99	761.7	30.20	767.1	34.2	1.2	68	NNW	11.1	5.0		ck	9s			0.250	6.35	Cloudy	S. Tukehayashi.
Tokei Obs'y, Yeddo	29.53	750.0	29.60	751.8	39.6	4.2	79	SSW	13.6	6.1		0	0			0.010	0.25	Clear	The Staff.
Wakayama	29.94	760.5	29.99	761.7	32.4	0.2	54					9ck;1s			WNW	0.055	1.40	Cloudy	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.75	755.6	29.93	760.3	80.4	26.9	56	E	13.0	5.8		1	4		ESE	0.01	0.3	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.76	755.9	30.02	762.6	57.6	14.2	70	E			1	0	1k			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascallentes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.96	761.0	29.96	761.0	37.2	2.9		NW			3					0.008	0.2		
Groningen	29.76	756.0	29.82	757.4	35.1	1.7		N			4					0.039	1.0		
Helder	29.87	758.7	29.87	758.7	38.3	3.5		NNW			5					0.039	1.0		
Hellevoetsluis	29.93	760.2	29.93	760.2	36.7	2.6	88	WNW			3					0	0		
Utrecht	29.86	758.4	29.91	759.6	35.2	1.8	91	WSW			2		10			0.075	1.9	Dull	H. van der Brink.

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

NORWEGIAN SERIES.

Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.

Bergen	29.64	752.9	29.71	754.5	32.4	0.2	71	NNW	9.4	4.2			2			0.157	4.0		
Christiania	29.55	750.6	29.71	754.6	17.1	— 8.3	55	NE	11	5			3			0	0		
Gjæsvær	29.91	759.7	29.93	760.3	18.7	— 7.4		Calm			0		10					Snowing	
Lodingen	29.90	759.4	29.95	760.6	14.5	— 9.7	68	N			2		0			0	0		

PORTUGUESE SERIES.

Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Angra, Azores	28.75	730.2	28.91	734.3	53.2	11.8	78	W	19.9	8.9			4			1.024	25.0		Dr. J. A. Sampaio.
Campo Major	28.73	729.8	29.74	755.5	49.6	9.8	97	ENE	1.3	0.6			10			0.197	5.0	Foggy	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.51	749.6	29.60	751.8	65.7	18.7	84	SSW	11.9	5.3			10			0.673	17.1		Capt. D. A. de Cunha.
Lisbon, Observatory	29.34	745.3	29.71	754.6	49.3	9.6	100	ENE	6.3	2.8			10			0.319	8.1	Raining	The Staff.
Ponta Delgada, Azores	28.97	735.8	29.04	737.6	56.5	13.6	60	SW	26.2	11.7			4			0.610	15.5		

RUSSIAN SERIES.

Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.

Akmolinsk	28.77	730.7	29.91	759.7	20.5	— 6.4	100	SSW	56	25			10			Blank	Blank		Capt. Lasarew.
Archangel	29.68	753.9	29.70	754.4	— 9.8	—23.2	84	N	2	1			5ks						Capt. Sselliwerstow.
Astrakhan	30.10	764.6	30.02	762.5	25.2	— 3.8	82	NNE	7	3			3s			Blank	Blank		Capt. Wisganow.
Barnaul	29.76	755.9	30.30	769.5	21.0	— 6.1	71	SW	4	2			10						Meteorological Obs'y.
Dorpat	28.78	731.0	29.03	737.3	19.9	— 6.7	89	NNW	7	3			10n						Observatory.
Ekaterinburg	28.62	727.0	29.69	754.1	— 5.4	—20.8	68	WSW	22	10			2ks					Snow-drift	Meteorological Obs'y.
Kasan	29.56	750.9	29.87	758.7	— 9.4	—23.0	77	WSW	2	1			0						Observatory.
Kertch	30.02	762.4	30.04	762.9	27.7	— 2.4	94	NW	7	3			10					Light snow	Lagorio.
Kieff	29.07	738.4	29.76	755.8	17.4	— 8.1	59	SW	13	6		c	8cs;ks					Solar halo	Observatory.
Krotkowo, N. 58°47′, E. 48°34′																			Cand. Fatjanow.
Lugan	29.78	756.5	30.00	762.1	16.9	— 8.4	58	WSW	4	2			1						Meteorological Obs'y.
Moscow	28.93	734.9	29.52	749.9	11.1	—11.6	82	S	4	2			10s					Snowing	Meteorological Obs'y.
Nertchinsk	27.95	710.0	30.54	775.7	— 4.0	—20.0	77						0						Meteorological Obs'y.
Nikolajev	29.97	761.2	30.04	763.0	19.8	— 6.8	60	S	9	4			0						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Nukuss	29.76	755.8	29.99	761.8	49.6	9.8	56	S	4	2			0						Dr. Dobrochotow.
Pekin, China	30.26	768.5	30.40	772.1	25.7	— 3.5	33	Calm	0	0			2c						Physical Observatory.
St. Petersburg	29.14	740.2	29.16	740.6	7.0	—13.9	87	ENE	18	8			10n					Snowing	Central Physical Obs'y.
Tashkend, Laboratory	28.54	725.0	30.18	766.6	41.4	5.2	78	Calm	0	0			4						Teich, A. M.
Tiflis	28.51	724.1	29.95	760.8	44.1	6.7	68	NW	9	4			8ks						Physical Observatory.
Warsaw	29.06	738.2	29.51	749.6	23.0	— 5.0	95	WSW	27	12			10n					Snowing	Astronomical Obs'y.
Wilna	28.84	732.4	29.27	743.4	24.8	— 4.0	84	W	7	3			6					Light clouds	Berg, Assistant.
Yeniseisk	29.95	760.7	30.26	768.5	18.9	— 7.3	87	W	9	4			2						M. O. Marks.

SCOTTISH SERIES.

Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.

Leith, Restalrig Park			30.14	765.5	29.9	— 1.2	86	W			2		10k			0	0	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides			30.16	766.1	44	6.7	92	NE			4		10			0	0		J. Youngclause.
North Unst, Shetland Isl'ds			29.92	760.0				N			6		9			Blank	Blank		Robert Burnet.

SPANISH SERIES.

Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.

Barcelona, Met. Obs'y ‡	29.74	755.4	29.85	758.1	50.4	10.2	79	NE	0.2	0.11			7			0.048	1.22	Misty	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.87	758.8	29.93	760.3	42.3	5.7	82	SE	1.4	0.65		1	8	SW		0	0	Almos cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.78	680.2			33.3	0.7	94	NE	4.5	2.00			10			0.098	2.5	Snowing	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.55	699.7	29.84	758.0	40.8	4.9	90	NE	3.4	1.5			10			0.110	2.8	Covered	The Staff.
Murcia, Met. Obs'y. ‡	29.71	754.6	29.86	758.5	50.0	10.0	93	SSE	0.4	0.2		5	5	SE		0.020	0.5	Misty	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.74	730.1	29.65	753.0	47.3	8.5	92	NE	0	0			10			0.209	5.3	Covered	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.92	760.0	29.99	761.7	72.6	22.6	83	ESE	4.5	2.0		3ck	1s	S		0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	30.01	762.2	30.06	763.5	80.2	26.8	82	SW	0	0		3c	4ck	E	W	0	0	Very cloudy	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.71	754.6	29.81	757.2	57.9	14.4	93	SE	8.3	3.7			10		S	0.675	17.1	Raining	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.04	763.1	30.13	765.3	74.8	23.8	88	SE	2.5	1.13		2cs	0	SE		0	0	Clear	Enrique Gadea, Chief Engineer.

SWEDISH SERIES.

Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.

Haparanda	29.81	757.2	29.85	758.2	— 5.8	—21.0	100	N			2		5			0	0		
Umea	29.71	754.5	29.76	755.8	6.4	—14.2	92	NE			6		10			0	0		
Hernosand	29.68	753.8	29.73	755.1	7.0	—13.9	96	N			6		10			0.008	0.2		
Stockholm	29.24	742.7	29.42	747.2	17.6	— 8.0	77	N			8		10			0.012	0.3	Snowing	
Wisby	29.26	743.2	29.32	744.7	25.2	— 3.8	82	N			6		10					Snowing	
Sub-Series.																			
Upsala	29.36	745.8	29.45	748.0	17.4	— 8.1	91	NNE	18.6	8.3			10			0.030	0.76		Nils Ekholm

SWISS SERIES.

Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.

Geneva	28.50	723.9	30.01	762.2	28.4	— 2.0	77	NNW			2		6			0	0	Cloudy	The Observatory.
Zurich	28.26	717.9	29.99	761.7	29.3	— 1.5	70	SE			1		2			0	0	Clear	The Observatory.

At Geneva the corresponding departures from the normal values are: Bar. —3.8 mm.; Ther. —3°.3 cent.; Hum. —3 per cent.

TURKISH SERIES.

Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.

Constantinople			30.08	763.9	37.9	3.3	69	N	11	5.0			10		N	0	0		The Observatory.
Valona			29.94	760.4	49.1	9.5		NW			2		10			0	0	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.94	760.5	65.3	18.5	53	SW			3		10n		SW	0.02	0.5		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.80	756.9	29.89	759.2	27	— 2.8	76	E	2	0.9			10n		Calm	0.45	11.4	Light rain...	
Alpena, Michigan	29.47	748.5	30.19	766.8	0	—17.8	70	NW	8	3.6			8s		Calm	0.10	2.5	Cloudy.....	
Atlanta, Georgia	28.70	729.0	29.86	758.4	40	4.4	91	N	6	2.7			10n		Calm	1.29	32.8	Light rain...	
Atlantic City, New Jersey	29.74	755.4	29.76	755.9	45	7.2	100	W	7	3.1			10n;fg		W	2.86	72.6	Light rain...	
Augusta, Georgia	29.72	754.9	29.92	760.0	40	4.4	91	N	1	0.4			10n		N	0.62	15.7	Light rain...	
Baltimore, Maryland	29.78	756.4	29.83	757.7	36	2.2	90	NW	5	2.2			10n		Calm	1.28	32.5	Light rain...	
Barnegat, New Jersey	29.67	753.6	29.69	754.1	48	8.9	100	S	12	5.4			10n		Calm	3.06	77.7	Light rain...	
Benton, Montana	26.97	685.0			12	—11.1	62	W	14	6.3		5x		Calm		0.07	1.8	Fair.....	
Bismarck, Dakota	27.94	709.7	29.79	756.7	—21	—29.4		Calm	0	0		0	0			0	0	Clear.....	
Boise City, Idaho	27.16	689.8	30.12	765.0	20	— 6.7	85	W	2	0.9			10s		Calm	0.14	3.6	Cloudy.....	
Boston, Massachusetts	29.85	758.2	30.01	762.2	35	1.7	100	E	20	8.9			10n		E	0.97	24.6	Heavy rain..	
Brackettville, Texas	28.97	735.8	30.12	765.0	19	— 7.2	85	N	1	0.4		0	0			Inap.	Inap.	Clear.....	
Brownsville, Texas	30.15	765.8	30.20	767.1	31	— 0.6	89	N	6	2.7		8cs	0	Calm		0.28	7.1	Fair.....	
Buffalo, New York	29.25	742.9	29.98	761.5	23	— 5.0	93	NW	4	1.8			10n		Calm	0.30	7.6	Light snow..	
Burlington, Vermont	29.72	754.9	30.03	762.7	26	— 3.3	88	SE	7	3.1			10n		S	0.09	2.3	Light snow..	
Cairo, Illinois	29.85	758.2	30.29	769.4	7	—13.9	77	NW	10	4.5		0	0			0.04	1.0	Clear.....	
Campo, California	27.51	698.7	30.08	764.0	21	— 6.1	86	S	3	1.3		0	0			0	0	Clear.....	
Camp Thomas, Arizona	27.33	694.2			17	— 8.3	83	Calm	0		0	0	0			0	0	Clear.....	
Cape Henry, Virginia	29.80	756.9	29.82	757.4	35	1.7	100	W	11	4.9			10n		Calm	0.63	16.0	Light rain..	
Cape May, New Jersey	29.73	755.1	29.76	755.9	37	2.8	90	NW	13	5.8			10n		Calm	2.60	66.0	Light rain...	
Castroville, Texas	29.37	746.0	30.13	765.3	24	— 4.4	74	NW	6	2.7			10s		Calm	0.05	1.3	Cloudy.....	
Cedar Keys, Florida	29.86	758.4	29.88	758.9	62	16.7	94	S	22	9.8			Fog		Calm	1.85	47.0	Dense fog....	
Champaign, Illinois	29.37	746.0	30.30	769.6	—12	—24.4	50	NW	5	2.2		0	0			0	0	Clear.....	
Charleston, S. Carolina	29.78	756.4	29.83	757.7	59	15.0	100	S	12	5.4			10s		SW	0.44	11.2	Threatening	
Charlotte, N. Carolina	28.98	736.1	29.81	757.2	34	1.1	100	NE	4	1.8			10n		NE	0.72	18.3	Light rain...	
Chattanooga, Tennessee	29.12	739.6	29.95	760.7	34	1.1	79	NW	8	3.6			10s;fg		NW;C	0.87	22.1	Cloudy	
Cheyenne, Wyoming	23.73	602.7	29.67	753.6	17	— 8.3	67	NW	28	12.5		0	0			0	0	Clear.....	
Chicago, Illinois	29.46	748.3	30.26	768.6	— 8	—22.2	58	N	5	2.2		0	0			0.01	0.3	Clear.....	
Chincoteague, Virginia	29.78	756.4	29.80	756.9	38	3.3	100	NW	11	4.9			10n		SW	1.14	29.0	Light rain...	
Cincinnati, Ohio	29.46	748.3	30.17	766.3	19	— 7.2	85	N	11	4.9			10s		Calm	0.12	3.0	Cloudy.....	
Cleveland, Ohio	29.33	745.0	30.12	765.0	16	— 8.9	91	NW	10	4.5			10n		Calm	0.03	0.8	Light snow.	
Coleman City, Texas	28.34	719.8	30.20	767.1	5	—15.0	50	Calm	0	0		0	0			0.04	1.0	Clear.....	
Columbus, Ohio	29.20	741.7	30.11	764.8	16	— 8.9	83	N	8	3.6			10s		Calm	0.11	2.8	Cloudy.....	
Concho, Texas	28.16	715.3	30.06	763.5	1	—17.2	70	N	3	1.3		0	0			0.09	2.3	Clear.....	
Corsicana, Texas	29.79	756.7	30.31	769.9	11	—11.7	60	N	4	1.8		0	5s		Calm	0.35	8.9	Fair.....	
Davenport, Iowa	29.55	750.6	30.29	769.4	—14	—25.6	72	Calm	0	0		0	0			Inap.	Inap.	Clear.....	
Dayton, Washington T'y	28.18	715.8	29.90	759.4	32	0.0	100	Calm	0	0			10s		Calm	0.18	4.6	Cloudy.....	
Deadwood, Dakota	24.99	634.7			22	— 5.6	72	SW	10	4.5		0	0			0	0	Clear.....	
Decatur, Texas	28.99	736.3	30.31	769.9	5	—15.0	100	NW	3	1.3		0	0			0.02	0.5	Clear.....	
Delaware Breakwater, Del.	29.72	754.9	29.74	755.4	35	1.7	90	W	3	1.3			10s		W	1.52	38.6	Cloudy.....	
Denison, Texas	29.38	746.2	30.28	769.1	5	—15.0	75	NW	4	1.8		0	0			0.03	0.8	Clear.....	
Denver, Colorado	24.57	624.1	29.79	756.7	23	— 5.0	34	W	10	4.5		0	0			0	0	Clear.....	
Des Moines, Iowa	29.18	741.1	30.18	766.6	— 7	—21.7	80	SW	9	4.0		0	0			0	0	Clear.....	
Detroit, Michigan	29.42	747.3	30.15	765.8	12	—11.1	80	NW	1	0.4		0	0			0.07	1.8	Clear.....	
Dodge City, Kansas	27.31	693.7	29.86	758.4	— 2	—18.9	67	SW	4	1.8		0	0			0	0	Clear.....	
Dubuque, Iowa	29.46	748.3	30.30	769.6	—24	—31.1	55	S	1	0.4		0	0			0.01	0.3	Clear.....	
Duluth, Minnesota	29.32	744.7	30.11	764.8	—17	—27.2		NW	4	1.8		0	0			0	0	Clear.....	
Eagle Pass, Texas	29.43	747.5	30.23	767.8	24	— 4.4	74	NE	2	0.9		0	0			0.01	0.3	Clear.....	
Eagle Rock, Texas	25.13	638.3	29.78	756.4	— 5	—20.6	100	N	5	2.2			10n		Calm	1.22	31.0	Light snow.	
Eastport, Maine	30.25	768.6	30.33	770.4	20	— 6.7	70	E	16	7.2			10s		E	0	0	Cloudy.....	
Edinburg, Texas					30	— 1.1	78	N			1		10s		Calm	0.01	0.3	Cloudy.....	
El Paso, Texas	26.21	665.7			19	— 7.2	54	W	5	2.2		0	1s		W	0	0	Clear.....	
Erie, Pennsylvania	29.27	743.4	30.03	762.7	21	— 6.1	100	NW	6	2.7			10n		Calm	0.07	1.8	Light snow.	
Escanaba, Michigan	29.47	748.5	30.24	768.1	—18	—27.8	100	Calm	0	0		0	0			0	0	Clear.....	
Florence, Arizona	28.63	727.2	30.23	767.8	29	— 1.7	67	NE	1	0.4		5c	0	Calm		0	0	Fair.....	
Fort Apache, New Mexico	24.92	633.0	30.37	771.4	12	—11.1	42	Calm	0	0		0	0			0	0	Clear.....	
Fort Assiniboine, Montana	26.86	682.2			2	—16.7	100	NW	12	5.4			10n		NW	0.05	1.3	Light snow.	
Fort Bennett, Dakota	28.16	715.3			— 6	—21.1	100	Calm	0	0		0	0			Inap.	Inap.	Clear.....	
Fort Buford, Dakota	27.75	704.8	29.84	757.9	—18	—27.8	100	Calm	0	0		10cs	0	Calm		0	0	Cloudy.....	
Fort Custer, Montana	26.50	673.1			15	— 9.4	100	W	8	3.6			10n		Calm	0.17	4.3	Heavy snow	
Fort Davis, Texas	24.97	634.2	29.93	760.2	10	—12.2	79	SW	12	5.4		0	0			0.03	0.8	Clear.....	
Fort Elliott, Texas	27.26	692.4	29.84	757.9	— 7	—21.7	26	NW	4	1.8		0	0			0	0	Clear.....	
Fort Gibson, Indian T'y	29.66	753.4	30.29	769.4	—12	—24.4	54	Calm	0	0		0	0			Inap.	Inap.	Clear.....	
Fort Grant, Arizona	25.13	638.3	29.93	760.2	24	— 4.4	74	Calm	0	0		0	0			0	0	Clear.....	
Fort Griffin, Texas	28.89	733.8	30.33	770.4	4	—15.6	74	Calm	0	0		0	0			0.05	1.3	Clear.....	
Fort Keogh, Montana	27.22	691.4			13	—10.6	81	Calm	0	0			10s		Calm	0.20	5.1	Cloudy.....	
Fort Macon, North Carolina	29.84	757.9	29.85	758.2	45	7.2	100	N	3	1.3			Fog		Calm	0.21	5.3	Dense fog..	
Fort Missoula, Montana	26.48	672.6			12	—11.1	100	N	1	0.4			10s		Calm	0.73	18.5	Cloudy.....	
Fort McKavett, Texas	27.80	706.1	29.91	759.7	11	—11.7	80	N	2	0.9		0	0			0.02	0.5	Clear.....	
Fort Shaw, Montana	26.06	661.9			15	— 9.4	82	W	4	1.8		2cs	0	Calm		0	0	Clear.....	
Fort Sill, Indian Territory	28.95	735.3	30.21	767.3	0	—17.8	70	Calm	0	0		0	0			0	0	Clear.....	
Fort Stevenson, Dakota	27.96	710.2			—22	—30.0	100	E	4	1.8		0	0			0	0	Clear.....	
Fort Verde, Arizona					21	— 6.1	57	NW			1	5cs	0	SW		0	0	Fair.....	
Fredericksburg, Texas	28.37	720.6	30.00	762.0	20	— 6.7	85	N	6	2.7			10s		Calm	0.02	0.5	Cloudy.....	
Galveston, Texas	30.07	763.8	30.12	765.0	29	— 1.7	89	N	20	8.9			10s		N	1.17	29.7	Cloudy.....	
Grand Haven, Michigan	29.48	748.8	30.20	767.1	12	—11.1	80	W	4	1.8			10k	0	W	0.02	0.5	Cloudy	
Hatteras, North Carolina	29.82	757.4	29.84	757.9	48	8.9	100	W	6	2.7			Fog		Calm	0.12	3.0	Dense fog....	
Helena, Montana	25.49	647.4			24	— 4.4	74	NW	5	2.2			10s		Calm	0	0	Cloudy.....	
Henrietta, Texas	29.18	741.1	30.24	768.1	4	—15.6	74	N	3	1.3		0	0			Inap.	Inap.	Clear.....	
Indianapolis, Indiana	29.33	745.0	30.18	766.6	9.5	—12.5	78	N	5	2.2			10s		Calm	Inap.	Inap.	Cloudy.....	
Indianola, Texas	30.15	765.8	30.18	766.6	24	— 4.4	87	NW			6	0	0			1.49	37.8	Clear.....	
Jacksboro, Texas	28.99	736.3	30.26	768.6	7	—13.9	54	Calm	0	0		0	0			Inap	Inap	Clear.....	
Jacksonville, Florida	29.85	758.2	29.90	759.4	60	15.6	94	S	8	3.6			10s		Calm	1.14	29.0	Cloudy.....	
Keokuk, Iowa	29.55	750.6	30.31	769.9	—11	—23.9	76	SE	1	0.4		0	Fog		Calm	Inap.	Inap	Clear.....	
Key West, Florida	29.99	761.7	30.02	762.5	73	22.8	95	S	3	1.3		0	0			0	0	Clear.....	
Kittyhawk, North Carolina	29.86	758.4	29.88	758.9	41	5.0	91	W	8	3.6			10n		Calm	0.39	9.9	Light rain...	
Knoxville, Tennessee	28.93	734.8	29.97	761.2	32	0.0	84	N	8	3.6			10s		Calm	0.99	25.1	Cloudy.....	
La Crosse, Wisconsin	29.34	745.2	30.23	767.8	—28	—33.3	100	S	6	2.7		0	0			0	0	Clear.....	
La Mesilla, New Mexico	26.09	662.7	30.24	768.1	17	— 8.3	67	N	3	1.3		0	2s		Calm	0	0	Fair.....	
Laredo, Texas	29.76	755.9	30.13	765.3	23	— 5.0	73	Calm	0	0		0	0			0.25	6.3	Clear.....	
Leavenworth, Kansas	29.29	744.0	30.25	768.3	— 2	—18.9	67	S	5	2.2		0	0			0	0	Clear.....	
Lewiston, Idaho	29.14	740.1	29.82	757.4	27	— 2.8	67	S	1	0.4			10s		Calm	0	0	Cloudy.....	
Little Rock, Arkansas	29.88	758.9	30.22	767.6	19	— 7.2	85	N	12	5.4			10s		Calm	0.04	1.0	Cloudy.....	
Los Angeles, California	29.75	755.6	30.10	764.5	41	5.0	57	NE	8	3.6		0	0			0	0	Clear.....	
Louisville, Kentucky	29.55	750.6	30.15	765.8	17	— 8.3	83	N	10	4.5			10s		NW	0.05	1.3	Cloudy.....	
Lynchburg, Virginia	29.15	740.4	29.84	757.9	35	1.7	90	W	3	1.3			10n		Calm	1.05	26.7	Light rain...	
Madison, Wisconsin	29.12	739.6	30.27	768.8	—15	—26.1	71	S	6	2.7		0	0			0.04	1.0	Clear.....	
Marquette, Michigan	29.38	746.2	30.19	766.8	—13	—25.0	47	W	7	3.1		0	0			0.02	0.5	Clear.....	
Mason, Texas	28.43	722.1	30.37	771.4	13	—10.6	81	W	4	1.8		0	0			0.13	3.3	Clear.....	
Memphis, Tennessee	29.83	757.7	30.20	767.1	16	— 8.9	83	NW	8	3.6		2cs	5x	Calm	NW	0.29	7.4	Fair.....	
Milwaukee, Wisconsin	29.44	747.8	30.29	769.4	—12	—24.4	74	NW	5	2.2		0	0			0.01	0.3	Clear.....	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.84	757.9	29.92	760.0	40	4.4	91	NE	16	7.2	.....	.....	1on	.....	Calm	1.35	34.3	Heavy rain..	
Montgomery, Alabama	29.72	754.9	29.96	761.0	44	6.7	92	NW	4	1.8	.....	.....	1on	.....	Calm	1.61	40.9	Light rain..	
Morgantown, W. Virginia	28.93	734.8	29.95	760.7	32	0.0	79	NE	6	2.7	.....	.....	1on	.....	Calm	0.47	11.9	Light snow..	
Moorhead, Minnesota	28.86	733.0	29.95	760.7	—18	—27.8	67	S	12	5.4	.....	0	0	.....	.....	0	0	Clear.....	
Mt. Washington, N. H.	23.43	595.1	29.79	756.7	12	—11.1	100	S	84	37.5	.....	.....	10n;fg	.....	C;S	0.55	14.0	Light snow.	
Nashville, Tennessee	29.57	751.1	30.15	765.8	20	— 6.7	85	N	6	2.7	.....	10cs	Sm'e	NW	Calm	0.39	9.9	Cloudy.....	
New Haven, Connecticut	29.66	753.4	29.78	756.4	33	0.6	100	NE	14	6.3	.....	.....	1on	.....	NE	2.04	51.8	Heavy rain..	
New London, Connecticut	29.83	757.7	29.88	758.9	37	2.8	100	N	16	7.2	.....	.....	1on	.....	N	2.44	62.0	Heavy rain..	
New Orleans, Louisiana	29.92	760.0	29.98	761.5	40	4.4	91	N	10	4.5	.....	.....	1os	.....	Calm	0.90	22.9	Light rain...	
Newport, Rhode Island	29.76	755.9	29.81	757.2	40	4.4	100	E	29	13.0	.....	.....	1on	.....	Calm	0.92	23.4	Heavy rain..	
New River, N. Carolina	.....	.....	.....	.....	43	6.1	92	SE	.....	.....	1	.....	1on	.....	Calm	.....	.....	Light rain ..	
New Shoreham, Rhode I'd	29.73	755.1	29.76	755.9	46	7.8	100	SE	28	12.5	.....	.....	1on	.....	SE	0.14	3.6	Light rain...	
New York, New York	29.58	751.3	29.76	755.9	36	2.2	100	N	14	6.3	.....	.....	1on	.....	Calm	2.22	56.4	Light rain...	
Norfolk, Virginia	29.78	756.4	29.84	757.9	37	2.8	90	W	3	1.3	.....	.....	1os;fg	.....	Calm	0.34	8.6	Foggy.....	
North Platte, Nebraska	26.87	682.5	29.66	753.4	4	—15.6	74	W	6	2.7	.....	0	Haze	.....	Calm	0	0	Hazy.....	
Olympia, Washington T'y	29.91	759.7	29.95	760.7	36.0	2 2	86	Calm	0	0	.....	.....	1os	.....	Calm	Inap.	Inap.	Cloudy.....	
Omaha, Nebraska	28.80	731.5	30.03	762.7	— 5	—20.6	82	S	15	6.7	.....	0	0	.....	.....	0	0	Clear.....	
Oswego, New York	29.58	751.3	29.90	759.4	31	— 0.6	89	SE	8	3.6	.....	.....	1on	.....	Calm	0.27	6.9	Light snow.	
Pensacola, Florida	29.91	759.7	29.94	760.5	47	8.3	92	NE	1	0.4	.....	.....	1oks	.....	NE	0.57	14.5	Cloudy.....	
Philadelphia, Pa	29.70	754.4	29.75	755.6	36	2.2	100	NE	4	1.8	.....	.....	1on	.....	Calm	1.65	41.9	Heavy rain..	
Phœnix, Arizona	30.00	762.0	30.92	785.4	26	— 3.3	63	E	8	3.6	.....	0	0	.....	.....	0	0	Clear.....	
Pike's Peak, Colorado	17.31	439.7	29.52	749.8	—14	—25.6	45	N	32	14.3	.....	0	0	.....	.....	0	0	Clear.....	
Pilot Point, Texas	29.41	747.0	30.26	768.6	6	—14.4	52	NW	3	1.3	.....	0	0	.....	.....	0.03	0.8	Clear.....	
Ploche, Nevada	23.97	608.8	29.74	755.4	19	— 7.2	54	SW	6	2.7	.....	0	0	.....	.....	Inap.	Inap.	Clear.....	
Pittsburg, Pennsylvania	29.14	740.1	30.00	762.0	24	— 4.4	87	NW	8	3.6	.....	.....	1on	.....	NW	0.30	7.6	Light snow.	
Port Huron, Michigan	29.43	747.5	30.16	766.1	10	—12.2	79	NW	6	2.7	.....	0	Sm'e	.....	.....	0.08	2.0	Clear.....	
Portland, Maine	30.07	763.8	30.12	765.0	23	— 5.0	100	NE	18	8.0	.....	.....	1on	.....	Calm	0.83	21.1	Heavy snow	
Portland, Oregon	29.92	760.0	30.00	762.0	40	4.4	100	S	5	2.2	.....	.....	1on	.....	S	0.39	9.9	Light rain...	
Portsmouth, N. Carolina	.....	.....	.....	.....	50	10.0	100	SW	8	3.6	.....	.....	1on	.....	Calm	0.23	5.8	Light rain...	
Prescott, Arizona	24.73	628.1	30.09	764.3	18	— 7.8	77	N	2	0.9	.....	0	0	.....	.....	0	0	Clear.....	
Punta Rassa, Florida	29.95	760.7	29.96	761.0	68	20.0	90	S	14	6.3	.....	2c	0	SW	.....	0	0	Fair.....	
Red Bluff, California	29.80	756.9	30.16	766.1	42.0	5.6	87	NW	1	0.4	.....	0	4s	.....	Calm	0	0	Fair...	
Rio Grande City, Texas	30.05	763.5	30.30	769.6	27	— 2.8	76	NW	8	3.6	.....	0	0	.....	.....	Inap.	Inap.	Clear.....	
Rochester, New York	29.29	744.0	29.93	760.2	27	— 2.8	100	NW	6	2.7	.....	.....	1on	.....	NW	0.54	13.7	Heavy snow	
Roseburg, Oregon	29.45	748.0	30.03	762.7	43	6.1	96	S	2	0.9	.....	.....	1on	.....	Calm	0.09	2.3	Light rain...	
Sacramento, California	30.10	764.5	30.18	766.6	41	5.0	91	S	3	1.3	.....	0	5s	.....	Calm	0	0	Fair.....	
St. Louis, Missouri	29.66	753.4	30.32	770.1	— 6	—21.1	100	N	9	4.0	.....	0	0	.....	.....	Inap.	Inap.	Clear.....	
St. Paul, Minnesota	29.07	738.4	30.03	762.7	—17	—27.2	69	SE	10	4.5	.....	0	0	.....	.....	0	0	Clear.....	
Salt Lake City, Utah	25.63	651.0	29.96	761.0	22	— 5.6	45	Calm	0	0	.....	.....	1os	.....	Calm	Inap.	Inap.	Cloudy.....	
San Antonio, Texas	29.50	749.3	30.26	768.6	25	— 3.9	100	Calm	0	0	.....	.....	1os	.....	Calm	0.02	0.5	Cloudy.....	
San Diego, California	30.07	763.8	30.15	765.8	42	5.6	50	E	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Sandusky, Ohio	29.41	747.0	30.14	765.5	16	— 8.9	83	NW	14	6.3	.....	.....	1os	.....	Calm	0.02	0.5	Cloudy.....	
Sandy Hook, New Jersey	29.75	755.6	29.79	756.7	36	2.2	100	N	8	3.6	.....	.....	1on	.....	Calm	1.98	50.3	Heavy rain..	
San Francisco, California	30.09	764.3	30.16	766.1	47	8.3	81	NE	1	0.4	.....	0	1s	.....	Calm	0	0	Clear.....	
Santa Fé, New Mexico	23.04	585.2	29.58	751 3	9	—12.8	57	N	20	8.9	.....	0	0	.....	.....	0	0	Clear.....	
Savannah, Georgia	29.76	755.9	29.85	758.2	58	14.4	94	E	14	6.3	.....	.....	1oks	.....	S	0.90	22.9	Threatening	
Shreveport, Louisiana	29.92	760.0	30.18	766.6	26	— 3.3	88	NW	5	2.2	.....	.....	1on	.....	Calm	0.06	1.5	Light snow.	
Silver City, New Mexico	24.16	613.6	30.64	778.2	23	— 5.0	60	NW	8	3.6	.....	0	5s	.....	Calm	0	0	Fair.....	
Smithville, North Carolina	29.80	756.9	29.84	757.9	54	12.2	100	S	5	2.2	.....	.....	1on	.....	Calm	0.31	7.9	Heavy rain..	
Socorro, New Mexico	25.44	646.2	29.51	749.5	11	—11.7	60	E	3	1.3	.....	0	0	.....	.....	0	0	Clear.....	
Springfield, Illinois	29.56	750.8	30.33	770.4	— 5	20.6	63	N	3	1.3	.....	0	0	.....	.....	Inap.	Inap.	Clear.....	
Springfield, Massachusetts	29.74	755.4	29.87	758.7	34	1.1	90	Calm	0	0	.....	.....	1on	.....	Calm	1.37	34.8	Light rain...	
Stockton, Texas	26.91	683.5	29.91	759.7	8	—13.3	78	SW	4	1.8	.....	0	0	.....	.....	Inap.	Inap.	Clear.....	
St. Vincent, Minnesota	29.04	737.6	29.97	761.2	—25	—31.7	100	W	2	0.9	.....	0	0	.....	.....	0	0	Clear.....	
Thatcher's Island, Mass	29.93	760.2	29.99	761.7	37	2.8	100	E	36	16.1	.....	.....	1on	.....	E	0 42	10.7	Heavy rain..	
Toledo, Ohio	29.42	747.3	30.16	766.1	15	— 9.4	83	W	4	1.8	.....	.....	2s	.....	Calm	0.01	0.3	Clear.....	
Tucson, Arizona	27.62	701.5	30.17	766.3	25	— 3.9	62	S	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Umatilla, Oregon	29.64	752.8	30.16	766.1	20	— 3.3	88	SE	6	2.7	.....	.....	1os	.....	Calm	0	0	Cloudy.....	
Uvalde, Texas	29.25	742.9	30.15	765.8	24	— 4.4	87	N	3	1.3	.....	0	5s	.....	Calm	0	0	Cloudy.....	
Vicksburg, Mississippi	29.85	758.4	30.13	765.3	28	— 2.2	88	N	8	3.6	.....	.....	1os	.....	Calm	0.39	9.9	Cloudy.....	
Visalia, California	29.79	756.7	30.18	766.0	33	0.6	89	E	1	0.4	.....	0	0	.....	.....	0	0	Clear.....	
Washington, D. C.	29.71	754.6	29.83	757.7	32	0.0	100	NW	1	0.4	.....	.....	1cn	.....	Calm	1.33	33.8	Light rain...	
Wickenburg, Arizona	.....	.....	.....	.....	23	— 5.0	72	NW	.....	.....	1	2c	0	Calm	.....	0	0	Clear.....	
Wilmington, N. Carolina	29.77	756.1	29.82	757.4	49	9.4	93	S	4	1.8	.....	.....	1on	.....	Calm	0.23	5.8	Light rain...	
Winnemucca, Nevada	25.61	650.5	29.97	761.2	28	— 2.2	77	SW	6	2.7	.....	.....	1os	.....	Calm	0.14	3.6	Cloudy.....	
Wood's Holl, Mass	29.75	755.6	29.79	756.7	39	3.9	91	SE	22	9.8	.....	.....	1on	.....	SE	0.04	1.0	Light rain...	
Yankton, Dakota	28.51	724.1	29.93	760.2	0	—17.8	70	S	1	0.4	.....	0	0	.....	.....	0	0	Clear.....	
Yuma, Arizona	29.98	761.5	30.14	765.5	34	1.1	70	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear.....	
SUB-SERIES.																			
Bogota, U. S. Columbia	21.98	558.3	.....	.....	49.0	9.4	67	Calm	0	0	.....	2c	0	.....	.....	0	0	Clear.....	Thomas Herran.
Havana, Cuba, W. I.	29.96	761.0	30.01	762.2	75	23.9	81	SE	2:4	1.1	.....	4ck	0	SW	.....	0	0	Fair.....	Charles Hasselbrink.
Jakobshavn, Greenland	30.11	764.8	30.17	766.3	34.9	1.6	.....	SW	.....	.....	6	.....	4	.....	.....	0	0	.....	
Kingston, Jamaica, W. I.	30.01	762.2	30.02	762.5	74.5	23.6	77	Calm	0	0	.....	.....	1oks	.....	ESE	0	0	Fair.....	Maxwell Hall.
Navassa, W. I.	29.91	759.7	29.99	761.7	78	25.6	73	E	18	8.0	.....	0	0	.....	.....	0	0	Clear.....	F. M. Everett.
Paramaribo, S. A.	29.97	761.2	29.97	761.2	77	25.0	91	E	.....	.....	2	.....	1on	E	.....	0.510	12.95	Raining.....	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.36	745.7	29.91	759.7	80	26.7	80	Calm	.....	.....	0	0	0	.....	.....	0	0	Fair.....	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	73	23	.....	ESE	.....	.....	1	0	6k	.....	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.03	762.7	30.06	763.5	73	22.8	81	Calm	0	0	.....	Haze	0	.....	.....	0	0	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	30.20	767.1	30.26	768.6	10.4	—12.	.....	Calm	.....	.....	0	.....	1	.....	.....	0	0	.....	
York Factory, B. A.	30.19	766.8	30.25	768.3	—45.0	—42.8	.....	SW	7	3.1	.....	3c	0	SW	.....	0	0	Fair.....	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandra																			Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Haud.
H. M. S Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. S. Hope.
H. M. S Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. J. F. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.20	767.1	66	18.9		ESE			4		9	SE						D. clouds	Capt. J. Moresby. Capt. Hulton.
H. M. S. Dragon																			Capt. W. R. Kennedy.
H. M. S. Druid																			Comm. John Hext.
H. M. S. Dryad																			Capt. E. St. J. Garforth
H. M. S. Eclipse																			Comm. C. Johnstone.
H. M. S. Egeria																			Capt. W. H. Maxwell.
H. M. S. Emerald																			Capt. L. Ching.
H. M. S. Encounter																			
H. M. S. Euryalus, Bombay, India	29.92	760.0	76	24.4	77	NNW			5		0							Squally	Capt. R. D. King. Comm. W. H. C. Selby.
H. M. S. Falcon																			Capt. W. C. Karslake.
H. M. S. Fantome																			Capt. P. Aldrich.
H. M. S. Fawn																			Capt. R. N. Castance.
H. M. S Flamingo																			Capt. R. F. Hoskyn.
H. M. S. Flying Fish																			
H. M. S. Gannet, Callao Bay, Peru	29.92	760.0	64	17.8	94	NE			1		10							Misty	Comm. E. E. Bourke. Capt. L. F. Jones.
H. M. S. Garnet																			
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	29.98	761.5	53	11.7	68	W			1		6	W				1	W	D. clouds	Capt. T. L. H. Ward. Capt. J. L. Way.
H. M. S. Humber																			Capt. C. C. P. Fitzgerald
H. M. S. Inconstant																			Capt. E. H. Seymour.
H. M. S. Iris																			Capt. H. F. Cleveland.
H. M. S. Iron Duke																			Comm. R. H. Thornton.
H. M. S. Kingfisher																			Capt. W. Scott.
H. M. S. Lapwing																			Comm. S. Grove.
H. M. S. Lily																			Capt. C. J. Brownrigg.
H. M. S. London																			
H. M. S. Magpie, N. 25° 58′, E. 119° 29′	30.43	772.9	49.7	9.8	69	NE			3		9							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 17° 38′, E. 67° 10′	30.03	762.7	75	23.9	72	NNE			3		0					2	NE	Blue sky	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 38° 42′, W. 9° 06′	29.68	753.9	54	12.2	93	E			3		10	SE						Rain & fog	Capt. H. Rawson. Capt. J. G. Mead.
H. M. S. Modeste																			Capt. G. Tryon, C. B.
H. M. S. Monarch																			

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 27° 17′, W. 63° 26′	30.18	766.6	74	23.3	81	SSW			2		5	S				3	NE	Showery	Capt. J. A. Fisher.
H. M. S. Orontes, N. 45° 25′, W. 8° 02′	29.71	754.6	49.5	9.7	95	ESE			6		10	ESE				8	SE	Gloomy	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 06′, E. 48° 09′	29.68	753.9	78	25.6	73	E			3		0					3	E	Blue sky	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb, N. 37° 03′, E. 15° 18′	30.00	762.0	58	14.4	64	NNE			1–2		7	W						D. clouds	Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark																			Capt. R. D. Cumming.
H. M. S. Zephys																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	29.94	760.5	77.0	25.0	80	NE			2		6			0	0	1	SE	D. clouds	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando	29.99	761.7	81.5	27.5	81	NW			2		6			0	0	1		Blue sky	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			

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

UNITED STATES NAVAL SERIES.

By authority of the Secretary of the Navy.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

N. Yard, Pensacola, Fla	30.32	770.1	42	5.6	91	N	2	0.9			10		N	0	0			Cloudy	
N. Yard, Portsmouth, N. H.	30.12	765.0	33	0.6	70	E	13	5.8		10cf		Calm		0	0			Clear?	
Naval Hospital, Yokohama, Japan	29.47	748.5	43	6.1	59	SW			4		0			0	0			Clear	
Adams, Ancon, Peru	29.97	761.2	66	18.9	94	Calm			0		10					Sm'h		Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.11	764.8	45	7.2	84	Calm			0		0			0	0			Clear	
Alert, Hong-Kong, China	30.14	765.5	62	16.7	61	Calm			0		0			0	0			Hazy	
Alliance, Pensacola, Fla	29.89	759.2	51	10.6	86	NNE			3		10			Light		Sm'h		Cloudy	
Ashuelot, Tientsin, China	30.40	772.1	27	— 2.8	88	NW					0							Clear	
Colorado, New York, N. Y.	29.76	755.9	36	2.2	100	N	2	0.9			10		Calm	0.183	4.65			Raining	
Constitution, N. Yard, League I'd., Pa			35	1.7	90	NNW	1	0.4			10							Raining	
Franklin, Off N. Yard, Norfolk, Va	30.05	763.3	39	3.9	73	NW	2	0.9			10			0.72	18.3			Foggy	
Galena, N. 35° 20′, W. 12° 22′	29.53	750.0	64	17.8	89	S			5		10		S			Mod.	SW	Cloudy	
Independence, N. Yard, Mare I'd, Cal.	30.14	765.5	43	6.1	83	Calm	0	0			5		ESE	0	0			Fair	
Jamestown, Sitka, Alaska	29.84	757.9	37	2.8	100	ENE			1		8			0.31	7.9			Cloudy	
Kearsarge, N. 15° 50′, W. 72° 45′	30.02	762.5	80	26.7	78	NE			4		5		ENE			Long	E	Fair	
Lackawanna, Ancon, Peru	30.05	763.3	66	18.9	?	NW			0		10			0	0			Cloudy	
Marion, S. 53° 10′, W. 76° 53′	29.52	749.8	48	8.9	85	NW			2		8		SW			Sm'h		Fair	
Michigan, Erie, Pennsylvania	29.97	761.2	21	— 6.1		N			3		10							Snowing	
Minnesota, New York, N. Y.	29.77	756.1	36	2.2	90	NE			2		10		NE					Rainy	
Monocacy, Shanghai, China	30.53	775.4	27	— 2.8	100	NW			2		0							Clear.	
New Hampshire, Port Royal, S. C.	29.80	756.9	56	13.3	100	SSW	18	8.0			10		SW	0.53	13.5			Foggy	
Nipsic, Villafranca, France	29.87	758.7	55	12.8	57	ESE			1		8					Sm'h		D. clouds	
Onward, Chimbote Bay, Peru	29.91	759.7	71	21.7	80	S			4		2		NW			Long	N:W	Fair	
Palos, Shanghai, China	30.59	777.0	28	— 2.2	88	NW			1		0							Clear.	
Passaic, Washington, D. C.	29.90	759.4	34	1.1	89	NW			1		10		Calm					Raining	
Pensacola, N. 24° 09′ W. 109° 42′	30.05	763.3	64	17.8	58	NNW			3		0					Mod.	NNW	Clear	
Portsmouth, Washington, D. C.	29.80	756.9	31	— 0.6	100	W			1		10							Drizzling	
Powhatan, New York, N. Y.	29.78	756.4	35	1.7	100	NNE			2		10							Rainy	
Quinnebaug, Alexandria, Egypt	30.00	762 0	64	17.8	62	W			6		2		W			Chop		Fair	
Richmond, Pagoda Anchorage, China	30.49	774.4	50	10.0	65	NE			5		8		W	0	0			Hazy	
Saratoga, Baltimore, Md	29.81	757.2	35	1.7	100	NW			1		10			Heavy				Cloudy	
Shenandoah, Montevideo, Uruguay	29.78	756.4	76	24.4	60	N			3		2					Sm'h		Fair	
St. Louis, League Island, Pa	29.87	758.7	36	2.2	90	N	3	1.3			10		NNE	2.00	50.8			Raining	
Swatara, Kobe, Japan	29.84	757.9	33	0.6	80	NNW			4		2		NW			Mod.	NW	Squally	
Tennessee, N. 17° 40′, W 64° 56′	30.12	765.0	80	26.7	78	ENE	17	7.6			8		E	0	0	Sm'h		Cloudy	
Trenton, Villafranca, France	29.86	758.4	51	10.6	52				0–1		10			0	0			Cloudy	
Vandalia, N. 34° 40′, W. 65° 27′	30.29	759.4	63	17.2	100	SE			6		10		SE			Mod.	SE	Drizzling	
Wabash, Boston, Massachusetts	30.02	762.5	36	2.2	100	ENE	14	6.3			10		E	1.2	30.			Raining	
Wachusetts, Taboga near Panama.	29.51	749.5	77	25.0	91	NW			3		2		N	0	0	Sm'h		Fair	
Wyoming, Naples, Italy	29.89	759.2	51	10.6	65	NNW			1		8		NE			Sm'h		Showery	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic,																			
N. 41° 35′, W. 44° 15′	29.04	737.6	48	8.9	100	WNW			6		10					7	WNW; SW	Misty	Capt. H. Parsell.
Ship Baroda, ‡																			
S. 27° 35′, E. 46° 47′	29.84	757.9	80	26.7	80	SW			4		5							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡																			
N. 34° 37, W. 19° 35′	29.32	744.7	64.5	18.1	63	SW			6		10							Raining	Capt. N. Youlden.
S. S. Cipero,																			
N. 54° 00′, W. 10° 55′	30.12	765.0	43	6.1		E			2		10					1	SSW	Overcast	Capt. W. N. Lailey.
City of Agra, ‡																			
S. 54° 08′, W. 115° 30′	29.96	761.0	44.5	6.9	85	SE			1		6							D. clouds	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Coppename,																			
N. 34° 40′, W. 18° 22′	29.38	746.2	63.8	17.7	87	WSW			6		7							D. clouds	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra, ‡																			
S. 26° 08′, E. 59° 28′	30.00	762.0	79	26.1	66	ENE			4		5							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡																			
N. 54° 16′, W. 22° 16′	30.13	765.3	49	9.4	78	NE			5		9					4	ESE; ENE	Overcast	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡																			
N. 12° 44′, E. 84° 50′	29.98	761.5	77.5	25.3	82	NE			5		9							Gloomy	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 55° 35′, W. 12° 50′	30.18	766.6	44.5	6.9	68	NNE			6		6							D. clouds	Capt. H. W. Dyke.
Barque Meriola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡																			
3d station from Port Said, Eg.	29.97	761.2									3							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
Moravian																			
S. S. Peruvian																			Capt. W. H. Smith, R.N.R.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Britanic,																			
N. 50° 00′, W. 17° 50′ †	30.03	762.7	49	9.4		SE			6		10		ESE			H'vy	SE	Squally	Capt. H. Perry.
S. S. Celtic,														6 hours					
N. 46° 30′, W. 47° 14′ †	29.39	746.5	39	3.9		NNW			6		10		WNW	Light		Cross	WNW	Cloudy	Capt. Benj. Gleadell.
S. S. Germanic,																			
N. 41° 09′, W. 64° 35′ †	30.37	771.4	46	7.8		E			4		5?		SSE	0	0	Sm'h		Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Undütsch.
S. S. Hermann																			Capt. H. Maur.
S. S. Köln,																			
N. 37° 40′, W. 72° 30′	29.77	756.1	63.5	17.5		SSE			6		10		S	4 hours		Cross	SSE	Drizzling	
S. S. Leipzig, ‡														Light					
N. 49° 04′, W. 25° 21′	29.66	753.4	53.5	11.9	73	SE			7		8		SE	0	0	H'vy	SE	Cloudy	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolph Fredholm, ‡																			
S. 23° 49′, W. 30° 03′ *†	30.02	762.5	75.6	24.2	90	WNW			1		10							Raining	Capt. Albert Fredholm.
Ship Peru, ‡																			
N. 25° 29′, W. 87° 00′	29.86	758.4	75.1	24.5	88	WSW			4		9us							Overcast	Capt. O. F. Sköterbrand

UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 51° 02′, W. 16° 54′	29.97	761.2	53	11.7	93	E			5		8?		E			Mod.	ESE	Clear?	Capt. J. W. Shackford
S. S. Indiana, ‡ Philadelphia, Pa			30	— 1.1		NE			3		8		NE	Mod	erate				Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 51° 29′, W. 18° 04′	30.04	763.0	48	8.9	92	ESE			6		8		ESE	0	0	L'ge	ESE	Cloudy	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, ‡ N. 44° 18′, W. 50° 00′	29.64	752.8	28	— 2.2		NNW			7		8		NNW	0	0	Very R'gh	WNW	Overcast	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 26° 51′, W. 114° 24′	30.11	764.8	60	15.6	71	N			2		0			0	0	G'tl	NW	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 35° 59′, E. 162° 02′	30.08	764.0	66	18.9	79	SSW			5		8		SW	0	0	High	SW	Cloudy	Capt. H. Davison.
S. S. Gaelic, San Francisco, Cal.	30.32	770.1	52	11.1	93	W			2		10		E			Sl't	N	Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 42° 12′, E. 152° 33′	29.83	757.7	44	6.7	76	W			6				W	0.34	8.6	Mod.	W	Cloudy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			Capt. J. M. Lachlan.
S. S. Geo. W. Elder																			
S. S. Columbia, N. 42° 00′, W. 124° 30′	29.98	761.5	51	10.6	86	SSE			5		10		SSE			Light	S	Overcast	Capt. Fred. Bolles
S. S. Oregon																			Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, N. 33° 44′, W. 118° 29′	30.05	763.3	54	12.2	74	E			1		0					Sm'h		Clear	Capt. J. N. Ingalls.
S. S. Idaho																			C. E. Lyons, 1st Officer
S. S. Orizaba, N. 36° 15′, W. 121° 52′	30.22	767.6	58	14.4	58	SE			1		0					Mod.	SW	Fair	
S. S. State of California, Portland, Oregon	29.97	761.2	40	4.4	100	E			2		10		SE					Raining	Capt. G. Debney.
S. S. Victoria, Fuca Strait	30.08	764.0	38	3.3	90	ENE			2		5					Sm'h		Fair	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			A. Bannerman, 1st Officer.
S. S. Australia																			
S. S. City of New York, S. 20° 30′, W. 175° 40′	29.86	758.4	78	25.6	91	ESE			4		1		SE	0	0	Light	SE	Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, N. 32° 36′, W. 139° 57′	29.91	759.7	62	16.7	83	SSE			6		10		S	0	0	Mod.	S	Cloudy	Capt. G. G. Berry.
S. S. City of Sidney, S. 12° 39, W. 169° 51′	29.78	756.4	83	28.3	63	SSE			2		2		ENE	0	0	Mod.	NE	Clear	Capt. H. C. Dearborn
S. S. City of Tokio, Hong Kong, China	30.39	771.9	61	16.1	88	E			1		0			0	0			Clear	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 15° 38′, W. 97° 16′	29.89	759.2	79	26.1	91	W			3		8		WSW	0	0	Sm'll	wsw	Clear	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths
S. S. Granada, N. 21° 45′, W. 105° 12′	29.95	760.7	71	21.7	85	W			2		0			0	0			Clear	
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			Capt. Sam'l Jackson.
S. S. Belgenland ‡																			Capt. S. Stokes.
S. S. Nederland																			Capt. W. Geo. Randle.
S. S. Rhynland ‡																			Capt. J. C. Jamison.
S. S. Vaderland ‡																			
MISCELLANEOUS.																			Capt. A. Mehaffey.
Sch'r Abby K. Bentley																			
Sch'r Addie Fuller, Brunswick, Ga.	29.85	758.2	61	16.1	94	Calm			0		10d		SW	0.56	14.2			Foggy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, ‡ Arroyo, P. R. ‡	30.33	770.4	78	25.6		ENE			4		2		E	0	0	Sm'h		Clear	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	29.89	759.2	38	3.3	90	WNW	1	0.4		2k	5k			0.04	1.0			Rainy	
Sch'r Hattie V. Kelsey																			Capt. J. L. Randall.
Ship Jumna																			Capt. James S. Gawin
Bark Sunbeam, ‡ Lisbon, Portugal †	29.60	751.8	56	13.3	87	SE			6		10		W	Hea	vy			Rainy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 11, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.94	760.5	67.6	19.8	78	SW			3		2			0	0	Pretty fair.	Dr. Ollive.
Nemours			29.89	759.1	56.8	13.8	60	WNW			1		3			0	0	Fair	Reynard.
Algiers			29.88	759.0	65.1	18.4	65	W			5		9			0.075	1.9	Covered	Nicolas.
La Calle			29.89	759.3	59.7	15.4	77	WSW			3		6			0	0	Cloudy	Fenfrède.
Tunis			29.90	759.5															Jacques.
Sfax			30.02	762.5															Gau.
Saida			29.93	760.3	59.5	15.3	98	WSW			2		4			0	0	Cloudy	Dumas.
Tebessa			30.07	763.7	63.0	17.2	50	W			3		9			0	0	Covered	Watrin.
Gerville																			Lonchamp.
Laghouat			29.98	761.6	67.6	19.8	58	SW			2		1			0	0	Very fair	Herbin.
Biskra			30.06	763.4	61.2	16.2	69	E			1		5			0	0	Cloudy	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.68	753.9	29.77	756.1	68.5	20.3	65	ESE	10	4.5			10			0	0	Dull	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			30.50	774.7	75	23.9		SE			3		4k			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.24	742.6	29.82	757.3	29.1	— 1.6	88	NE			2		10			0.125	3.2	Snowing	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.94	735.1	29.74	755.4	28.0	— 2.2	89	SW	11.9	5.3			4			0.024	0.6		Dr. Wiersbicki.
Eperies	28.84	732.6	29.77	756.1	26.2	— 3.2	78	S			2		9ks		N	0	0		Julius Mikolik.
Gratz‡	28.49	723.7	29.80	757.0	28.6	— 1.9	80	S			2		0			0	0		Andreas Rospini.
Hermannstadt	28.37	720.7	29.91	759.8	16.2	— 8.8	97	SSE			3		4			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.39	721.2	29.82	757.3	25.5	— 3.6	91	Calm			0		10			0	0		The Staff.
Lemberg	28.68	728.5	29.72	754.8	25.4	— 3.1	75	SW			3		10			Inap.	Inap.		Dr. T. Stanecki.
Pola	29.63	752.7	29.75	755.6	41.7	5.4	67	S			1		10			0.218	6.3		I. R. HydrographicOffice.
Szathmar	29.43	747.5	29.88	759.0	25.0	— 3.9	95	S			3		10			0	0		Beicht Petór, S. J.
Szegedin	29.55	750.6	29.85	758.1	29.1	— 1.6	84	S			1		0			0	0		Karl Stancel.
Trieste	29.70	754.4	29.80	757.0	39.6	4.2	40	Calm			0		10			Inap.	Inap.	Cloudy	P. Busin.
Vienna	29.08	738.5	29.83	757.6	29.5	— 1.4	74	Calm			0		8			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 17, 1882.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.58	751.3	29.69	754.1	27.8	— 2.3	77	W	14	6.3			5			0.200	5.08	Blue sky	W. Boswell.
Armagh, Observatory	29.60	751.8	29.84	757.9	32.4	0.2	93	SSW	4	1.8			7			Blank	Blank	D. clouds	S. Call.
Bidston, Liverpool Obs'y			29.78	756.4	33.2	0.7	80	WSW	10	4.5			8					Overcast	John Hartnup.
Bolton, Sharples	29.20	741.7	29.74	755.4	32.0	0.0	90	WNW	15	6.7			10					Overcast	Thomas Mackereth.
Bradford, Yorkshire	29.34	745.2	29.73	755.1	32.5	0.3	89	SW			2		10			Blank	Blank	Overcast	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	82.0	27.8	64	NE			3		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			29.74	755.4	33.0	0.6	89	NW			0.4		8					Overcast	John McLaren.
Chatham, School M. E.	29.66	753.4	29.88	758.9	33.2	0.7	81	Calm			0		0					Misty	Cpl. Gwinn, R. E.
Falmouth, Observatory	29.62	752.3	29.86	758.4	35.0	1.7	70	NNW			1		9					Foggy	The Staff.
Fort Napier, Natal	27.50	698.5	29.72	754.9	92.3	33.5	96	NW			3		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.89	759.2	84	28.9	83	Calm			0		5					D. clouds	C. E. Keane.
Galway, Queen's College			29.82	757.4	34	1.1	90	SW			2		8					D. clouds	J. O'Donaghadue.
Gibraltar, Mediterranean	30.01	762.2	30.07	763.8	61.3	16.3	94	E			2		9					Gloomy	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.54	750.3	29.74	755.4	29.8	— 1.2	93	NE			1							Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.62	752.3	29.80	756.9	33.2	0.7	94	NNW			1		10					Snowing	The Staff.
Guernsey	29.57	751.1	29.80	756.9	37	2.8	95	NNW			1		10					Showery	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.01	762.2	30.05	763.3	34.5	1.4	71	NW	6	2.7			9					Misty	The Met'g'l Office.
Leicester, Museum	29.40	746.7	29.67	753.6	29.9	— 1.2	100	SW			2		9					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.73	755.1	29.80	756.9	62.6	17.0	75	SW			2		6					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.10	764.5	73.2	22.9	98	S			0		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.26	743.2	29.81	757.2	31.4	— 0.3	89	W			2		9					Snowing	Robert Pate.
Oxford, Radcliffe Obs'y	29.56	750.8	29.81	757.2	33	0.6	89	W			2		10					Overcast	The Staff.
Plymouth	29.76	755.9	29.83	757.7	35.6	2.0	70	Calm			0		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.62	752.3	30.3	— 0.9	100	E	29	13.0			5					Hailing	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.88	758.9	29.94	760.5	51.0	10.6	69	SW			2		6			Blank	Blank	D. clouds	Serg't W. H. Lyne.
Sheffield	29.48	748.8	29.78	756.4	34.4	1.3	79	NNW			1		7			0	0	Misty	W. F. Cooper.
Siloth Rectory	29.65	753.1	29.68	753.9	30.4	— 0.9	70	Calm			0		10			0	0	Overcast	Rev. F. Redford, A. M.
Stonyhurst, Observatory			29.76	755.9	30.2	— 1.0	76	NNE	3	1.3			10					D. clouds	Rev. S. J. Perry.
Strathfield Turgiss					34.0	1.1	84	NE			1		8					D. clouds	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	29.74	748.5	29.83	757.7	37	2.8	81	NE			2		5					D. clouds	W. Newcombe.
Valencia, Observatory	29.89	759.2	29.91	759.7	36.6	2.6	72	N	2	0.9			6					D. clouds	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	30.12	765.0	30.16	766.1	22.6	— 5.2		N	6	2.7			10n			1.20	30.5	Cloudy	Hon. J. Ferguson.
Chatham, N. B.*	29.93	760.2	30.00	762.0	23	— 5.0	96	N	10	4.5			10n			0.74	18.8	Cloudy	G. A. Blair.
Charlottetown, P. E. Island	29.81	757.2	29.86	758.4	30	— 1.1	100	NE	6	2.7			10n			0.705	17.91	Light rain	H. J. Cundall, C. E.
Chicontime, Quebec					12.9	—10.6		NW			1	0	1s			1.10	27.9	Clear	Rev. V. A. Huard.
Cornwall, Ontario	30.05	763.5	30.27	768.8	4.0	—15.6	100	NW			1		10s			0.35	8.9	Cloudy	James Smith, M. A.
Dalhousie, N. B	30.09	764.3	30.12	765.0	20.0	— 6.7		W			1		10s			0.80	20.3	Cloudy	H. A. Johnson.
Father Point, Quebec*	30.18	766.6	30.20	767.1	13	—10.6	51	N	2	0.9			10n			0.80	20.3	Light snow	J. McWilliams.
Fredericton, N. B.	29.95	760.7	30.02	762.5	23.0	— 5.0	86	NW	8	3.6			10s			0.820	20.83	Cloudy	Prof. Harrison.
Fort Garry, Manitoba*	29.17	740.9	30.17	766.3	—31	—35.0	100	SW	5	2.2		0	0			0	0	Clear	James Stewart.
Granton, Ontario	29.09	738.9	30.29	769.4	13.5	—10.3	74	Calm			0	0	0			0	0	Clear	James Grant.
Halifax, N. S.*	29.62	752.3	29.75	755.6	33	0.6	96	N	8	3.6			Fog			0.723	18.37	Foggy	A. Allison.
Hamilton, Ontario	29.90	759.4	30.35	770.9	— 4.8	—20.4	86	W			1	4cs	0			0	0	Fair	Geo. Dickson, B. A.
Kingston, Ontario*	29.91	759.7	30.50	769.6	— 4	—20.0	85	N	3	1.3		0	0			0.12	3.0	Clear	S. Woods, M. A.
Little Glace Bay, N. S.	29.88	758.9	29.92	760.0	30.0	— 1.1	100	S	2	0.9			10n			0.60	15.2	Cloudy	C. H Rigby.
Montreal, Quebec*	30.05	763.3	30.27	768.8	77	—13.9	77	N	2	0.9		2ck	2s;8m			0.31	7.9	Fair	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A.
Parry Sound, Ontario*	29.50	749.3	30.26	768.6	11	—11.7	90	SE	4	1.8		5k	5ks	E	E	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.52	749.8	30.41	772.4	—15.6	—26.4	100	N			1	0	0			Inap.	Inap.	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.54	750.3	30.35	770.9	—12	—24.4	100	N	4	1.8		0	0			0.01	0.3	Clear	H. Morgan.
Port Stanley, Ontario	29.59	751.6	30.35	770.9	—15	—26.1	100	N	5	2.2		0	0			0.01	0.3	Clear	M. Payne.
Quebec, Quebec*	29.88	758.9	30.23	767.8	12	—11.1	100	SW			1		10n		SW	0.65	16.5	Light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.80	756.9	30.34	770.6	—16	—26.7	83	Calm	0	0		0	5ks		W	0	0	Fair	W. H. McIntyre.
St. Andrews	29.91	759.7	29.96	761.0	21	— 6.1	87	N	14	6.3			10n			1.02	25.9	Cloudy	
St. John's, N. B	29.73	755.1	29.90	759.4	23.0	— 5.0	100	NW	13	5.8			10ks			1.06	26.9	Cloudy	G. Murdock, C. E.
Saugeen, Ontario*	29.47	748.5	30.26	768.6	7	—13.9	82	S	11	4.9			10ks			0	0	Cloudy	K. Stewart.
Stratford, Ontario	28.90	734.0	30.40	772.1	—18.0	—27.8	93	Calm	0	0		0	Fog			0	0	Foggy	C. J. Macgregor, M. A.
Sydney, C. B*	29.89	759.2	29.94	760.5	30	— 1.1	98	E	4	1.8			10n			0.91	23.1	Sleeting	T. C. Hill, C. E.
Toronto, Ontario*	29.90	759.4	30.33	770.4	6	—14.4	93	N	9	4.9		0	2ks			0	0	Clear	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario	29.14	740.1	30.40	772.1	—16.2	—26.7	94	W	1	0.4		1cs	0	SW		0	0	Clear	Prof. Wolverton.
Yarmouth, N. S.*																			Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. John's, Newfoundland	30.03	762.7	30.21	767.3	28	— 2.2	100	SE	1	0.4			10n			0	0	Cloudy	John Delany.
St. Pierre, N. F.			30.00	762.0	21.9	— 5.6		NE			2					0	0		N. F. Land, Comd't.
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.96	761.0	29.99	761.7	86.5	30.3	40	SE	4.1	1.8		2c;ck	6			0	0		The Staff, for D. Gill.
Cape St. Francis Lt. House	29.81	757.2			70.5	21.4	81	W	20.1	9.0			0			0	0	Blue sky	John Duthie.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	30.43	772.9	30.45	773.5	26.6	— 3.0	60	WSW	1.6	0.7			0			0	0	Clear	M. Marc Dechevrens, S J.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.23	666.2	29.95	760.7	63.5	17.5	97	NE			2		1d			0	0	Clear	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.75	755.7	29.80	756.9	17 1	— 8.3	76	N	11	5			0						
Fanöe	29.72	754.8	29.74	755.3	25.3	— 3.7	87	E			4		9						
Godthaab, Greenland	30.24	768.2	30.29	769.3	37.4	3.0	88	SW			3		10					Raining	
Stykkisholm, Iceland	30.58	776.8	30.63	777.9	10.0	—12.2	93	E			0		0						
Thorshavn	29.84	758.0	29.88	758.9	29.1	— 1.6	88	N	31	14			10						
Vestervig	29.66	753.4	29.76	755.8	20.5	— 6.4	84	E			4		9						
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.15	740.4	29.83	757.6	36.0	2.2	100	S			1		Fog			0	0	Dense fog	M. Labroue, Director.
Alençon	29.36	745.8	29.91	759.8	29.8	—1.2	92	NE			1		10			0	0	Foggy	M. Nicot, Director.
Arras, Engineer School	29.50	749.4	29.77	756.2	33.8	1.0	92	NW					n						M. Klein, Commandant.
Avignon, Normal School	29.66	753.4	29.74	755.4	45.0	7.2	69	N			1		0			0.177	4.5	Very clear	M. Giraud, Director.
Bar-sur-Seine ‖	29.24	742.8	29.84	757.8	26.4	-3.1	87	NE			1		5kn			0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.53	750.1	29.81	757.2	34.7	1.5	76	WNW			1		10			0.098	2.5	Snowing	M. Frère Eugene Marie.
Besançon, Normal School	28.87	733 2	29.81	757.1	29.5	—1.4	100	NE			1		10n		NE	0	0	Covered	M. Gobin, Director.
Bordeaux, Observatory	29.51	749 6	29.78	756.5	32.5	0.3	98	SE			1		10			0	0	Foggy	M. Rayet, Director.
Bourges, Normal School	29.20	741.6	29.77	756.2	29.1	—1.6	96	NE			1		1		N	0	0	Clear	M. Postel, Director.
Brest, Naval Observatory	29.65	753.1	29.89	759.3	36.3	2.4	75	SE			1		7		S	0	0		M. de Rermaree, Dir.
Caen, Normal School	29.68	753.9	29.76	755.9	32.7	0.4	100	ESE			1		8		ESE	0	0	Almost cov'd	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.47	748.5	29.80	756.9	30.2	—1.0		Calm			0		5			0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.25	742.9	29.78	756.4	32.0	0	85	SW			1		10		SW	0	0	Covered	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.36	720.4	29.76	756.0	34.0	1.1	74	SSW			1		0			0	0	Light haze	M. Alluard, Director.
Cluny, Normal School	28.91	734.4	29.79	756.7	32.4	0.2		N			1		10			0	0	Covered	M. de Villemontée, Dir.
Commercy, Normal School	28.91	734.2	29.81	757.2	29.8	—1.2	88	E			1		n		E	0	0	Foggy	Dr. Coulet, Director.
Gap, Normal School	27.20	690.9	29.78	756.3	38.3	3.5	70	SW			1		c		N	0.067	1.7		M. Jeangirard, Director.
Gréasque, du. Rhone	28.61	726.8	29.76	755.8	41.7	5.4	30	NE			1		10		E	0.177	4.5		M. Kina, Director.
Grenoble, Normal School	28.76	730.4	29.54	750.3	38.8	3.8	53	NE			1		ck		NW	c	0		M. Ablard, Director.
Guéret, Normal School	28.16	715.3	29.77	756.1	38.3	3.5	90	SE			1		0			0	0	Clear	M. Rivoir, Director.
Lamballe, Normal School	29.61	752.1	29.90	759.4	35.6	2	74	NE			1		1		NE	0	0	Light fog	M. Ollitrault, Director.
Lescar, Normal School	29.26	743.2	29.71	754.7	44.2	6.8	65	N					2		W	0	0	Slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	29.79	756.6	29.89	759.2	37.0	2.8	66	NE			3		0			0	0	Clear	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.69	728.7	29.75	755.7	33.1	0.6	100	ENE			1		0			0	0	Misty	M. André, Director.
Mans, Normal School	29.56	750.7	29.88	758.9	27.9	—2.3	87	E			1		0			0	0	Clear	M. Piboen, Director.
Marseille, Observatory	29.43	747.4	29.70	754.3	47.3	8.5	82	NE			1		10		W	0.053	1.60	Raining	M. Stephan, Director.
Montlouis l'Instituteur	24.49	622 1	29.73	755.1	34.2	1.2	70	SW	5.6	2.5			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.64	752.8	29.75	755.6	46.9	8.3	86	NNW			2		5		W	0.228	5.8	Cloudy	M. Galzin, Director.
Nancy, Normal School	28.93	734.8	29.73	755.2	28.8	—1.8	84	W			1		10			0	0	Foggy	M. Hasse.
Nantes, Observatory	29.74	755.4	29.90	759.5	30.9	—0.6	60	NE			2		0			0	0	Clear	M. Larocque, l'ir.
Nice	29.65	753.0	29.68	753.9	47.8	8.8	84	SW			2		10	W	W	0.067	1.7	Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.63	752.5	29.73	755.2	45.1	7.3	60	NW	5.6	2.5			3		W	Inap.	Inap.		Dr. Fines.
Pic-du-Midi, Plantade	22.19	563.5			25.2	—3.8							10		NW	0.039	1.0	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.64	728.4	29.77	756.1	40.8	4.9	90	Calm			0		5	NE	N	0	0	Foggy	M. Tallieu.
Puy de Dôme O. s'y, Summit	24.76	629.0			26.4	—3.1	96	W			3		2			0.004	0.1		M. Alluard, Director.
Rochefort, Naval Obs'y	29.79	756.6	29.82	757.4	35.4	1.9	95	E			1		0			0	0	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.61	752.1	29.84	757.8	33.4	0.8	92	N			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.60	701.1	29.81	757.1	36.5	2.5	89	SE			1		Fog		S	0	0	Foggy	M. Richard, Director.
Rouen, Normal School	29.72	755.0	29.81	757.2	32.9	0.5	92	NW			1		10		NW	0	0	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.69	754 2	29.89	759.2	32.4	0.2	78	E			1		10			0	0	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.65	753.1	29.82	757.3	28.8	—1.8	85	S			1		10		N				M. Renou, Director.
Toulouse, Observatory	29.10	739.1	29.82	757.4	37.9	3.3	95	SSW			1		10			0.169	4.3	Covered	M. Bailland, Director.
Tours	29.62	752.4	29.82	757 4				ENE			1		0			0	0	Clear	M. de Tastes.
Versailles, Observatory	29.31	744.5	29.80	757.0	28.4	—2.0	87	NE			1		10			0	0	Covered	Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.93	734.9	29.79	756.6	26.8	—2.9	77	N			4		6ks	E		0.038	0.2		Prof. Dr. Hoh.
Berlin	29.61	752.0	29.79	756.7	23.2	—4.9	74	N			2		10			0.016	0.4		Prof. Dr. Arndt.
Breslau	29.24	742.6	29.76	756.0	23.7	—4.6	79	NW			2		10			0.039	1.00		Royal University Obs'y.
Carlsruhe	29.37	746.0	29.81	757.2	31.3	—0.4	79	SW			0		10	NW		0	0		Albert Senz.
Cassel	29.14	740.2	29.74	755.5	29.8	—1.2	86	S			4		7	SW		0	0		Dr. H. Möhl.
Frankfort on the Main	29.51	749.5	29.89	759 2	29.3	—1.5	76	SSE			2		3			0.004	0.1		Physical Society.
Friedrichshafen	28.27	718.4	29.76	755.8	32.4	0.2	87	NNE			2		10	WSW		0.012	0.3		Chief Telegrapher Wilhelm.
Hamburg	29.71	754.7	29.78	756.5	25.7	—3.5	85	SE			4		9			0.012	0.3		Dr. R. Kleeman.
Kiel	29.75	755.7	29.77	756.1	27.7	—2.4	73	ESE			1		5			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.36	745 7	29.80	756.9	27.0	—2.8	87	NNE			1		9	NW		0	0	Hazy	Prof. Dr. Bruhns.
Magdeburg	29.55	750.6	29.79	756.6	26.2	—3.2	91	E			1		10ks			0.039	1.0		Dr. Assmans.
Memel	29.51	749.5	29.55	750.6	21.2	—6.0	98	NW			4–5		7k						Reinbrecht & Issermann.
Munich	27.88	708.1	29.72	754.9	27.1	—2.7	69	E			2		9	SW		0	0		Central Station.
Neufahrwasser	29.65	753.2	29.67	753.6	20.5	—6.4	71	WNW			3		3			0.008	0.2		A Lothes.
Neustadt, Palatinate	29.17	741.0	29.69	754.2	29.3	—1.5		W			2		10			0.008	0.2	Light snow	Dicknether.
Stuttgart	28.79	731.2	29.72	754.9	28.4	—2.0	74	N			1		10			0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.23	717.0	29.74	755.5	29.1	—1.6	90	Calm			0		10	NW		0	0		Prof. Kemlein.
Wustrow	29.79	756.6	29.82	757.3	22.6	—5.2	99	ENE			2		10			0	0		Prof. S. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.50	749.4	29.90	759.5	53.6	12.0		NE			0.0		10					Blank	Light rain... Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.04	763.1	30.10	764.4	77.7	25.4	31	SSW	7.0	3.1			0			0	0	Blue sky	
Deesa	29.55	750.4	30.03	762.7	74.7	23.7	15	NE	10.5	4.7			0			0	0	Blue sky	
Bombay	29.90	759.6	29.94	760.5	78.9	26.1	71	NNW	22.0	9.8			0			0	0	Blue sky	
Poona, Yarrowda	28.66	712.7	29.91	759.8	80.0	26.7	23	WSW	5.0	2.2			1		WSW	0	0	D. clouds	
Belgaum	27.37	695.3	29.90	759.3	80.3	26.8	31	ENE	3.0	1.3			0			0	0	Blue sky	
Lahore	29.33	745.0	30.11	764.8	60.6	15.9	42	Calm	1.0	0.4			0			0	0	Blue sky	
Roorkee	29.14	740.3	30.09	764.2	59.8	15.4	44	NW	1.8	0.8			0			0	0		
Agra	29.52	749.9	30.11	764.9	65.4	18.6	45	NW	2.7	1.2			0			0	0		
Nagpur	28.92	734.6	29.97	761.2	79.7	26.5	39	S	3.0	1.3			2		NE	0	0	D. clouds	
Jubbulpore	28.64	727.4	30.02	762.6	74.8	23.8	26	E	4.1	1.8			2			0	0	D. clouds	
Lucknow	29.70	754.2	30.09	764.3	60.3	15.7	42	Calm	1.1	0.5			0			0	0	Blue sky	
Allahabad	29.75	755.6	30.08	764.0	59.2	15.1	58	Calm	0.7	0.3			0			0	0	Blue sky	
Patna	29.84	757.9	30.03	762.7	62.1	16.7	47	W	1.0	0.4			2	W	W	0	0		
Hazaribagh	27.97	710.4	30.04	763.0	55.8	18.8	51	Calm	4.6	2.1			2		NW	0	0		
Cuttack	29.93	760.3	30.02	762.4	76.5	24.7	54	WNW	0.6	0.3			5			0	0	D. clouds	
Calcutta, Alipore	30.01	762.2	30.03	762.8	65.3	18.5	61	Calm	0	0			0			0	0	Blue sky	
Goalpara	29.60	752.0	30.02	762.6	66.4	19.1	66	Calm	1.2	0.5			0			0	0	Blue sky	
Chittagong	29.93	760.3	30.03	762.7	65.8	18.8	63	WNW	2.9	1.3			0			0	0	Misty	
Sibsagar	29.72	754.8	30.07	763.8	59.3	15.2	85	SW	1.1	0.5			2			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.38	746.2	29.81	757.2	33.8	1.0	81	Calm	0	0			9			0	0		Prof. Giovanni Clodig.
Milan	29.25	742.9	29.79	756.7	32.4	0.2	87	N	0.7	0.3			10			0	0		Prof. Schiaparelli.
Padua	29.70	754.3	29.81	757.1	31.5	— 0.3	80	NNW	4.3	1.9			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.85	732.7	29.79	756.7	33.3	0.7	81	ENE	2.5	1.1			3		NE	0	0		Prof. P. F. Denza.
Genoa	29.54	750.3	29.74	755.3	34.5	1.4	81	N	8.7	3.9			10		W	0.276	7.0		Prof. G. M. Garibaldi.
Mondovi	27.81	706.4	29.81	757.2	29.5	— 1.4	83	W			2		10			0	0		Prof. D. C. Bruno.
Pesaro	29.74	755.4	29.79	756.7	36.5	2.5	88	W	4.9	2.2			10			0	0		Prof. Luigi Guidi.
Florence	29.45	748.1	29.72	754.8	41.4	5.2	84	NE			2		10			0.110	2.8		Cav. F. Meucci.
Leghorn	29.60	751.7	29.68	753.9	40.1	4.5	76	NE	8.1	3.6			10		W	0.398	10.1		Prof. P. Monte.
Rome	29.57	751.1	29.75	755.6	52.2	11.2	62	NE	5.6	2.5			10			0	0		Prof. P. S. Ferrari.
Lecce	29.55	750.6	29.81	757.1	54.5	12.5	75	SSW	3.1	1.4			4		SW	0.020	0.5		Prof. C. de Giorgi.
Cosenza	28.92	734.6	29.82	757.3	49.3	9.6	71	SW	1.3	0.6			10		WSW	0.228	5.8		Prof. D. Conti.
Cagliari	29.55	750.6	29.74	755.5	57.2	14.0	76	Calm			0		4		W	0	0		Prof. A. Pacinotti.
Palermo	29.57	751.0	29.82	757.3	58.8	14.9	46	WSW	8.7	3.9			8			0	0		Prof. G. Cincciatore.
Syracuse	29.74	755.4	29.78	756.5	59.0	15.0	69	SW	7.4	3.3			8		W	0.039	1.0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R.	29.26	743.1	29.79	756.6	51.1	10.6	76	SSE	0	0			5k	NW		0.177	4.5		Prof. F. Brioschi.
Stelvio	21.93	557.0			11.8	—11.2	34	S					0			0	0		P. F. Denza.
Valdobbia	21.71	551.4			17.1	— 8.3	73	SE					9			0	0		
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.16	766.0	30.18	766.6	32.6	0.3	66	WSW	5.8	2.6			3ck			0	0	Fair	K. Sasaki.
Kioto	29.91	756.7	30.09	764.3	28.7	— 1.8	49						0			0	0	Clear	
Nagasaki, I. M. Obs'y	30.02	762.5	30.24	768.1	33.6	0.9	77	NW	0.5	0.2		ck	9s			0.590	14.99	Cloudy	S. Tukehayashi.
Tokei Obs'y, Yeddo	29.85	758.2	29.92	759.9	27.4	— 2.6	78	NW	4.0	1.8		0	0			0	0	Foggy	The Staff.
Wakayama	30.09	764.3	30.14	765.5	34.6	1.4	74	NW	9.1	4.1			10ck			0.038	0.97	Cloudy	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.69	754.1	29.88	759.0	76.5	24.5	77	ENE	6.5	2.9			10		Var.	0	0	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.84	758.0	30.11	764.7	59.0	15.0	82	ENE			1	0	0			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.76	755.8	29.76	755.8	34.2	1.2		SSW			2					0.028	0.7		
Groningen	29.66	753.4	29.72	754.8	32.4	0.2		SW			1					0.047	1.2		
Helder	29.70	754.3	29.70	754.3	35.2	1.8		S			3					0.075	1.9		
Hellevoetsluis	29.75	755.7	29.75	755.7	32.7	0.4	92	SW			1					0	0		
Utrecht	29.71	754.5	29.75	755.7	29.7	— 1.3	96	W			2		Haze			0.608	0.2	Hazy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.63	752.5	29.69	754.1	22.6	— 5.2	52	Calm	0	0			7			0	0		
Christiania	29.78	756.3	29.94	760.4	6.4	—14.2	66	N	7	3			0			0	0		
Gjæsvær	29.84	757.8	29.86	758.4	19.0	— 7.2		NE			4		10						
Lodingen	29.92	759.9	29.97	761.1	18.9	— 7.3	78	N			2		10			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.13	740.0	29.29	744.0	57.2	14.0	69	WSW	10.5	4.7			4			0	0		Dr. J. A. Sampaio.
Campo Major	28.86	733.1	29.86	758.4	57.9	14.4	93	SSW	12.5	5.6			10			0.079	2.0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.73	755.1	29.82	757.3	67.5	19.7	92	Calm	0	0			10			0.551	14.0	Foggy	Capt. D. A. da Cunha.
Lisbon, Observatory	29.50	749.2	29.85	758.2	61.7	16.5	97	SW	21.7	9.7			10			0.189	4.8		The Staff.
Ponta Delgada, Azores	29.28	743.7	29.35	745.5	59.4	15.2	56	SW	22.4	10.0			4	NNE		0.374	9.5		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinsk	28.98	736.0	30.20	767.0	— 5.8	—21.0	100	NNE	56	25			0						Capt. Lasarew.
Archangel	29.63	752.5	29.65	753.0	—27.8	—33.2	80	NE	4	2			2cs						Capt. Sselliwerstow.
Astrakhan	30.24	768.1	30.16	766.0	27.0	— 2.8	85	SE	4	2			10cp					Heavy clouds	Capt. Wisganow.
Barnaul	29.39	746.5	29.91	759.7	28.6	— 1.9	62	SW	9	4			10						Meteorological Obs'y.
Dorpat	29.17	741.0	29.44	747.8	— 0.1	—17.8	83	NW	2	1			0						Observatory.
Ekaterinburg	29.12	739.7	30.18	766.5	— 9.6	—23.1	72	W	4	2		10c						Light clouds	Meteorological Obs'y.
Kasan	29.60	751.8	29.90	759.4	0.5	—17.5	76	S	16	7			10						Observatory.
Kertch	29.94	760.4	29.95	760.9	34.7	1.5	89	SW	7	3			10						Meteorological Obs'y.
Kieff	29.00	736.6	29.67	753.7	23.9	— 4.5	54	WSW	13	6		c	8cs;ks						Lagorio.
Krotkowo, N. 58°47′, E. 48°34′																			Observatory.
Lugan	29.61	752.2	29.83	757.7	24.6	— 4.1	73	SSW	22	10			5			Blank	Blank		Cand. Fatjanow.
Moscow	28.82	732.1	29.41	746.9	16.7	— 8.5	82	SSW	4	2			8ks						Meteorological Obs'y.
Nertchinsk	27.92	709.1	30.56	776.1	—13.2	—25.1	89						0						Meteorological Obs'y.
Nikolaiev	29.80	757.0	29.87	758.8	28.8	— 1.8	56	SW	9	4			7cs					Light clouds	Meteorological Obs'y.
Nikolaievsk, on the Amoor	29.53	750.1?	29.54	750.3?	10.4	—12.0	85	W	18	8			10n					Snow-drift	1st. Lieut. Kurdakov.
Nukuss	30.17	766.3	30.41	772.5	33.8	1.0	89	NNE	7	3			10n						Lieut. Iwanow.
Pekin, China	30.33	770.3	30.47	773.9	30.2	— 1.0	37	NW	4	3			0						Dr. Dobrochotow.
St. Petersburg	29.36	745.8	29.38	746.2	— 0.2	—17.9	78	NNE	13	6			6ks;s						Physical Observatory.
Tashkend, Laboratory	28.53	724.7	30.14	765.5	46.8	8.2	56	NE	22	10			4						Central Physical Obs'y.
Tiflis	28.64	727.4	30.11	764.7	39.4	4.1	82	Calm	0	0			10						Teich, A. M.
Warsaw	29.21	742.0	29.66	753.4	23.7	— 4.6	88	WNW	13	6			10n						Physical Observatory.
Wilna	29.08	738.5	29.51	749.6	20.1	— 6.6	80	W	4	2			8						Astronomical Obs'y.
Yeniseisk	29.46	748.3	29.76	755.9	27.5	— 2.5	91	S	9	4			10					Light clouds	Berg, Assistant.
																			M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.77	756.1	30.8	— 0.7	91	W				2	7k	S		0.04	1.0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.81	757.2	32	0.0	90	N				6	10						J. Youngclause.
North Unst, Shetland Isl'ds			29.73	755.1				NE				6	8			Blank	Blank		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.65	753.1	29.76	755.8	55.0	12.8	62	W	4.9	2.2			0			0.024	0.61	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.76	756.0	29.82	757.5	49.8	9.9	80	SE	0.8	0.36		2	6	NW		0	0	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.85	681.9			39.9	4.4	97	S	3.4	1.51			10			0.492	12.5	Foggy	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.64	702.1	29.90	759.8	47.5	8.6	95	N	2.7	1.2			10			0.057	1.7	Covered	The Staff.
Murcia, Met. Obs'y. ‡	29.75	755.7	29.91	759.6	58.8	14.9	76	NNW	0.9	0.4		2	3	SE		0.004	0.1	Misty	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.79	731.2	29.68	753.9	52.0	11.1	98	SE	0	0			10			0.555	14.1	Misty	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.99	761.8	30.06	763.5	72.3	22.4	92	SE	2.7	1.2		3ck	2k	SSW	SSW	0.012	0.3	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.99	761.8	30.04	763.1	79.5	26.4	79	E	0	0			1s			0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.91	759.6	30.01	762.1	61.9	16.6	98	SSW	7.5	3.4			10		S	0.665	16.9		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.07	763.8	30.16	766.1	84.2	29.0	54	SE	2.8	1.27		5c	2k	SE	SE	0	0	D. clouds	Enrique Gadea, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.80	756.9	29.84	757.9	7.5	—13.6	100	N				2	10			0	0		
Umea	29.78	756.3	29.83	757.6	9.0	—12.8	92	N				4	10			0	0		
Hernosand	29.84	757.8	29.89	759.1	10.2	—12.1	81	N				4	9			0	0		
Stockholm	29.49	749.0	29.67	753.5	11.7	—11.3	89	N				6	10			0.053	1.6		
Wisby	29.49	749.0	29.55	750.5	20.8	— 6.2	79	N				6	10			0	0		
Sub-Series.																			
Upsala	29.60	751.9	29.69	751.1	9.5	—12.5	96	NNW	13.6	6.1			10			0.014	0.35	Snowing	Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.31	719.0	29.80	756.8	34.5	1.4	75	SSW				2	9			0	0	Covered	The Observatory.
Zurich	28.08	713.1	29.80	756.9	30.2	— 1.0	75	W				1	8			0.004	0.1	Foggy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —8.7 mm.; Ther. 0°.0 cent.; Hum. —4 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.00	762.1	48.6	9.2	83	SW	13	6.0			5			0.079	2.0		The Observatory.
Valona			29.79	756.6	49.1	9.5		NW				2	10			0	0	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.10	764.5	63.1	17.3	65	W				2	7n			0.31	7.9		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direc-tion. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
Albany, New York	30.16	766.1	30.25	768.3	22	— 5.6	72	NE	4	1.8			10s		Calm	0.30	7.6	Cloudy	
Alpena, Michigan	29.49	749.0	30.21	767.3	10	—12.2	79	SW	6	2.7			8s		Calm	0	0	Cloudy	
Atlanta, Georgia	28.85	733.0	30.04	763.0	38	3.3	80	NW	5	2.2			Fog		Calm	0.01	0.3	Foggy	
Atlantic City, New Jersey	30.14	765.5	30.16	766.1	28	— 2.2	66	N	10	4.5			10s		Calm	0.26	6.6	Cloudy	
Augusta, Georgia	29.90	759.4	30.10	764.5	45	7.2	92	Calm	0	0			10s;fg		Calm	0.10	2.5	Cloudy	
Baltimore, Maryland	30.17	766.3	30.22	767.6	29	— 1.7	67	NW	6	2.7			10s		Calm	0.13	3.8	Cloudy	
Barnegat, New Jersey	30.12	765.0	30.14	765.5	27	— 2.8	76	N	17	7.6			10s		Calm	0.81	20.6	Cloudy	
Benton, Montana	26.85	682.0			— 1	—18.3	100	NE	9	4.0			10n		Calm	0.07	1.8	Light snow.	
Bismarck, Dakota	28.19	716.0	30.04	763.0	—27	—32.8		Calm	0	0		0	0			Inap.	Inap.	Clear.	
Boise City, Idaho	27.01	686.0	29.97	761.2	40	4.4	82	SE	2	0.9			10n		Calm	0.98	24.9	Light rain	
Boston, Massachusetts	29.96	761.0	30.13	765.3	23	— 5.0	86	NW	11	4.9		5c	2s	W	Calm	1.91	48.5	Fair	
Brackettville, Texas	29.05	737.9	30.18	766.6	24	— 4.4	87	W	2	0.9			10s		Calm	0	0	Cloudy	
Brownsville, Texas	30.22	767.6	30.28	769.1	34	1.1	100	Calm	0	0		2c	0	Calm		0	0	Clear	
Buffalo, New York	29.54	750.3	30.31	769.9	10	—12.2	90	NW	2	0.9			10s;fg		Calm	0.05	1.3	Cloudy	
Burlington, Vermont	30.01	762.2	30.33	770.4	16	— 8.9	83	NE	11	4.9			10n		NE	0.24	6.1	Light snow.	
Cairo, Illinois	29.86	758.4	30.31	769.9	8	—13.3	78	NW	2	0.9			10s		Calm	0	0	Cloudy	
Campo, California	27.65	702.3	30.22	767.6	28	— 2.2	78	S	2	0.9		5c	0	N		0	0	Fair	
Camp Thomas, Arizona	27.44	697.0			21	— 6.1	71	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.13	765.3	30.15	765.8	35	1 7	80	N	7	3.1			10s		W	0.32	8.1	Cloudy	
Cape May, New Jersey	30.13	765.3	30.16	766.1	30	— 1.1	60	N	13	5.8		10cs	0	NW		0.10	2.5	Cloudy	
Castroville, Texas	29.46	748.3	30.23	767.8	23	— 5.0	60	NW	2	0.9		0	0			0	0	Clear	
Cedar Keys, Florida	30.01	762.2	30.04	763.0	58	14.4	94	W	2	0.9			10ks		W	0.41	10.4	Cloudy	
Champaign, Illinois	29.33	745.0	30.22	767.6	6	—14.4	52	SW	3	1.3			10s		SW	0	0	Cloudy	
Charleston, S. Carolina	30.02	762.5	30.07	763.8	50	10.0	93	N	2	0.9			10n		Calm	0.22	5.6	Light rain	
Charlotte, N. Carolina	29.19	741.4	30.03	762.7	36	2.2	100	NE	6	2.7			10s		NE	0.09	2.3	Cloudy	
Chattanooga, Tennessee	29.27	743.4	30.10	764.5	33	0.6	89	SW	7	3.1			10n		W	Inap.	Inap.	Light snow.	
Cheyenne, Wyoming	23.77	603.8	29.71	754.6	27	— 2.8	53	W	20	8.9		0	5s		Calm	0	0	Fair	
Chicago, Illinois	29.46	748.3	30.22	767.6	12	—11.1	23	SW	5	2.2		0	0			0	0	Clear	
Chincoteague, Virginia	30.13	765.3	30.15	765.8	30	— 1.1	89	NE	11	4.9			10s		W	0.66	16.8	Cloudy	
Cincinnati, Ohio	29.54	750.3	30.26	768.6	12.5	—10.8	71	NE	2	0.9			Fog		Calm	0	0	Foggy	
Cleveland, Ohio	29.50	749.3	30.32	770.1	— 1	—18.3	100	SE	5	2.2		0	1s;fg		Calm	0.03	0.8	Clear	
Coleman City, Texas	28.36	720.3	30.17	766.3	17	— 8.3	67	SW	12	5.4		0	0			0	0	Clear	
Columbus, Ohio	29.30	744.2	30.24	768.1	4	—15.6	74	N	3	1.3		0	Fog		Calm	0	0	Clear	
Concho, Texas	28.21	716.5	30.06	763.5	11	—11.7	80	NW	4	1.8		0	0			0	0	Clear	
Corsicana, Texas	29.81	757.2	30.33	770.4	12	—11.1	61	Calm	0	0		0	0			0	0	Clear	
Davenport, Iowa	29.46	748.3	30.16	766.1	10	—12.2	69	S	2	0.9		0	0			0	0	Clear	
Dayton, Washington T'y	27.89	708.4	29.59	751.6	27	— 2.8	100	Calm	0	0			10s		Calm	0.36	9.1	Cloudy	
Deadwood, Dakota	25.05	636.3			10	—12.2	79	NW	1	0.4		0	0			0.20	5.1	Clear	
Decatur, Texas	28.94	735.1	30.22	767.6	21	— 6.1	86	SE	10	4.5		0	0			0	0	Clear	
Delaware Breakwater, Del.	30.13	765.3	30.15	765.8	29	— 1.7	67	N	19	8.5			10s		Calm	0.12	3.0	Cloudy	
Denison, Texas	29.38	746.2	30.24	768.1	20	— 6.7	85	SW	4	1.8		0	0			0	0	Clear	
Denver, Colorado	24.59	624.6	29.81	757.2	23	— 5.0	60	W	4	1.8		0	5s		Calm	0	0	Fair	
Des Moines, Iowa	29.14	740.1	30.11	764.8	9	—12.8	78	Calm	0	0		0	0		Calm	0	0	Clear	
Detroit, Michigan	29.54	750.3	30.28	769.1	5	—15.0	75	Calm	0	0			Fog		Calm	0	0	Foggy	
Dodge City, Kansas	27.33	694.2	29.83	757.7	7	—13.9	54	W	8	3.6		0	0			0	0	Clear	
Dubuque, Iowa	29.40	746.7	30.17	766.3	9	—12.8	78	Calm	0	0			10s		Calm	0	0	Cloudy	
Duluth, Minnesota	29.40	746.7	30.17	766.3	—16	—26.7		SW	2	0.9		0	0			0	0	Clear	
Eagle Pass, Texas	29.48	748.8	30.28	769.1	27	— 2.8	76	Calm	0	0		0	0			0	0	Clear	
Eagle Rock, Texas	25.02	635.5	29.67	753.6	28	— 2.2	100	SW	29	13.0			10n		Calm	0.39	9.9	Light snow.	
Eastport, Maine	29.90	759.4	29.97	761.2	22	— 5.6	72	N	17	7.6			10s		N	3.43	87.1	Cloudy	
Edinburg, Texas					35	1.7	61	N			4	0	5ks		Calm	0	0	Fair	
El Paso, Texas	26.35	669.3			34	1.1	52	NW	5	2.2		0	1s		Calm	0	0	Clear	
Erie, Pennsylvania	29.50	749.3	30.29	769.4	6	—14.4	76	S	6	2.7		0	Haze		Calm	0.15	3.8	Fair	
Escanaba, Michigan	29.40	746.7	30.14	765.5	5	—15.0	75	W	5	2.2			10s		Calm	0	0	Cloudy	
Florence, Arizona	28.78	731.0	30.38	771.6	30	— 1.1	47	Calm	0	0		8cs	0	Calm		0	0	Fair	
Fort Apache, New Mexico	25.15	638.8	30.60	777.2	17	— 8.3	51	Calm	0	0		0	0			0	0	Clear	
Fort Assinniboine, Montana	26.82	681.2			—10	—23.3	100	NE	12	5.4			10n		NE	0.06	1.5	Light snow.	
Fort Bennett, Dakota	28.44	722.4			— 3	—19.4	66	SE	2	0.9		0	0			0.02	0.5	Clear	
Fort Buford, Dakota	27.94	709.7	30.14	765.5	—31	—35.0	100	Calm	0	0		5cs	0	W		0	0	Fair	
Fort Custer, Montana	26.50	673.1			— 2	—18.9	67	N	7	3.1			10s		Calm	0.16	4.1	Cloudy	
Fort Davis, Texas	25.18	639.6	30.14	765.5	28	— 2.2	77	SW	8	3.6		0	0			0	0	Clear	
Fort Elliott, Texas	27.37	695.2	29.92	760.0	2	—16.7	44	NW	4	1.8		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.62	752.3	30.23	767.8	2	—16.7	72	SE	4	1.8		0	0			0	0	Clear	
Fort Grant, Arizona	25.28	642.1	30.08	764.0	28	— 2.2	77	NE	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas	28.85	732.8	30.24	768.1	17	— 8.3	67	Calm	0	0		0	0			0	0	Clear	
Fort Keogh, Montana	27.30	693.4			— 8	—22.2	100	E	3	1.3			10s		Calm	0	0	Cloudy	
Fort Macon, North Carolina	30.07	763.8	30.08	764.0	40	4.4	91	NE	20	8.9			10s		NE	0.25	6.3	Cloudy	
Fort Missoula, Montana	26.25	666.7			21	— 6.1	100	NW	1	0.4			10n		Calm	0.70	17.8	Heavy snow	
Fort McKavett, Texas	27.89	708.4	29.95	760.7	24	— 4.4	74	SW	7	3.1		0	0			0	0	Clear	
Fort Shaw, Montana	25.96	659.4			1	—17.2	100	Calm	0	0			10n		Calm	0.10	2.5	Light snow.	
Fort Sill, Indian Territory	28.82	732.0	30.05	763.3	7	—13.9	77	Calm	0	0		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.14	714.7			—32	—35.6	100	Calm	0	0		0	0			0	0	Clear	
Fort Verde, Arizona					22	— 5.6	45	NW			2	5cs	0	W		0	0	Fair	
Fredericksburg, Texas	28.40	721.3	30.07	763.8	29	— 1.7	89	W	2	0.9		0	0			0	0	Clear	
Galveston, Texas	30.25	768.3	30.29	769.4	34	1.1	90	NW	4	1.8		0	1s		Calm	0	0	Clear	
Grand Haven, Michigan	29.50	749.3	30.20	767.1	14	—10.0	82	SE	8	3.6		2k	0	Calm		0	0	Clear	
Hatteras, North Carolina	30.08	764.0	30.10	764.5	41	5.0	91	N	24	10.7			10s		Calm	0.60	15.2	Cloudy	
Helena, Montana	25.45	646.4			9	—12.8	100	Calm	0	0			10n		Calm	0.08	2.0	Heavy snow	
Henrietta, Texas	29.13	739.9	30.18	766.6	7	—13.9	54	NW	3	1.3		0	0			0	0	Clear	
Indianapolis, Indiana	29.37	746.0	30.26	768.6	— 2	—18.9	67	N	2	0.9		1c	1s;m'o	Calm	Calm	0	0	Fair	
Indianola, Texas	30.28	769.1	30.31	769.9	35	1.7	80	NW	4	1.8		0	0			0	0	Clear	
Jacksboro, Texas	28.95	735.3	30.17	766.3	23	— 5.0	73	Calm	0	0		0	0			0	0	Clear	
Jacksonville, Florida	29.99	761.7	30.04	763.0	56	13.3	87	NE	7	3.1			10s		Calm	0.57	14.5	Cloudy	
Keokuk, Iowa	29.44	747.8	30.16	766.1	6	—14.4	64	S	3	1.3		0	0			0	0	Clear	
Key West, Florida	30.05	763.3	30.08	764.0	74	23.3	90	S	4	1.8		1k	0	Calm		Inap.	Inap.	Clear	
Kittyhawk, North Carolina	30.12	765.0	30.14	765.5	37	2.8	81	NE	22	9.8			10s		NE	0.62	15.7	Cloudy	
Knoxville, Tennessee	29.05	737.9	30.10	764.5	32	0.0	89	N	1	0.4			10s		Calm	0	0	Cloudy	
La Crosse, Wisconsin	29.30	744.2	30.10	764.5	12	—11.1	80	Calm	0	0		0	0			0	0	Clear	
La Mesilla, New Mexico	26.25	666.7	30.40	772.1	18	— 7.8	68	N	1	0.4		0	0			0	0	Clear	
Laredo, Texas	29.82	757.4	30.19	766.8	30	— 1.1	89	Calm	0	0		0	0			0	0	Clear	
Leavenworth, Kansas	29.14	740.1	30.05	763.3	16	— 8.9	66	S	12	5.4			10s			0	0	Cloudy	
Lewiston, Idaho	28.79	731.3	29.44	747.8	33	0.6	100	E	4	1.8			10n		Calm	0.85	21.6	Heavy snow	
Little Rock, Arkansas	29.92	760.0	30.27	768.8	22	— 5.6	86	N	2	0.9		0	Fog		Calm	0	0	Clear	
Los Angeles, California	29.90	759.4	30.25	768.3	44	6.7	76	N	6	2.7		0	1s		Calm	0	0	Clear	
Louisville, Kentucky	29.60	751.8	30.21	767.3	11	—11.7	80	N	6	2.7		5k	5s	N	Calm	0	0	Cloudy	
Lynchburg, Virginia	29.47	748.5	30.18	766.6	35	1.7	80	NE	4	1.8			10s		Calm	0.04	1.0	Cloudy	
Madison, Wisconsin	29.07	738.4	30.15	765.8	10	—12.2	79	S	5	2.2			10s		Calm	0	0	Cloudy	
Marquette, Michigan	29.32	744.7	30.12	765.0	0	—17.8	70	SW	7	3.1		0	8s		SW	0	0	Cloudy	
Mason, Texas	28.47	723.1	30.38	771.6	21	— 6.1	81	W	2	0.9		0	0			0	0	Clear	
Memphis, Tennessee	29.88	758.9	30.25	768.3	18	— 7.8	84	Calm	0	0		1cs	Haze	Calm	Calm	0	0	Clear	
Milwaukee, Wisconsin	29.38	746.2	30.18	766 6	13	—10.6	81	SW	6	2.7			10s		SW	0	0	Cloudy	

UNITED STATES SERIES.

By authority of the Secretary of War.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.12	765.0	30.20	767.1	38	3.3	91	NW	10	4.5			10s		Calm	0.08	2.0	Cloudy	
Montgomery, Alabama	29.93	760.2	30.17	766.3	36	2.2	80	NW	6	2.7			10s		Calm	0.01	0.3	Cloudy	
Morgantown, W. Virginia	29.13	739.9	30.19	766.8	22	— 5.6	79	Calm	0	0			10s		Calm	Inap.	Inap.	Cloudy	
Moorhead, Minnesota	29.13	739.9	30.26	768.6	—20	—28.9	64	W	4	1.8		0	0			0	0	Clear.	
Mt. Washington, N. H.	23.59	599.2	29.95	760.7	10	—12.2	58	NE	21	9.4		2c	8s	Calm	Calm	0.71	18.0	Clear	
Nashville, Tennessee	29.64	752.8	30.22	767.6	23	— 5.0	73	W	3	1.3		0	Sm'e		W	0	0	Dense smoke	
New Haven, Connecticut	30.04	763.0	30.16	766.1	22	— 5.6	72	N	8	3.6			10s		Calm	0.70	17.8	Cloudy	
New London, Connecticut	30.05	763.5	30.12	765.0	29	— 1.7	78	N	5	2.2			10s		Calm	1.60	40.6	Cloudy	
New Orleans, Louisiana	30.17	766.3	30.23	767.8	38	3.3	72	NW	9	4.0			10s		Calm	0.01	0.3	Cloudy	
Newport, Rhode Island	30.06	763.5	30.11	764.8	27	— 2.8	76	NW	11	4.9			10s		Calm	2.16	54.9	Cloudy	
New River, N. Carolina					39	3.9	83	N			2		10s		N			Cloudy	
New Shoreham, Rhode I'd	30.10	764.5	30.14	765.5	29	— 1.7	67	N	19	8.5		8cs	0	N		0.13	3.3	Fair	
New York, New York	29.98	761.5	30.17	766.3	27	— 2.8	88	N	8	3.6		2cs	8s	Calm	Calm	0.38	9.7	Cloudy	
Norfolk, Virginia	30.11	764.8	30.18	766.6	33	0.6	89	N	11	4.9			10s		N	0.34	8.6	Cloudy	
North Platte, Nebraska	27.00	685.8	29.70	754.4	11	—11.7	80	NE	6	2.7		0	0			0	0	Clear	
Olympia, Washington T'y	29.38	746.2	29.43	747.5	47	8.3	100	S	5	2.2			10n		Calm	2.75	69.9	Light rain	
Omaha, Nebraska	28.82	732.0	30.03	762.7	5	—15.0	75	N	4	1.8		0	1s		Calm	0	0	Clear	
Oswego, New York	29.94	760.5	30.28	769.1	17	— 8.3	83	NE	8	3.6		0	5s		N	0.27	6.9	Fair	
Pensacola, Florida	30.17	766.3	30.20	767.1	40	4.4	91	W	8	3.6			10s		Calm	0.05	1.3	Cloudy	
Philadelphia, Pa	30.12	765.0	30.18	766.6	25	— 3.9	87	NE	12	5.4			10s		Calm	0.03	0.8	Cloudy	
Phœnix, Arizona	29.16	740.7	31.12	790.4	27	— 2.8	64	E	3	1.3		0	0			0	0	Clear	
Pike's Peak, Colorado	17.40	442.0	29.62	752.3	— 9	—22.8	78	W	52	23.2		10cs	0	Calm		0	0	Cloudy	
Pilot Point, Texas	29.40	746.7	30.32	770.1	20	— 6.7	70	S	8	3.6		0	0			0	0	Clear	
Pioche, Nevada	24.10	612.1	29.87	758.7	21	— 6.1	57	Calm	0	0		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.36	745.7	30.24	768.1	16	— 8.9	83	NW	2	0.9			10s;fg		NW;C	0.02	0.5	Cloudy	
Port Huron, Michigan	29.55	750.0	30.29	769.4	2	—16.7	72	S	4	1.8		2cs	Sm'e	Calm		0	0	Fair	
Portland, Maine	30.04	763.0	30.10	764.5	27	— 2.8	76	N	8	3.6		5ck	5s	NW	Calm	1.50	38.1	Cloudy	
Portland, Oregon	29.53	750.0	29.60	751.8	52.5	11.4	90	S	17	7.6			10n		S	2.12	53.8	Light rain	
Portsmouth, N. Carolina					40	4.4	82	NE	24	10.7			10s		Calm	0.03	0.8	Cloudy	
Prescott, Arizona	24.88	531.9	30.24	768.1	21	— 6.1	57	SW	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	30.01	762.2	30.03	762.7	69	20.6	90	SW	12	5.4			10ks		SW	0.25	6.3	Cloudy	
Red Bluff, California	29.88	758 9	30.24	768.1	43.0	6.1	92	SW	8	3.6			10s		Calm	0	0	Cloudy	
Rio Grande City, Texas	30.09	764.3	30.33	770.4	30	— 1.1	78	Calm	0	0		0	0			0	0	Clear	
Rochester, New York	29.63	752.6	30.30	769.6	18	— 7.8	84	W	4	1.8			10n		Calm	0.29	7.4	Light snow	
Roseburg, Oregon	29.30	744.2	29.86	758.4	51.5	10.8	83	S	5	2.2			10n			1.09	27.7	Light rain	
Sacramento, California	30.22	767.6	30.29	769.4	42	5.6	91	SE	6	2.7		0	5s		Calm	0	0	Fair	
St. Louis, Missouri	29.59	751.6	30.23	767.8	6	—14.4	88	S				1cs	0	Calm		0	0	Clear	
St. Paul, Minnesota	29.20	741.7	30.13	765.3	— 4	—20.0	64	NW	4	1.8		0	0			0	0	Clear	
Salt Lake City, Utah	25.62	651.0	29.95	760.7	33	0.6	70	S	14	6.3			10s		Calm	0.01	0.3	Cloudy	
San Antonio, Texas	29.56	750.8	30.31	769.9	27	— 2.8	76	Calm	0	0		0	0			0	0	Clear	
San Diego, California	30.23	767.8	30.30	769.6	40	4.4	82	NE	4	1.8		0	Haze		Calm	0	0	Clear	
Sandusky, Ohio	29.54	750.3	30.29	769.4	4	—15.6	74	NW	3	1.3		0	5s		Calm	0	0	Fair	
Sandy Hook, New Jersey	30.14	765.5	30.18	766.6	26	— 3.3	75	N	11	4.9		10cs	0	Calm		0.20	5.1	Cloudy	
San Francisco, California	30.23	767.8	30.30	769.6	51	10.6	86	SE	4	1.8			10s		Calm	0	0	Cloudy	
Santa Fé, New Mexico	23.22	589.8	29.75	755.9	15	— 9.4	64	N	12	5.4		0	0			0	0	Clear	
Savannah, Georgia	30.01	762.2	30.10	764.5	52	11.1	83	N	3	1.3			Fog		Calm	0.16	4.1	Dense fog	
Shreveport, Louisiana	30.03	762.7	30.29	769.4	27	— 2.8	88	Calm	0	0		0	0			0.02	0.5	Clear	
Silver City, New Mexico	24.34	618.2	30.91	785.1	21	— 6.1	57	NW	4	1.8		0	0			0	0	Clear	
Smithville, North Carolina	30.07	763.8	30.10	764.5	43	6.1	92	N	8	3.6			10s		Calm	0.18	4.6	Cloudy	
Socorro, New Mexico	25.50	647.7	29.56	750.8	12	—11.1	61	NE	1	0.4		0	0			0	0	Clear	
Springfield, Illinois	29.49	749.0	30.24	768.1	6	—14.4	76	S	7	3.1		0	0			0	0	Clear	
Springfield, Massachusetts	30.03	762.7	30.17	766 3	24	— 4.4	74	N	5	2.2		0	1s		Calm	0.51	13.0	Clear	
Stockton, Texas	27.05	687.1	30.05	763.3	28	— 2.2	77	S	4	1.8		0	0			0	0	Clear	
St. Vincent, Minnesota	29.16	740.7	30.10	764.5	—24	—31.1	100	W	3	1.3		0	0			0	0	Clear	
Thatcher's Island, Mass	30.06	763.5	30.12	765.0	28	— 2.2	54	NW	19	8.5		10cs	0	NW		0.78	19.8	Cloudy	
Toledo, Ohio	29.51	749.5	30.28	769.1	3	—16.1	100	N	2	0.9			Fog		Calm	0	0	Dense fog	
Tucson, Arizona	27.76	705.1	30.31	769.9	29	— 1.7	56	S	6	2.7		0	0			0	0	Clear	
Umatilla, Oregon	29.31	744.5	29.82	757.4	25..5	— 3.1	94	SE	6	2.7		0	8s		Calm	0.25	6.3	Cloudy	
Uvalde, Texas	29.32	744.7	30.22	767.6	22	— 5.6	86	Calm	0	0		0	0			0	0	Clear	
Vicksburg, Mississippi	29.99	761.7	30.27	768.8	30	— 1.1	89	NW	2	0.9			10s		Calm	0.01	0.3	Cloudy	
Visalia, California	29.91	759 7	30.30	769.6	39	3.9	82	E	4	1.8		0	0			0	0	Clear	
Washington, D. C.	30.11	764.8	30.23	767.8	26	— 3.3	88	N	4	1.8			10s		Calm	0.06	1.5	Cloudy	
Wickenburg, Arizona					24	— 4.4	74	W			1	5c	2s	Calm	Calm	0	0	Cloudy	
Wilmington, N. Carolina	30.06	763.5	30.12	765.0	43	6.1	92	NE	5	2.2			10s		Calm	0.27	6.9	Cloudy	
Winnemucca, Nevada	25.59	650.0	29.95	760.7	43	6.1	36	SW	28	12.5			10ks		SW	0	0	Cloudy	
Wood's Holl, Mass	30.06	763.5	30.10	764.5	28	— 2.2	77	NW	12	5.4			10s		SW	0.74	18.8	Cloudy	
Yankton, Dakota	28.76	730.5	30.22	767.6	— 3	—19.4	66	NW	14	6.3		0	0			0.02	0.5	Clear	
Yuma, Arizona	30.13	765.3	30.28	769.1	37	2.8	63	NE	2	0.9		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.01	559.0			48.5	9.2	63	Calm	0	0		2c	0			0	0	Clear	Thomas Herran.
Havana, Cuba, W. I.	30.03	762.7	30.08	764.0	75	24.4	81	Calm	0	0		8cs	4ks	S	S	0.01	0.3	Foggy	Charles Hasselbrink.
Jakobshavn, Greenland	30.22	767.5	30.28	769.1	37.4	3.		W			2		10			0	0		
Kingston, Jamaica, W. I.	30.05	763.3	30.06	763 5	73.2	22.9	74	Calm	0	0		0	2ks		E	0	0	Fine	Maxwell Hall.
Navassa, W. I.	29.98	761.5	30.06	763.5	77.5	25.3	73	E	20	8.9		5ck	5s	NE	E	Inap.	Inap.	Fair	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	702.5	79	26.1	78	E			3	3c	5k	E		0.100	2.54	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.41	747.0	29.97	761.2	83	28.3	72	Calm			0	0	10s;ks		N	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					73	23		ESE			1	0	1k		ESE	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.07	763.8	30.10	764.5	70	24.4	76	Calm	0	0		0	0			0	0		Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	30.14	765.6	30.20	767.1	34.7	1.5		WSW			4		0			0	0		
York Factory, B. A.	30.00	762.0	30.06	763.5	—42.0	—41.1		S	8	3.6		1c	0	S		0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
M.H. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandre																			Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.09	764.3	69	20.6		SSE			2		3	S						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J.Garforth
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.91	759.7	75	24.4	82	NNW			5		0							Squally	Capt. R. D. King.
H. M. S. Falcon,																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Callao Bay, Peru	29.92	760.0	65	18.3	94	N			1		10							Misty	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	29.82	757.4	55	12.8	84	SE			3		10	SE				2	SE	Overcast	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P.Fitzgerald.
H. M. S. Iris, N. 37° 57′, E. 17° 36′	29.80	756.9	58	14.4	82	SSW			2		10					3	SW	Showery	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 25° 58′, E. 119° 29′	30.43	772.9	47.5	8.6	73	NE			2		0							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 18° 38′, E. 71° 16′	29.92	760.0	77	25.0	73	NNE			2		0					2	NE	Blue sky	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 38° 42′, W. 9° 06′	29.82	757.4	63	17.2	94	SW			6		10	SW						Misty	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 29° 27′, W. 62° 22′	30.20	767.1	75.5	24.2	96	NE			1		2	NE				3	NE	D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes, N. 48° 53′, W. 5° 13′	29.84	757.9	46.5	8.1	?	ESE			1-2		10	SE				5	SE	Misty	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 22′, E. 48° 54′	29.67	753.6	78	25.6	78	E			2		1					4	ESE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis, N. 34° 59′, E. 19° 16′	29.90	759.4	69	20.6	75	W			3-4		7	W				2	W	D. clouds	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb, N. 37° 03′, W. 15° 18′	29.64	752.8	60	15.6	65	WSW			1-2		5	W						D. clouds	Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	30.07	763.8	59.5	15.3	94	SE			4-5		7							Showery	Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	29.99	761.9	77.0	25.0	83	ENE			1		5			0	0	1	SE	D. clouds	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando	29.95	760.6	83.8	28.8	75	W			1		2		W	0	0			D. clouds	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensdcola, Fla	30.37	771.4	39	3.9	82	N	2	0.9			8		N	0.31	7.9			Fair	
N. Yard, Portsmouth, N. H.	30.07	763.8	20	— 6.7	13	NW	9	4.0		5c		NW		1.2	30.			Snowing	
Naval Hospital, Yokohama, Japan	29.76	755.9	33.5	0.8	39	W			1		0			0	0			Clear	
Adams, Ancon, Peru	29.99	761.7	68	20.0	70	WNW			1		10		WNW			Mod.	SW	Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.17	766.3	48	8.9	85	Calm			0		2		S	0	0			Fair	
Alert, Hong-Kong, China *.	30.19	766.8	61	16.1	66	Calm			0		0			0	0	Sm'h		Hazy	
Alliance, Pensacola, Fla	30.11	764.8	43	6.1	92	N			2		10			Light		Sm'h		Cloudy	
Ashuelot, Tientsin, China	30.44	773.2	31	— 0.6	89	NW			1		0							Clear	
Colorado, New York, N. Y.	30.13	765.3	24	— 4.4	100	NW	1	0.4			8		Calm	0	0			Cloudy	
Constitution, N. Yard, League I'd., Pa			27	— 2.8		N	1	0.4			10							Overcast	
Franklin, Off N. Yard, Norfolk, Va	30.08	764.0	34	1.1	79	NE	10.8	4.8			10			0.03	0.8			Cloudy	
Galena, N. 35° 40′, W. 8° 49′	29.94	760.5	65	18.3	94	SSW			4		8		S			Mod.	SW	Fair	
Independence, N. Yard, Mare I'd, Cal.	30.21	767.3	44	6.7	84	S	6.0	2.7			8		Calm	0	0			Cloudy	
Jamestown, Sitka, Alaska *	29.39	746.5	31	— 0.6		ENE			3		2			0	0			Clear	
Kearsarge, N. 17° 45′, W. 75° 32′	30.06	763.5	80	26.7	78	E			4		5		E	0	0	Long	E	Fair	
Lackawanna, Ancon, Peru †.	30.11	764.8	68	20.0	100	S			1		10		NW	0	0			Cloudy	
Marion, S. 53° 10′, W. 70° 53′	29.56	750.8	46	7.8	77	WNW			3		5?		SW	Light		Sm'h		Cloudy?	
Michigan, Erie, Pennsylvania	30.22	767.6	0.0	—17.8		N			1		0							Clear	
Minnesota, New York, N. Y.	30.21	767.3	26	— 3.3		NNE			4		10		NW					Cloudy	
Monocacy, Shanghai, China	30.45	773.4	35	1.7	45	WSW			1		0							Clear	
New Hampshire, Port Royal, S. C.	30.03	762.7	50	10.0	100	ENE	3	1.3			10		Calm	0.11	2.8			Cloudy	
Nipsic, Villafranca, France	29.68	753.9	53	11.7	73	Calm			0		10					Sm'h		Drizzling	
Onward, Chimbote Bay, Peru †	29.95	760.7	70	21.1	80	SSW			2		2		NW			Long	N;W	Fair	
Palos, Shanghai, China	30.47	773.9	32	0.0	79	WNW			1		0							Clear	
Passaic, Washington, D. C.	30.23	767.8	28	— 2.2	88	NW			1		8		NW					Cloudy	
Pensacola, Pichilinque, Mexico	30.12	765.0	63	17.2	62	N			3		0							Clear	
Portsmouth, Washington, D. C.	30.22	767.6	27	— 2.8	76	NW			1		10							Cloudy	
Powhatan, New York, N. Y.	30.13	765.3	26	— 3.3		N			3		10							Overcast	
Quinnebang, Alexandria, Egypt	30.14	765.5	62	16.7	72	SSW			6		8		SW			Sm'h		Fair	
Richmond, Pagoda Anchorage, China	30.44	773.2	49	9.4	64	NE			4		0			0	0			Hazy	
Saratoga, Baltimore, Md	30.20	767.1	26	— 3.3	75	NNW			2		10		NNW	Light				Cloudy	
Shenandoah, Montevideo, Uruguay *	29.75	755 9	72	22.2	80	S			4		5					Mod.	SSW	Fair	
St. Louis, League Island, Pa	30.17	766.3	26	— 3.3	75	N	9	4.0			10			0.05	1.3			Cloudy	
Swatara, Kobe, Japan †.	30.00	762.0	36	2.2	61	W			2		10		W			Mod.	W	Overcast	
Tennessee, St. Croix, W. I.	30.16	766.1	83	28.3	60	ENE	6	2.7			2		Calm	0	0	Sm'h		Fair	
Trenton, Villafranca, France *	29.63	752.6	48	8.9	63	Var.			0-1		10			8 h'rs	h'vy			Cloudy	
Vandalia, N. 35° 27′, W. 63° 50′	30.12	765.0	69	20.6	100	SW			4		5		SW			Mod.	SSW	Raining	
Wabash, Boston, Massachusetts	30.15	765.8	24	— 4.4	74	NNW	11	4.9			10		Calm	0.02	0.5			Cloudy	
Wachusetts, Taboga near Panama. *	29.56	750.8	78	25.6	86	NW			3		2		N	0	0	Sm'h		Fair	
Wyoming, Naples, Italy	29.78	756.4	54	12.2	74	E			1		8		SE			Sm'h		Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mil.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mil.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic,																			
N. 43° 20′, W. 39° 45′	29.31	744.5	56	13.3	87	NE			6		8					7	NE	Showery	Capt. H. Parsell.
Ship Baroda, ‡																			
S. 27° 59′, E. 42° 04′	30.06	763.5	74.8	23.8	68	E			6		8							D. clouds	Capt. C. J. Russell.
British Merchant, ‡																			
S. 43° 58′, E. 105° 16′	29.98	761.5	50.8	10.4	66	SW			2-3		5	SW						Misty	Capt. F. J. Molony.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡																			
N. 34° 27′, W. 19° 00′	29.59	751.6	66	18.9	84	SSW			4		10							Drizzling	Capt. H. Youlden.
S. S. Cipero,																			
N. 51° 20′, W. 15° 20′	30.02	762.5	46	7.8		NE			4		9					4	ENE	Overcast	W. N. Lailey.
City of Agra, ‡																			
S. 54° 49′, W. 112° 02′	30.02	762.5	45.5	7.5	88	NNE			5		10							Showery	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Coppename,																			
N. 34° 25′, W. 20° 30′	29.56	750.8	62.3	16.8	95	SW			5		8							Showery	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 26° 30′, E. 57° 00′	29.90	759.4	76	24.4	82	WSW			3		9							Overcast	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡																			
N. 54° 46′, W. 16° 28′	30.06	763.5	44	6.7	76	NE			5		6					5	NE	D. clouds	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross																			Capt W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamports																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡																			
N. 15° 50′, E. 84° 32′	30.01	762.2	76.0	24.4	72	ENE			4		8							D. clouds	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland,																			
N. 52° 50′, W. 14° 25′	29.96	761.0	43.5	6.4	84	NNE			6		10							Showery	Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡																			
N. 31° 19′, E. 32° 09′	30.11	764.8	60.5	15.8	76	WNW			2		10							Overcast	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE.																			
A. Schumacher & Co.																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE.																			
Ch. G. Francklyn.																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE.																			
Ismay, Imrie & Co.																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Britanic,																			
Off Gally Head, Ireland †	29.92	760.0	48	6.7		ENE			2		8		E			Mod.	SE	Misty	Capt. H. Perry.
S. S. Celtic,														24 hours					
N. 44° 42′, W. 53° 54′ †	29.99	761.7	36	2.2		N			4		10		NW	Light		Mod.	NNW	Cloudy	Capt. Benj. Gleadell.
S. S. Germanic,																			
N. 40° 35′, W. 72° 30′ †	30.17	766.3	33	0.6		WNW			3		2		NW	0	0	Sm'h		Clear	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen.																			
A. Schumacher & Co.																			
S. S. Hermann																			Capt. H. Baur.
S. S. Köln,																			
N. 39° 09′, W. 68° 06′	30.04	763.0	47.3	8.5		NNW			5		10		N	10h'rs	light	R'gh	NNW	Cloudy	
S. S. Leipzig, ‡																			Capt. F. Pfeiffer.
N. 48° 07′, W. 32° 53′	29.72	754.9	52.0	11.1	86	ESE			6		8		SE	¼ hour		R'gh	SE	Cloudy	
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			
S. 23° 09′, W. 29° 51′	30.08	764.0	78.8	26.8	84	NW			3		3							Blue sky	Capt. Albert Fredholm.
Ship Peru, ‡																			
N. 35° 57′, W. 80° 45′	30.09	762.1	68.9	20.5	90	NW			6		10th							Raining	Capt. C. F. Sköldbrand.

UNITED STATES MERCHANT-MARINE SERIES.

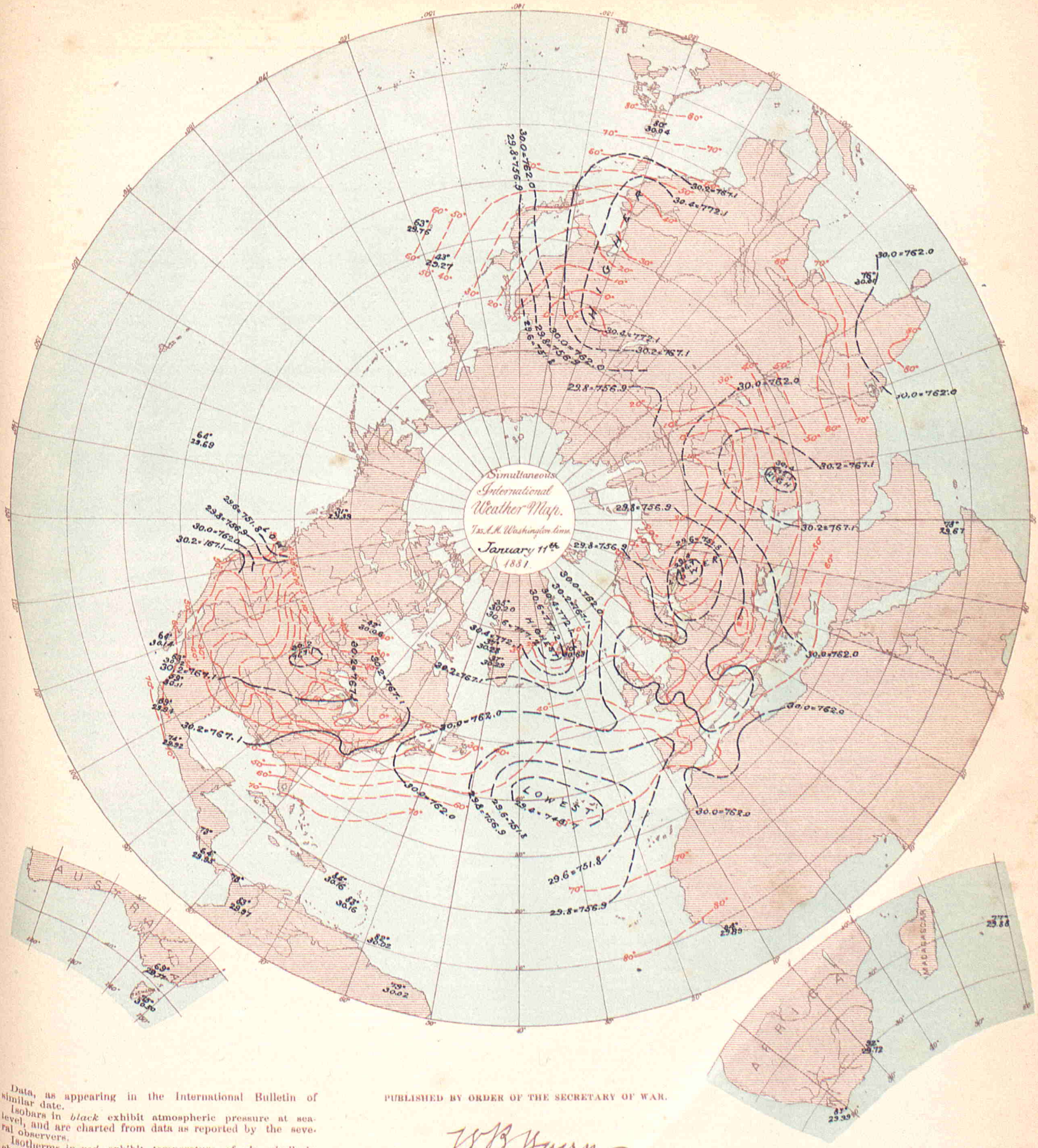
Furnished by the co-operation of the owners and agents of the respective lines and vessels.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 50° 34′, W. 25° 16′	29.87	758.7	54	12.2	87	E			5		5?		E			Mod.	ESE	Clear?	Capt. J. W. Shackford.
S. S. Indiana, ‡ Philadelphia, Pa.			23	— 5.0		NE			3		8		NE	0	0			Cloudy	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 51° 21′, W. 10° 14′ *†	29.90	759.4	42	5.6	91	NE			2		10		NE	0	0	Sm'll	ESE	Cloudy	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, ‡ N. 44° 34′, W. 44° 21′ †	29.67	753.6	49	9.4		NE			5		8		NE	0	0	R'gh	NE	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 24° 32′, W. 112° 02′ †	30.14	765.5	64	17.8	78	NE			2		0			0	0	Sm'll	WSW	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 35° 45′, E. 158° 29′ †	29.76	755.9	63	17.2	78	WSW			5		2		WNW	0	0	High	W	Clear	Capt. H. Davison.
S. S. Gaelic, San Francisco, Cal. †*	30.44	773.2	53	11.7	86	NE			2		10		NW			Sl't		Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 43° 16′, E. 158° 13′	29.27	743.4	43	6.1	83	W			1		2		SW	0.04	1.0	Mod.	SW	Fine	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			Capt. J. M. Lachlan.
S. S. Geo. W. Elder																			Capt. Fred. Bolles
S. S. Columbia																			Capt E. Polemann.
S. S. Oregon																			
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, N. 32° 41′, W. 117° 14′ †	30.22	767.6	51	10.6	79	E			1		0					Sm'h		Hazy	Capt. J. N. Ingalls.
S. S. Idaho																			C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. State of California, Portland, Oregon †	29.58	751.3	52	11.1	93	S			3		10		S					Raining	Capt. G. Debney.
S. S. Victoria, N. 47° 20′, W. 124° 52′ †	29.44	747.8	48	8.9	93	SW			4		5					R'gh	S	Fair	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			A. Bannerman, 1st Officer.
S. S. Australia																			
S. S. City of New York, S. 25° —′, W. 178° 45′ †	29.83	757.7	78	25.6	86	N			2		7		N	0	0	Light	N	Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, N. 31° 50′, W. 144° 13′ †	29.69	754.1	64	17.8	73	S			6		10		S	0	0	R'gh	S	Squally	Capt. G. G. Berry.
S. S. City of Sidney, S. 8° 23, W. 168° 20′ †	29.73	755.1	82	27.8	79	NW			6		10		NW	0	0	Mod.	N	Threatening	Capt. H. C. Dearborn
S. S. City of Tokio, Hong Kong, China †	30.41	772.4	58	14.4	94	Calm			0		0			0	0			Clear	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ Acapulco, Mexico †	29.92	760.0	74	23.3	72	ESE			2		10		SE	0	0	Sm'h		Cloudy	apt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths
S. S. Granada, Manzanillo, Mexico †	29.94	760.5	69	20.6	90	Calm			0		0			0	0			Clear	
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			Capt. Sam'l Jackson.
S. S. Belgenland ‡																			Capt. S. Stokes.
S. S. Nederland																			Capt. W. Geo. Randle.
S. S. Rhyniand ‡																			Capt. J. C. Jamison.
S. S. Vaderland ‡																			
MISCELLANEOUS.																			Capt. A. Mehaffey.
Sch'r Abby K. Bentley																			
Sch'r Addie Fuller, Brunswick, Ga.	30.01	762.2	54	12.2	87	NW			6		10d		NW	0.25	6.4			Overcast	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, ‡ Arroyo, P. R. †	30.34	770.6	79	26.1		ENE			4		2		E	0	0	Sm'h		Clear	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	30.15	765.8	34	1.1	79	N	2	0.9			10n			0.12	3.0			Cloudy	Capt. J. L. Randall.
Sch'r Hattie V. Kelsey,																			Capt. James S. Gawin
Ship Jumna																			
Bark Sunbeam, ‡ Lisbon, Portugal †	29.77	756.1	65	18.3	100	SW			5		10		W	Mod	erate			Light rain	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 12, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.05	763.3	72.3	22.4	54	S			3		4			0	0	Covered	Dr. Ollive.
Nemours			29.99	761.8	80.2	26.8	63	W			0		2			0	0	Fair	Raynard.
Algiers			29.89	759.3	69.1	20.6	58	W			6		2			0.128	3.2	Fair	Nicolas.
La Calle			29.91	759.7	65.5	18.6	45	WNW			3		6			0	0	Cloudy	Foufrède.
Tunis			29.87	758.8															Jacques.
Sfax			29.98	761.5															Gau.
Saida			30.04	762.9	68.7	20.4	91	WNW			3		1			0	0	Very fair	Dumas.
Tebessa			30.04	762.9	57.2	14.0	65	WNW			7		5			0	0	Cloudy	Watrin.
Gerville																			Lonchamp.
Laghouat			30.14	765.6	71.2	21.8	44	SSW			2		1			0	0	Very fair	Herbin.
Biskra			30.09	764.3	69.8	21.0	54	NW			1		3			0	0	Pretty fair	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.71	754.6	29.80	756.9	66.2	19.0	67	ESE	11	4.9			1			0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			30.60	777.2	73	22.8		SE			2		5k			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.18	741.2	29.75	755.7	32.7	0.4	89	SW			2		10			0.118	3.0	Snowing	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.06	738.1	29.88	758.9	18.7	— 7.4	92	W	5.6	2.5			10			0	0		Dr. Wiersbicki.
Eperies	28.89	733.8	29.82	757.5	25.5	— 3.6	83	Calm			0		10s			0	0		Julius Mikolik.
Gratz‡	28.47	723.2	29.79	756.6	27.3	— 2.6	71	S			2		2			0	0		Andreas Rospini.
Hermannstadt	28.31	719.0	29.82	757.5	21.9	— 5.6	93	S			1		10			0.031	0.80		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.31	719.0	29.71	754.5	28.9	— 1.7	88	NE			1		10			0.008	0.2		The Staff.
Lemberg	28.82	731.9	29.87	758.7	19.6	— 6.9	68	NE			1		8			0	0		Dr. T. Stanecki.
Pola	29.56	750 9	29.68	753.8	46.0	7.8	88	WNW			1		10			0.299	7.6		I. R. HydrographicOffice.
Szathmar	29.33	744.9	29.78	756.4	30.0	— 1.1	92	E			2		10			0	0		Beicht Peter, S. J.
Szegedin	29.46	748.3	29.75	755.7	31.3	— 0.4	78	Calm			0		10			0	0		Karl Stancel.
Trieste	29.40	746.8	29.50	749.4	43.5	6.4	71	Calm			0		10			Inap.	Inap.	Cloudy	P. Busin.
Vienna	29.05	737.9	29.81	757.1	25.5	— 3.6	95	Calm			0		10			0.177	4.5		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 18, 1882.

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

BRITISH SERIES.

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

Aberdeen	29.57	751.1	29.67	753.6	32.0	0.0	59	E	49	21.9			6			0.080	2.03	Squally	W. Boswell.
Armagh, Observatory	29.31	744.5	29.56	750.8	30.0	— 1.1	82	N	10	4.5			7			Blank	Blank	D. clouds	S. Call.
Bidston, Liverpool Obs'y			29.50	749.3	31.3	— 0.4	87	WSW	8	3.6			8					Overcast	John Hartnup.
Bolton, Sharples	28.94	735.1	29.48	748.8	27.9	— 2.3	94	N	15	6.7			4					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.05	737.9	29.44	747.8	27.9	— 2.3	83	NE			2		3			0	0	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	76.0	24.4	91	NE			2		6					*Gloomy*	Pvt. J. Surgenor, A. H. C.
Cardington			29.46	748.3	30.0	— 1.1	89	NW			0.4		6					D. clouds	John McLaren.
Chatham, School M. E.	29.38	746.2	29.51	749.5	31.2	— 0.4	81	NW			1		0			Blank	Blank	Misty	Cpl. Gwinn, R. E.
Falmouth, Observatory	29.42	747.3	29.65	753.1	35.3	1.8	70	WNW			2		4					D. clouds	The Staff.
Fort Napier, Natal	27.58	700.5	29.69	759.2	82.4	28.0	96	NE			2		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.66	753.4	29.89	759.2	83	28.3	79	Calm			0		4					D. clouds	C. E. Keane.
Galway, Queen's College			29.60	751.8	33	0.6	100	N			2		8					Rain & snow	J. O'Donaghadue.
Gibraltar, Mediterranean	29.98	761.5	30.04	763.0	66.2	19.0	93	NNW			1		4					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.37	746.0	29.57	751.1	29.9	— 1.2	87	NNE			2					Blank	Blank	Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.32	744.7	29.50	749.3	29.5	— 1.4	78	W			1		2			Blank	Blank	Blue sky	The Staff.
Guernsey	29.35	745.5	29.58	751.3	37.5	3.1	58	NNW			5		3			Blank	Blank	D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.48	748.8	29.52	749.8	29.4	— 1.4	77	WNW	10	4.5			2					Blue sky	The Met'g'l Office.
Leicester, Museum	29.20	741.7	29.47	748.5	28.1	— 2.2	99	N			1		10			0.15	3.8	Misty	J. E. Carryer.
Malta, Mediterranean	29.76	755.9	29.84	757.9	63.8	17.7	78	NW			3		8					Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas			30.10	764.5	73.5	23.1	79	NW			2		5					D.clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.97	735.8	29.51	749.5	30.2	— 1.0	78	WNW			3-4		1					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	29.28	743.7	29.54	750.3	29	— 1.7	100	W			1		0					Misty	The Staff.
Plymouth	29.54	750.3	29.62	752.3	34.2	1.2	77	NW			1		2					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.84	757.9	28	— 2.2	100	E	7	3.1			10					Snowing	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.63	752.6	29.70	754.4	47.4	8.6	92	E			1		10					Raining	Serg't W. H. Lyne.
Sheffield	29.21	741.9	29.50	749.3	31.4	— 0.3	84	NNW			L		3			Inap.	Inap.	Misty	W. F. Cooper.
Silloth Rectory	29.49	749.0	29.52	749.8	31.6	— 0.2	81	Calm			0		0			0.150	3.81	Blue sky	Rev. F. Redford, A. M.
Stonyhurst, Observatory			29.50	749.3	24.8	— 4.0	68	WNW	2	0.9			0					Blue sky	Rev. S. J. Perry.
Strathfield Turgiss					30.8	— 0.7	84	W			1		0					Blue sky	Rev.O.H. Griffith, F.M.S.
Truro, Royal Institution	29.54	750.3	29.63	752.6	41	5.0	74	NW			2		6					D. clouds	W. Newcombe.
Valencia, Observatory	29.67	753.6	29.70	754.4	36.7	2.6	81	NNE	21	9.4			5			Blank	Blank	D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B	29.94	760.5	29.98	761.5	18.6	— 7.4		Calm	0	0			10n			Inap.	Inap.	Snowing	Hon. J. Ferguson.
Chatham, N. B.*	29.79	756.7	29.85	758.4	19	— 7.2	95	W	1	0.4			10n		W	0.03	0.8	Light snow.	G. A. Blair.
Charlottetown, P. E. Island	29.71	754.6	29.75	755.6	26	— 3.3	96	NW	9	4.0			10n			0.040	1.02	Cloudy	H. J. Cundall, C. E.
Chicontime, Quebec					—17.3	—27.4		NW			1		10s			0	0	Cloudy	Rev. V. A. Huart.
Cornwall, Ontario	29.95	760.7	30.16	766.1	— 7.8	—22.1	100	W			1	0	0			0	0	Clear	James Smith, M. A.
Dalhousie, N. B	29.82	757.4	29.85	758.2	17.0	— 8.3		Calm			0	0	5s			0	0	Fair	H. A. Johnson.
Father Point, Quebec*	29.99	761.7	30.01	762.2	9	—12.8	85	SW	4	1.8			10n		Ca'm	Inap.	Inap.	Cloudy	J. McWilliams.
Fredericton, N. B	29.82	757.4	29.89	759.2	18.0	— 7.8	86	NW	7	3.1			10s			0	0	Cloudy	Prof. Harrison.
Fort Garry, Manitoba*	28.96	735.6	29.91	759.7	—17	—27.2	100	Calm	0	0		Haze	0			0	0	Hazy	James Stewart.
Granton, Ontario	29.64	737 6	30.28	769.1	— 2.8	—19.3	82	S			2	3cs	0	S		0	0	Fair	James Grant.
Halifax, N. S.*	29.64	752.8	29.77	756.1	27	— 2.8	94	NW	8	3.6			10n			0.067	1.70	Cloudy	A. Allison.
Hamilton, Ontario	29.80	756.9	30.24	768.1	0.7	—17.4	97	SW			1	8cs	0			0	0	Fair	Geo. Dickson, B. A.
Kingston, Ontario*	29.82	757.4	30.20	767.1	— 8	—22.2	89	N	1	0.4		0	Sm'e		N	0	0	Smoky	S. Woods, M. A.
Little Glace Bay, N. S	29.58	751.3	29.62	752.3	30.5	— 0.8	100	Calm	0	0			10n			0	0	Cloudy	C. H Rigby.
Montreal, Quebec*	29.94	760.5	30.17	766.3	— 6	—21.1	81	W	8	3.6		Sm'e	Sm'e			0	0	Smoky	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A.
Parry Sound, Ontario*	29.40	746.7	30.15	765.8	12	—11.1	80	SE	8	3.6		5k	5ks	SW	SW	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.40	746.7	30.26	768.6	— 8.2	—22.3	79	N			1	0	0			0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.48	748.8	30.26	768.6	— 2	—18.9	100	Calm	0	0			10n			0	0	Hazy	H. Morgan.
Port Stanley, Ontario	29.53	750.0	30.27	768.8	— 5	—20.6	100	SE	2	0.9		0	8s		SW	0	0	Fair	M. Payne.
Quebec, Quebec*	29.76	755.9	30.11	764.8	3	—16.1	73	NW			3		8k		SW	0.03	0.8	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.64	752.8	30.16	766.1	— 5	—20.6	82	Calm	0	0		0	0			0	0	Clear	W. H. McIntyre.
St. Andrews	29.81	757.2	29.87	758.7	18	— 7.8	95	N	3	1.3			10n			0	0	Cloudy	
St. John's, N. B	29.66	753.4	29.84	757.9	23.0	— 5.0	100	N	10	4.5			10ks			0	0	Cloudy	G. Murdock, C. E.
Saugeen, Ontario*	29.38	746.2	30.17	766.3	10	—12.2	94	S	17	7.6			10ks			0	0	Cloudy	K. Stewart.
Stratford, Ontario	28.79	731.3	30.24	768.1	— 2.7	—19.3	97	Calm	0	0			10s			0	0	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.63	752.6	29.67	753.6	30	— 1.1	98	NE	5	2.2			10n			0.34	8.6	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.79	756.7	30.22	767.6	7	—13.9	81	NW	3	1.3			2cs	2s	W	0	0	Fair	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario	29.04	737.6	30 26	768.6	— 7.2	—21.8	96	SE	5	2.2			4cs	0	W	0	0	Fair	Prof. Wolverton.
Yarmouth, N. S.*	29.70	754.4	29.76	755.9	27	— 2.8	77	NE	4	1.8			10k	0	NE	0	0	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.73	755.1	29.90	759.4	35	1.7	100	SE	1	0.4		Fog	Fog			0.12	.3.0	Foggy	John Delany.
St. Pierre, N. F			29.65	753.1	30.2	— 1.0		S			1					0.24	6.1		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.90	759.4	29.94	760.5	81.6	27.6	53	SW	20.0	8.9		2c	4ks			0	0		The Staff, for D. Gill.
Cape St. Francis Lt. House	30.00	762.0			72.5	22.5	86	SSE	14.5	6.5			3s			0	0		John Duthie.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.41	772.5	30.44	773.1	29.3	—1.5	55	N	2.0	0.9			0			0	0	Clear	M. Marc Dechevrens, S J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.24	666.5	29.96	761.0	64.0	17.8	90	NE			2	1ck	1d		NE	0	0	Clear	Federico Maison.

DANISH SERIES.

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

Copenhagen	29.79	756.7	29.84	757.9	19.9	— 6.7	78	SE	29	13			8						
Faröe	29.60	751.8	29.62	752.3	25.3	— 3.7	91	SE			6		10						
Godthaab, Greenland	30.29	769.4	30.34	770.5	34.9	1.6	89	Calm			0		10						
Stykkisholm, Iceland	30.38	771.6	30.42	772.7	8.2	—13.2	92	E			4		0						
Thorshavn	29.98	761.6	30.02	762.5	31.5	— 0.3	70	N	11	5			6					Snowing	
Vestervig	29.65	753.0	29.74	755.4	18.1	— 7.7	100	ENE			7		10					Snowing	

FRENCH SERIES.

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

Agen, Normal School	28.98	736.1	29.64	752.9	37.0	2.8	92	S			1		8					Raining	M. Labroue, Director.
Alençon	29.08	738.5	29.63	752.5	33.4	0.8	96	SW			1		10kn		NE	0	0	Foggy	M. Nicot, Director.
Arras, Engineer School	29.23	742.4	29.49	749.1	29.7	—1.3	81	WSW					10					Snowing	M. Klein, Commandant.
Avignon, Normal School	29.65	753.1	29.73	755.1	33.8	1	92	N			1		10			0	0	Covered	M. Giraud, Director.
Bar-sur-Seine	29.66	738.2	29.64	752.9	32.0	0.0	95	S			1		8n			0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.30	744.3	29.58	751.3	34.3	1.3	79	S			1		10			0	0	Covered	M. Frère Eugene Marie.
Besançon, Normal School	28.80	731.6	29.70	754.3	27.7	—2.4	100	NE			1		10n		NE	0	0	Covered	M. Gobin, Director.
Bordeaux, Observatory	29.36	745.7	29.63	752.0	38.5	3.6	100	SSE			1		10			0.024	0.6	Raining	M. Rayet, Director.
Bourges, Normal School	29.04	737.5	29.61	752.0	30.2	—1	100	NE			1		5kn		NE	0	0	Cloudy	M. Postel, Director.
Brest, Naval Observatory	29.47	748.6	29.71	754.7	42.1	5.6	54	N			1		2		NNE	0.030	0.75		M. de Kermaree, Dir.
Caen, Normal School	29.40	746.8	29.48	748.9	34.7	1.5	100	SW			1		10			0.04	1.	Light snow	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.29	743.9	29.62	752.3	31.3	—0.4		S			1		5			0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.07	738.3	29.60	751.8	32.0	0	89	S			1		10		SW	0	0	Covered	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.30	717.8	29.65	753.2	36.1	2.3	68	SW			1		10		W	0	0		M. Alluard, Director.
Cluny, Normal School	28.82	731.9	29.69	754.0	32.7	0.4		N			1		10			0	0	Covered	M. de Villemontée, Dir.
Commercy, Normal School	28.74	730.0	29.63	752.6	31.8	—0.1	85	SW			1		sn	SW	SW	0	0		Dr. Coulet, Director.
Gap, Normal School	27.21	691.1	29.82	757.5	33.1	0.6	96	NW			1		n		NE	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.61	726.8	29.76	755.8	39.6	4.2	83	N			1		10		N	0.059	1.5	Raining	M. Kina, Director.
Grenoble, Normal School	28.91	734.3	29.71	754.5	33.6	0.9	83	NNE			1		cs		E	0	0		M. Ablard, Director.
Guéret, Normal School	28.62	711.7	29.65	753.0	34.2	1.2	85	SW			1		10		NE	0	0	Covered	M. Rivoir, Director.
Lanballe, Normal School	29.37	746.0	29.67	753.5	39.6	4.2	83	NNW			1		2		NNW	0	0	Slightly cld'y	M. Ollitrault, Director.
Lescar, Normal School	29.02	737.0	29.68	753.9	56.1	13.4	80	N					2		W	0.098	2.50	Slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	29.59	751.5	29.69	754.1	41.0	5.0	60	NW			1		2		NW	0	0	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.61	725.8	29.67	753.7	30.7	—0.7	89	SE			1		Fog			0	0	Dense fog	M. André, Director.
Mans, Normal School	29.35	745.4	29.67	753.5	30.2	—1	86	SW			1		8		NW	0	0	Cloudy	M. Piboën, Director.
Marseille, Observatory	29.43	747.4	29.70	754.3	46.6	8.1	71	E			0-1		10		WNW	0.028	0.70		M. Stephan, Director.
Montlouis l'instituteur	24.47	621.4	29.70	754.4	35.6	2.0	84	SW	15.0	6.7			5	W		0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.58	751.3	29.69	754.1	39.6	4.2	87	E			2		10			0.012	0.3	Raining	M. Galzin, Director.
Nancy, Normal School	28.87	733.2	29.70	754.4	32.0	0.0	78	W			1	2c				0	0	Slightly cl'dy	M. Hasse.
Nantes, Observatory	29.57	751.0	29.73	755.1	33.8	1	82	S			2		10			0	0	Foggy	M. Lætocque, Dir.
Nice	29.65	753.0	29.68	753.9	47.5	8.6	73	SW			2		10	SW	ENE	0.126	3.2	Covered	Capt. Boissière, Director.
Perpignan, Observatory	29.51	749.5	29.73	755.2	46.4	8.0	80	SE	7.4	3.3			9		NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.17	563.0			31.3	—0.4							10		W	0.201	5.1	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.66	727.9	29.77	756.2	34.7	1.5	78	Calm			0		10	NE	NE	0	0	Covered	M. Taillen.
Puy de Dôme O. s'y, Summit	24.65	626.1			24.8	—4.0	98	WSW			4		10			0.008	0.2	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.62	752.4	29.65	753.2	35.6	2.0	89	E			1		10			0	0	Covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.46	748.3	29.68	753.9	35.6	2.0	64	SW			1		10		NW	0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	27.50	698.6	29.70	754.4	36.1	2.3	89	NW			1		Fog		S	0	0	Foggy	M. Richard, Director.
Rouen, Normal School	29.46	748.2	29.54	750.4	32.4	0.2	96	SW			1		10		SW	0	0	Covered	M. Plantier, Director.
Saint Lô, Normal School	29.44	747.7	29.57	751.1	33.3	0.7	88	WSW			1		10					Snowing	M. Delaplanche, Dir.
Saint Maur, Observatory	29.42	747.3	29.59	751.5	32.0	0.0	75	SSW			1		10		WNW				M. Renou, Director.
Toulouse, Observatory	28.96	735.5	29.67	753.6	40.1	4.5	98	SSE			2		10			0	0	Covered	M. Baillaud, Director.
Tours	29.43	747.5	29.63	752.5				SW			1		10	Calm	WSW	0	0	Covered	M. de Tastes.
Versailles, Observatory	29.08	738.5	29.57	751.0	31.3	— 0.4	81	W			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	28.76	730.6	29.62	752.3	29.3	— 1.5	90	SE			4		9ks			0.004	0.1		Prof. Dr. Hoh.
Berlin	29.57	751.0	29.75	755.7	21.2	— 6.0	74	NE			2		8					Snowing	Prof. Dr. Arndt.
Breslau	29.31	744.5	29.84	757.9	19.6	— 6.9	73	SE			2		2			0	0		Royal University Obs'y.
Carlsruhe	29.25	743.0	29.69	754.2	32.7	— 0.4	73	SSW			0		5	NW		0.008	0.2	Light snow	Albert Senz.
Cassel	28.98	736.2	29.58	751.4	30.2	— 1.0	88	SE			2		10	SW		0.172	4.38	Snowing	Dr. H. Möhl.
Frankfort on the Main	29.35	745.4	29.73	755.1	33.4	0.8	71	SSW			1		10			0.004	0.1	Snowing	Physical Society.
Friedrichshafen	28.20	716.3	29.67	753 7	34.2	1.2	44	SW			2		5	SW		0	0		Chief Telegrapher Wilhelm.
Hamburg	29.58	751.2	29.65	753.0	23.7	— 4.6	86	SE			5		10			0.059	1.5		Dr. R. Kleeman.
Kiel	29.66	753.4	29.68	753.8	24.4	— 4.2	76	SE			4		10			0.007	0.17	Snowing	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.27	743.5	29.71	754.6	28.0	— 2.2	85	SE			2		9	SW		0	0		Prof. Dr. Bruhns.
Magdeburg	29.44	747.7	29.67	753.7	23.0	— 5.0	84	E			2		10ks			0.035	0.9		Dr. Assmans.
Memel	29.86	758.4	29.91	759.6	11.3	—11.5	82	SSE			2		9k					Foggy	Reinbrecht & Issermann.
Munich	27.81	705.3	29.65	753.0	31.1	— 0.5	77	Calm			0		5			0.035	0.9	Hazy	Central Station.
Neufahrwasser	29.87	758.6	29.88	759.0	19.4	— 7.0	75	W			2		4			0	0		A Lothes.
Neustadt, Palatinate	29.02	737.2	29.54	750.4	32.7	0.4		S			1		10			0.008	0.2		Dicknether.
Stuttgart	28.68	728.5	29.61	752.0	32.4	0.2	74	S			1		0			0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cumerth.
Weissenburg, Bavaria	28.13	714.5	29.65	753.0	25.7	— 3.5	91	SE			2		8	NW		0	0		Prof. Kemlein.
Wustrow	29.75	756.0	29.79	756.6	20.1	— 6.6	97	ESE			4		10s			0	0		Prof. S. Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.32	744.7	29.71	754.7	58.1	14.5		SW			1.0		k					Clear	Alexander Wourlisch
INDIAN SERIES.																			
Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.98	761.4	30.03	762.7	72.7	22.6	46	SW	5.0	2.2			0			0	0	Blue sky	
Deesa	29.50	749.4	29.98	761.6	76.3	24.6	25	NW	8.6	3.8			0			0	0	Blue sky	
Bombay	29.87	758.7	29.91	759.6	80.5	26.9	62	NW	12.0	5.4			0			0	0	Blue sky	
Poona, Yarrowda	28.04	712.1	29.88	759.1	81.6	27.6	23	ESE	4.0	1.8			1		ESE	0	0	D. clouds	
Belgaum	27.36	694.9	29.88	758.8	80.8	27.1	30	E	2.0	0.9			0			0	0	Blue sky	
Lahore	29.28	743.6	30.05	763.2	62.6	17.0	33	Calm	1.1	0.5			3			0	0	Gloomy	
Roorkee	29.11	739.3	30.05	763.2	59.8	15.4	55	NW	1.5	0.7			3			0	0		
Agra	29.48	748.9	30.07	763.8	65.9	18.8	43	NW	3.7	1.6			0			0	0		
Nagpur	28.91	734.2	29.96	760.8	79.7	26.5	39	E	3.1	1.4			1			0	0	Blue sky	
Jubbulpore	28.64	727.4	30.05	763.2	66.7	19.3	45	NE	2.5	1.1			0			0	0	Blue sky	
Lucknow	29.61	752.1	30.00	762.1	61.3	16.3	48	Calm	1.5	0.7			0			0	0	Blue sky	
Allahabad	29.72	754.9	30.05	763.3	58.8	14.9	39	Calm	2.0	0.9			0			0	0	Blue sky	
Patna	29.84	757.8	30.02	762.6	62.1	16.7	50	W	0.5	0.2			0			0	0	Blue sky	
Hazaribagh	27.95	709.9	30.03	762.8	62.0	16.7	50	NNW	3.8	1.7			0			0	0	Blue sky	
Cuttack	29.89	759.2	29.97	761.3	78.2	25.7	57	SSE	0.7	0.3			8			0	0	D. clouds	
Calcutta, Alipore	29.97	761.3	29.99	761.8	66.9	19.4	68	NNE	0.5	0.2			0			0	0	Blue sky	
Goalpara	29.58	751.3	30.00	761.9	66.6	19.2	63	Calm	0.8	0.4			0			0	0	Blue sky	
Chittagong	29.91	759.7	30.00	762.1	67.8	19.9	48	NW	3.0	1.3			0			0	0	Misty	
Sibsagar	29.72	754.8	30.07	763.8	59.7	15.4	82	E	1.2	0.5			0			0	0	Blue sky	
ITALIAN SERIES.																			
By authority of the Minister of Agriculture, Industry and Commerce.																			
Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.29	743.9	29.71	754.7	40.1	4.5	57	Calm	0	0			9			0	0		Prof. Giovanni Clodig.
Milan	29.18	741.2	29.72	755.0	33.1	0.6	79	SW	4.3	1.9			9	SW		0	0		Prof. Schiaparelli.
Padua	29.60	751.7	29.71	754.5	38.5	3.6	73	NW	0.7	0.3			10	W		0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.81	731.7	29.75	755.7	31.6	— 0.2	85	E	0.7	0.3			5	S		0	0		Prof. P. F. Denza.
Genoa	29.47	748.6	29.67	753.6	42.4	5.8	67	N	3.1	1.4			10	S		0.031	0.8		Prof. G. M. Garibaldi.
Mondovi	27.76	705.0	29.76	755.8	29.8	— 1.2	74	S			2		3	W		0	0		Prof. D. C. Bruno.
Pesaro	29.67	753.6	29.72	754.9	37.8	3.2	80	W	5.6	2.5			9	W		0	0		Prof. Luigi Guidi.
Florence	29.42	747.3	29.69	754.0	43.0	6.1	88	WSW			2		6	WSW		0.181	4.6		Cav. F. Meucci.
Leghorn	29.60	751.7	29.68	753.9	50.0	10.0	67	NE	4.3	1.9			10	W		0.220	5.6		Prof. P. Monte.
Rome	29.53	750.0	29.71	754.5	52.9	11.6	62	Calm	0	0			5			0.520	13.2		Prof. P. S. Ferrari.
Lecce	29.45	748.1	29.71	754.6	54.5	12.5	70	NNW	9.4	4.2			6			0	0		Prof. C. de Giorgi.
Cosenza	28.86	733.1	29.76	755.8	55.4	13.0	73	NNE	0.7	0.3			10	E		0.413	10.5		Prof. D. Conti.
Cagliari	29.54	750.3	29.73	755.2	61.5	16.4	74	Calm	0	0			8	W		0.063	1.6		Prof. A. Pacinotti.
Palermo	29.57	751.0	29.82	757.3	61.2	16.2	56	WSW	6.3	2.8			10			0.051	1.3		Prof. G. Ciaccatore.
Syracuse	29.72	754.9	29.76	756.0	60.1	15.6	61	S	7.4	3.3			9	W		0	0		Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R.	29.21	742.0	29.74	755.3	54.0	12.2	61	W	3.1	1.4			10			0.327	8.3		Prof. F. Brioschi.
Stelvio	21.89	556.0			10.0	—12.2	61	SW					0			0	0		P. F. Denza.
Valdobbia	21.66	550.3			16.3	— 8.7	70	NNE					9			0	0		
JAPANESE SERIES.																			
Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.14	765.5	30.16	766.0	35.5	1.9	63	WSW	4.6	2.1			1ck		NW	0	0	Clear	K. Sasaki.
Kioto	29.90	759.4	30.09	764.3	25.9	— 3.4	82						0			0	0	Clear	
Nagasaki, I. M. Obs'y	30.04	763.0	30.25	768.3	39.9	4.4	62	N	6.6	3.0		ck	4s			0.020	0.51	Fair	S. Takehayashi.
Tokei Obs'y, Yeddo	29.91	759.7	29.99	761.7	26.8	— 2.9	52	SSE	3.3	1.5		0	0			0	0	Foggy	The Staff.
Wakayama	30.06	763.5	30.11	764.8	35.7	2.1	66	NW	1.4	0.6			10ck		NW	0.017	0.43	Cloudy	S. Iwahashi.
MAURITIUS SERIES.																			
Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.65	753.1	29.84	757.9	80.6	27.0	71	NNW	8.5	3.8		4	4	SSW	SSE	0.16	4.1	Cloudy	A. N. Figon.
MEXICAN SERIES.																			
By authority of the Secretary of Public Works.																			
Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.80	756.9	30.05	763.6	63.5	17.5	62	E			1	0	0			0	0	Clear	F. Quiljano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES.																			
Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.44	747.8	29.44	747.8	32.5	0.3		SSW			4					0.146	3.7		
Groningen	29.46	748.3	29.52	749.7	31.3	— 0.4		S			2					0.055	1.4		
Helder	29.43	747.4	29.43	747.4	32.0	0.0		SSE			3					0.236	6.0		
Hellevoetsluis	29.45	748.0	29.45	748.0	32.4	0.2	94	S			2					0	0		
Utrecht	29.45	747.9	29.49	749.1	32.5	0.3	88	S			2		10			0.169	4.3	Snowing	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.82	757.5	29.89	759.1	18.3	— 7.6	43	Calm	0	0			0			0	0		
Christiania	29.87	758.6	30.03	762.7	5.5	—14.7	78	ENE	4	2			0			0	0		
Gjæsvær	29.55	750.6	29.58	751.2	14.2	— 9.9		N			4		10						
Lodingen	29.67	753.7	29.72	754.9	23.2	— 4.9	83	W			4		7			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.22	742.1	29.37	746.1	59.7	15.4	83	ESE	6.9	3.1			4			0	0		Dr. J. A. Sampaio.
Campo Major	28.87	733.3	29.86	758.4	63.0	17.2	84	SSW	12.5	5.6			10			0.398	10.1		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.84	758.0	29.93	760.2	68.0	20.0	73	WSW					10			0.142	3.6		Capt. D. A. de Cunha.
Lisbon, Observatory	29.53	750.1	29.89	759.2	61.5	16.4	99	SW	28.0	12.5			10			0.343	8.7		The Staff.
Ponta Delgada, Azores	29.35	745.6	29.43	747 4	60.8	16.0	79	S	5.6	2.5			3			0.429	10.9		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinsk	28.92	734.5	30.10	764.4	8.6	—13.0	96	E	.9	4			10					Light clouds	Capt. Lasarew.
Archangel	29.47	748.6	29.49	749.1	—33.2	—36.2	80	NNW	2	1			10s						Capt. Sseliwerstow.
Astrakhan	30.16	766.1	30.08	764.0	35.1	1.7	73	S	4	2			8k						Capt. Wisganow.
Barnaul	29.94	760.5	30.52	757.2	— 9.9	—23.3	78	Calm	0	0			0						Meteorological Obs'y.
Dorpat	29.56	750.9	29.84	757.8	— 7.4	—21.9	85	W	2	1			3k						Observatory.
Ekaterinburg	28.94	735.1	30.00	762.1	1.2	—17.1	70	SSW	9	4			10c					Light clouds	Meteorological Obs'y.
Kasan	29.41	747.0	29.70	754.4	7.7	—13.5	84	SSE	13	6			9						Observatory.
Kertch	29.80	756.9	29.82	757.4	34.7	1.5	87	ENE	4	2			6						Lagorio.
Kieff	29.10	739.2	29.78	756.3	20.5	— 6.4	69	W	7	3			c						Observatory.
Krotkowo, N. 58°47', E. 48°34'													8cs,ks						Cand. Fatjanow.
Lugan	29.62	752.4	29.84	757.8	30.4	— 0.9	67	SSW	4	2			6					Light clouds	Meteorological Obs'y.
Moscow	29.01	736.8	29.61	752.0	6.8	—14.0	75	S	4	2			10s						Meteorological Obs'y.
Nertchinsk	27.84	707.7	30.52	775.1	—16.6	—27.0	87						6					Light clouds	Meteorological Obs'y.
Nikolaiev	29.82	757.4	29.89	759.2	28.0	— 2.2	75	Calm	0	0			8cs,ks						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Nukuss	29.87	758.7	30.11	764.9	28.8	— 1.8	92	N	0	0			10n						Dr. Dobrochotow.
Pekin, China	30.18	766.6	30.32	770.2	25.5	— 3.6	52	Calm	0	0			0						Physical Observatory.
St. Petersburg	29.69	754.0	29.70	754.4	— 8.9	—22.7	76	NW	7	3			7kn						Central Physical Obs'y.
Tashkend, Laboratory	28.37	720.6	29.96	760.9	50.0	10	63	Calm	0	0			10						Teich, A. M.
Tiflis	28.64	727.4	30.10	764.4	42.6	5.9	81	Calm	0	0			4k						Physical Observatory.
Warsaw	29.44	747.8	29.90	759.4	14.2	— 9.9	80	W	4	2			0						Astronomical Obs'y.
Wilna	29.41	747.1	29.87	758.7	8.4	—13.1	74	WNW	4	2			10					Heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.27	758.9	30.60	777.3	— 7.6	—22.0	70	W	4	2			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.56	750.8	29.9	— 1.2	78	E			4		10k	S		0.17	4.3	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.82	757.4	32	0.0	90	NE			6		10						J. Youngclause.
North Unst, Shetland Isl'ds			29.88	758.9				NE			4	3	7	NE		0	0		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.58	751.3	29.69	754.0	58.1	14.5	69	SW	4.5	2.0			3			0.018	0.46	Misty	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.81	757.2	29.87	758.6	59.0	15.0	74	SW	0.6	0.25		3	5	NW		0.197	5.0	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.78	680.1			52.5	11.4	80	W	19.8	8.87		2	6	NE		0.905	23.0	Cloudy	Domingo Martiny Perez.
Madrid, Royal Obs'y	27.59	700.9	29.81	757.1	57.2	14.0	89	SW	23.9	10.7			10			0.071	1.8	Covered	The Staff.
Murcia, Met. Obs'y ‡	29.70	754.3	29.85	758.1	72.3	22.4	72	SSE	0.4	0.2		4	5	SE		0.004	0.1	Misty	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.77	730.7	29.66	753.3	54.9	12.7	91	SW	15.4	6.9			10			1.740	44.2	Covered	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.10	764.5	30.17	766.2	71.1	21.7	74	NNE	10.7	4.8			10kn		NNE	1.547	39.3	Cloudy	Benito Vines, S. J.
Manilla, Phillippine Islands	29.98	761.5	30.03	762.8	78.8	26.0	78	NE	2.6	1.2			9kn		E	0	0	Covered	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.00	762.1	30.11	764.7	61.3	16.3	98	SSW	8.9	4.0			10			0.166	3.8	Foggy	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.03	762.8	30.12	765.1	81.7	27.6	61	W	0	0		4c	6kn	W	E	0	0	Cloudy	Enrique Gadea, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.76	755.9	29.80	756.9	1.0	—17.2	100	Calm			0		0			0	0		
Umea	29.81	757.1	29.86	758.4	5.0	—15.0	91	N			7		4			0	0		
Hernosand	29.95	760.7	30.00	762.0	1.2	—17.1	84	Calm			2		1			0.008	0.2		
Stockholm	29.76	755.8	29.93	760.3	6.8	—14.0	91	NW			6		3			0.028	0.7		
Wisby	29.80	756.9	29.86	758.4	19.0	— 7.2	78	E			8		5			0	0		
Sub-Series.																			
Upsala	29.83	757.6	29.91	759.8	4.8	—15.1	96	NW	1.8	0.8			0			0.003	0.07		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.22	716.8	29.70	754.3	37.6	3.1	52	W			1		9			0	0	Vapory	The Observatory.
Zurich	28.00	711.1	29.72	755.0	28.4	— 2.0	75	W			1		6			0	0	Cloudy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —10.9 mm.; Ther. +1°.7 cent.; Hum. —27 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.87	758.7	47.7	8.7	90	SE	2	1.0			10		SW	0.366	9.3		The Observatory.
Valona			29.70	754.4	51.4	10.8		E			2		10			0	0	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.98	761.5	63.3	17.4	55	Calm			0		9cs		SW	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum't'l error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.09	764.3	30.18	766.6	13	—10.6	81	NW	6	2.7	.....	.....	10s	.....	N	0	0	Cloudy	
Alpena, Michigan	29.37	746.0	30.07	763.8	9	—12.8	78	SW	3	1.3	.....	.....	8s	.....	Calm	0	0	Cloudy	
Atlanta, Georgia	29.06	738.1	30.28	769.1	29	— 1.7	78	NW	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Atlantic City, New Jersey	30.11	764.8	30.12	765.0	20	— 6.7	69	NW	12	5.4	.....	Haze	0	Calm	.....	0.06	1.5	Clear	
Augusta, Georgia	30.10	764.5	30.32	770.1	34	1.1	79	NW	1	0.4	.....	0	0	.....	.....	0.03	0.8	Clear	
Baltimore, Maryland	30.16	766.1	30.21	767.3	22	— 5.6	86	NW	3	1.3	.....	Haze	Fog	Calm	Calm	0.17	4.3	Dense fog	
Barnegat, New Jersey	30.07	763.8	30.09	764.3	18	— 7.8	84	NW	15	6.7	.....	0	0	.....	.....	0.06	1.5	Clear	
Benton, Montana	27.03	686.6	.....	.....	— 2	—18.9	100	Calm	0	0	.....	.....	10n	.....	Calm	0.09	2.3	Light snow	
Bismarck, Dakota	27.85	707.4	29.71	754.6	— 6	—21.1	100	NW	4	1.8	.....	.....	10n	.....	Calm	0.05	1.3	Light rain	
Boise City, Idaho	27.03	686.6	29.99	761.7	39	3.9	95	SE	4	1.8	.....	.....	10n	.....	Calm	0.50	12.7	Heavy rain	
Boston, Massachusetts	29.83	757.7	30.00	762.0	20	— 6.7	70	NW	12	5.4	.....	5c	5s	W	W	0	0	Cloudy	
Brackettville, Texas	28.93	734.8	30.04	763.0	35	1.7	90	E	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Brownsville, Texas	30.17	766.3	30.22	767.6	43	6.1	92	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Buffalo, New York	29.48	748.8	30.27	768.8	3	—16.1	73	SW	6	2.7	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Burlington, Vermont	29.92	760.0	30.24	768.1	2	—16.7	72	NE	3	1.3	.....	.....	10s	.....	NE	Inap.	Inap.	Cloudy	
Cairo, Illinois	29.79	756.7	30.21	767.3	27	— 2.8	76	SE	9	4.0	.....	2c	0	Calm	.....	0	0	Fair	
Campo, California	27.62	701.5	30.19	766.8	24	— 4.4	87	S	4	1.8	.....	5c	0	N	.....	0	0	Fair	
Camp Thomas, Arizona	27.44	697.0	.....	.....	22	— 5.6	72	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	30.18	766.6	30.20	767.1	29	— 1.7	78	NW	15	6.7	.....	0	0	.....	.....	0.29	7.4	Clear	
Cape May, New Jersey	30.12	765.0	30.16	766.1	23	— 5.0	73	NW	32	14.3	.....	0	0	.....	.....	0.03	0.8	Clear	
Castroville, Texas	29.36	745.7	30.12	765.0	31	— 0.6	89	NW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Cedar Keys, Florida	30.25	768.3	30.28	769.1	43	6.1	75	N	17	7.6	.....	0	8ks	.....	N	0.09	2.3	Fair	
Champaign, Illinois	29.17	740.9	30.03	762.7	18	— 7.8	68	S	14	6.3	.....	2c	0	S	.....	0	0	Fair	
Charleston, S. Carolina	30.22	767.6	30.28	769.1	44	6.7	84	N	5	2.2	.....	.....	10s	.....	N	0.06	1.5	Threatening	
Charlotte, N. Carolina	29.37	746.0	30.23	767.8	28	— 2.2	100	Calm	0	0	.....	.....	Fog	.....	Calm	0.05	1.3	Dense fog	
Chattanooga, Tennessee	29.48	748.8	30.34	770.6	25	— 3.9	75	NE	3	1.3	.....	0	Sm'e	.....	Calm	Inap.	Inap.	Clear	
Cheyenne, Wyoming	23.80	604.5	29.74	755.4	38	3.3	31	W	24	10.7	.....	0	5s	.....	Calm	0	0	Fair	
Chicago, Illinois	29.24	742.7	29.97	761.2	23	— 5.0	60	SW	7	3.1	.....	Haze	0	Calm	.....	0	0	Clear	
Chincoteague, Virginia	30.16	766.1	30.18	766.6	22	— 5.6	86	NW	16	7.2	.....	1k	0	NW	.....	0.07	1.8	Clear	
Cincinnati, Ohio	29.58	751.3	30.30	769.6	12	—11.1	61	SE	3	1.3	.....	0	Fog;sm	.....	Calm	0	0	Clear	
Cleveland, Ohio	29.46	748.3	30.28	769.1	2	—16.7	100	SE	8	3.6	.....	10ck	Fog	W	.....	0	0	Cloudy	
Coleman City, Texas	28.24	717.3	29.96	761.0	37	2.8	71	SW	18	8.0	.....	0	0	.....	.....	0	0	Clear	
Columbus, Ohio	29.39	746.5	30.34	770.6	— 1	—18.3	84	S	3	1.3	.....	0	Sm'e	.....	Calm	0	0	Clear	
Concho, Texas	28.68	713.2	29.82	757.4	36	2.2	80	SW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Corsicana, Texas	29.67	753.6	30.16	766.1	35	1.7	70	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Davenport, Iowa	29.19	741.4	29.86	758.4	22	— 5.6	72	S	12	5.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Dayton, Washington T'y	27.90	708.6	29.55	750.6	42	5.6	100	SW	6	2.7	.....	.....	10n	.....	Calm	0.42	10.7	Heavy rain	
Deadwood, Dakota	24.87	631.7	.....	.....	42	5.6	42	SW	12	5.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Decatur, Texas	28.81	731.8	30.02	762.5	37	2.8	71	SE	16	7.2	.....	0	0	.....	.....	0	0	Clear	
Delaware Breakwater, Del.	30.14	765.5	30.16	766.1	22	— 5.6	86	NW	24	10.7	.....	0	0	.....	.....	0.08	2.0	Clear	
Denison, Texas	29.21	741.9	30.03	762.7	38	3.3	91	S	7	3.1	.....	2cs	0	Calm	.....	0	0	Fair	
Denver, Colorado	24.53	623.0	29.75	755.6	55	12.8	17	W	26	11.6	.....	0	0	.....	.....	0	0	Clear	
Des Moines, Iowa	28.84	732.5	29.75	755.6	27	— 2.8	88	SW	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Detroit, Michigan	29.44	747.8	30.17	766.3	10	—12.2	79	SW	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Dodge City, Kansas	27.19	690.6	29.55	750.6	26	— 3.3	75	W	4	1.8	.....	8os	2s	W	Calm	0	0	Cloudy	
Dubuque, Iowa	29.10	739.1	29.84	757.9	15	— 9.4	82	S	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Duluth, Minnesota	29.08	738.6	29.82	757.4	4	—15.6	100	NE	1	0.4	.....	.....	10s	.....	NE	0.01	0.3	Cloudy	
Eagle Pass, Texas	29.35	745.5	30.12	765.0	37	2.8	81	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Eagle Rock, Texas	24.93	633.5	29.58	751.3	33	0.6	89	SW	46	20 6	.....	.....	10s	.....	Calm	0.09	2.3	Cloudy	
Eastport, Maine	29.79	756.7	29.86	758.4	20	— 6.7	70	NW	13	5.8	.....	.....	10s	.....	NW	0	0	Cloudy	
Edinburg, Texas	.....	.....	.....	.....	38	3.3	31	S	.....	.....	1	0	0	.....	.....	0	0	Clear	
El Paso, Texas	26.35	669.3	.....	.....	34	1.1	52	NW	10	4.5	.....	0	1s	.....	W	0	0	Clear	
Erie, Pennsylvania	29.42	747.3	30.21	767.3	7	—13.9	77	S	8	3.6	.....	.....	10s;fg	.....	Calm	0	0	Cloudy	
Escanaba, Michigan	29.25	742.9	29.97	761.2	0	—17.8	85	N	4	1.8	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Florence, Arizona	28.69	728.7	30.29	769.4	30	— 1.1	57	SW	1	0.4	.....	10c	0	SW	.....	0	0	Cloudy	
Fort Apache, New Mexico	25.15	638.8	30.60	777.2	21	— 6.1	57	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Fort Assinniboine, Montana	26.96	684.8	.....	.....	— 3	—19.4	100	NE	6	2.7	.....	.....	10n	.....	NE	0.22	5.6	Light snow	
Fort Bennett, Dakota	27.98	710.7	.....	.....	7	—13.9	77	SE	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Buford, Dakota	27.97	710.4	30.00	763.5	—10	—23.3	100	N	12	5.4	.....	.....	10n	.....	NW	0.20	5.1	Light snow	
Fort Custer, Montana	26.42	671.1	.....	.....	1	—17.2	100	N	26	11.6	.....	.....	10n	.....	Calm	0.35	8.9	Light snow	
Fort Davis, Texas	25.18	639.6	30.14	765.5	50	10.0	65	W	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Fort Elliott, Texas	27.06	687.3	29.39	771.9	33	0.6	32	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Gibson, Indian T'y	29.44	747.8	29.99	761.7	35	1.7	61	SE	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Grant, Arizona	25.31	642.9	30.11	764.8	32	0.0	50	N	3	1.3	.....	2cs	0	Calm	.....	0	0	Clear	
Fort Griffin, Texas	28.68	728.5	29.98	761.5	40	4.4	73	S	6	2.7	.....	0	5s	.....	.....	0	0	Fair	
Fort Keogh, Montana	27.13	689.1	.....	.....	2	—16.7	72	NW	8	3.6	.....	.....	10s	.....	Calm	0.28	7.1	Cloudy	
Fort Macon, North Carolina	30.19	766.8	30.20	767.1	33	0.6	89	NW	20	8.9	.....	.....	10s	.....	Calm	0.17	4.3	Cloudy	
Fort Missoula, Montana	26.18	665.0	.....	.....	39	3.9	91	SW	1	0.4	.....	.....	10n	.....	Calm	1.44	36.6	Heavy rain	
Fort McKavett, Texas	27.80	706.1	29.78	756.4	38	3.3	72	SW	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Fort Shaw, Montana	26.11	663.2	.....	.....	— 4	—20.0	100	NW	4	1.8	.....	.....	10n	.....	Calm	0.20	5.1	Light snow	
Fort Sill, Indian Territory	28.65	727.7	29.83	757.7	21	— 6.1	86	E	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Stevenson, Dakota	27.84	707.1	.....	.....	— 5	—20.6	81	E	4	1.8	.....	.....	10n	.....	E	0.03	0.8	Light snow	
Fort Verde, Arizona	.....	.....	.....	.....	22	— 5.6	72	W	.....	.....	1	5cs	0	SW	.....	0	0	Fair	
Fredericksburg, Texas	28.35	720.1	29.96	761.0	42	5.6	83	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Galveston, Texas	30.19	766.8	30.23	767.8	46	7.8	84	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Grand Haven, Michigan	29.31	744.5	30.00	762.0	18	— 7.8	68	SE	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Hatteras, North Carolina	30.13	765.3	30.17	766.3	32	0.0	89	NW	18	8.0	.....	.....	10s	.....	W	0.38	9.7	Cloudy	
Helena, Montana	25.33	643.4	.....	.....	38	3.3	81	SW	5	2.2	.....	.....	10n	.....	Calm	0.08	2.0	Light rain	
Henrietta, Texas	28.94	735.1	29.90	759.4	34	1.1	79	SE	8	3.6	.....	0	5s	.....	Calm	0	0	Fair	
Indianapolis, Indiana	29.31	744.5	30.15	765.8	17	— 8.3	67	S	7	3.1	.....	10ck	0	W	.....	0	0	Cloudy	
Indianola, Texas	30.21	767.3	30.24	768.1	41	5.0	91	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Jacksboro, Texas	28.79	731.3	29.95	760.7	40	4.4	65	SW	12	5.4	.....	0	5s	.....	SW	0	0	Fair	
Jacksonville, Florida	30.25	768.3	30.30	769.6	43	6.1	75	NW	5	2.2	.....	5cs	0	W	.....	0.05	1.3	Fair	
Keokuk, Iowa	29.20	741.7	29.88	758.9	28	— 2.2	77	SW	10	4.5	.....	0	5s	.....	Calm	0	0	Fair	
Key West, Florida	30.17	766.3	30.20	767.1	64	17.8	78	N	12	5.4	.....	2k	0	N	.....	0.41	10.4	Fair	
Kittyhawk, North Carolina	30.16	766.1	30.19	766.8	29	— 1.7	89	N	28	12.5	.....	2k	0	N	.....	0.61	15.5	Clear	
Knoxville, Tennessee	29.29	744.0	30.38	771.6	23	— 5.0	94	SW	1	0.4	.....	0	Sm'e	.....	Calm	0.08	2.0	Clear	
La Crosse, Wisconsin	28.99	736.3	29.79	756.7	7	—13.9	77	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	
La Mesilla, New Mexico	26.25	666.7	30.40	772.1	23	— 5.0	73	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Laredo, Texas	29.72	754.9	30.07	763.8	43	6.1	83	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Leavenworth, Kansas	29.00	736.6	29.87	758.7	27	— 2.8	76	S	10	4.5	.....	.....	10s	.....	.....	0	0	Cloudy	
Lewiston, Idaho	28.69	728.7	29.32	744.7	39	3.9	100	E	2	0.9	.....	.....	10n	.....	Calm	0.38	9.7	Heavy rain	
Little Rock, Arkansas	29.83	757.7	30.17	766.3	31	— 0.6	89	S	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Los Angeles, California	29.90	759.4	30.26	768.6	41	5.0	82	NW	3	1.3	.....	4c	0	Calm	.....	0	0	Fair	
Louisville, Kentucky	29.64	752.8	30.25	768.3	18	— 7.8	84	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Lynchburg, Virginia	29.59	749.3	30.23	767.8	29	— 1.7	78	NW	8	3.6	.....	0	0	.....	.....	0.03	0.8	Clear	
Madison, Wisconsin	28.81	731.8	29.85	758.2	17	— 8.3	83	SE	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Marquette, Michigan	29.15	740.4	29.92	760.0	8	—13.3	78	SE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Mason, Texas	28.40	721.3	30.20	767.1	42	5.6	83	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Memphis, Tennessee	29.90	759.4	30.26	768.6	27	— 2.8	88	SE	6	2.7	.....	0	Fog	.....	Calm	0	0	Clear	
Milwaukee, Wisconsin	29.16	740.7	29.92	760.0	21	— 6.1	86	S	5	2.4	.....	0	8s	.....	Calm	0	0	Fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.27	768.8	30.35	770.9	33	0.6	89	N	4	1.8		0	0			0	0	Clear	
Montgomery, Alabama	30.10	764.5	30.36	771.1	30	— 1.1	89	W	2	0.9		0	0			0	0	Clear	
Morgantown, W. Virginia	29.25	742.9	30.32	770.1	20	— 6.7	77	Calm	0	0			10;hn		W	0.03	0.8	Cloudy	
Moorhead, Minnesota	28.72	729.5	29.78	756.4	—10	—23.3	77	Calm	0	0		0	0			0.06	1.5	Clear	
Mt. Washington, N. H.	23.38	593.8	29.74	755.4	3	—16.1	73	NW	32	14.3		8c	2s	NW	NW	0	0	Fair	
Nashville, Tennessee	29.74	755.4	29.33	745.0	16	— 8.9	83	W	1	0.4		0	Sm'e		W	0	0	Dense smoke	
New Haven, Connecticut	29.92	760.0	30.05	763.3	16	— 8.9	66	N	11	4.9		0	0			0.03	0.8	Clear	
New London, Connecticut	29.94	760.5	29.99	761.7	21	— 6.1	71	NW	7	3.1		0	0			0.02	0.5	Clear	
New Orleans, Louisiana	30.26	768.6	30.33	770.4	37	2.8	71	N	5	2.2		0	0			0	0	Clear	
Newport, Rhode Island	29.92	760.0	29.98	761.5	24.5	— 4.2	81	W	10	4.5		7k	1s	NW	Calm	0.03	0.8	Cloudy	
New River, N. Carolina																			
New Shoreham, Rhode I'd	29.97	761.2	30.00	762.0	25	— 3.9	75	N	18	8.0		0	0			0.12	3.0	Clear	
New York, New York	29.90	759.4	30.09	764.3	19	— 7.2	100	NW	4	1.8			2s;fg		Calm	0.02	0.5	Fair	
Norfolk, Virginia	30.18	766.6	30.24	768.1	25	— 3.9	87	N	8	3.6		0	0			0.20	5.1	Clear	
North Platte, Nebraska	26.79	680.4	29.39	746.5	32	0.0	69	W	12	5.4		0	0			0	0	Clear	
Olympia, Washington T'y	29.53	750.0	29.57	751.1	42.0	5.6	91	NE	1	0.4			1on		Calm	0.42	10.7	Light rain	
Omaha, Nebraska	28.53	724.6	29.68	753.9	18.5	— 7.5	76	S	4	1.8		0	8s		Calm	0	0	Fair	
Oswego, New York	29.87	758.7	30.22	767.6	6	—14.4	88	SE	3	1.3		5k	Fog	N		0	0	Fair	
Pensacola, Florida	30.34	770.6	30.37	771.4	32	0.0	87	NW	4	1.8		2cs	Haze	Calm	Calm	0	0	Fair	
Philadelphia, Pa	30.08	764.0	30.13	765.3	18	— 7.8	68	N	12	5.4		0	Haze		Calm	0.07	1.8	Clear	
Phœnix, Arizona	29.06	738.1	31.00	787.4	30	— 1.1	57	E	4	1.8		2c	0	E		0	0	Fair	
Pike's Peak, Colorado	17.57	446.3	29.78	756.4	10	—12.2	58	W	44	19.7		2cs	0	Calm		0	0	Clear	
Pilot Point, Texas	29.23	742.4	30.11	764.8	35	1.7	90	SE	20	8.9		0	0			0	0	Clear	
Ploche, Nevada	24.11	612.4	29.88	758.9	25	— 3.9	62	SW	2	0.9		5c	0	Calm		0	0	Fair	
Pittsburg, Pennsylvania	29.42	747.3	30.32	770.1	8	—13.3	78	Calm	0	0		0	Fog		Calm	0	0	Clear	
Port Huron, Michigan	29.43	747.5	30.16	766.1	10	—12.2	79	S	7	3.1		10cs	0	W		0	0	Cloudy	
Portland, Maine	29.91	759.7	29.96	761.0	20	— 6.7	70	NW	9	4.0			10s		Calm	0	0	Cloudy	
Portland, Oregon	29.52	749.8	29.59	751.6	53	11.7	93	SW	5	2.2			1on		W	1.89	48.0	Heavy rain	
Portsmouth, N. Carolina					32	0.0	79	N	28	12.5		5k	0	NW		0.12	3.0	Fair	
Prescott, Arizona	24.89	632.2	30.25	768.3	20	— 6.7	70	NE	4	1.8		2c	0	Calm		0	0	Clear	
Punta Rassa, Florida	30.20	767.1	30.22	767.6	54	12.2	80	N	12	5.4		8ck	1ks	SW	N	0.02	0.5	Cloudy	
Red Bluff, California	29.82	757.4	30.17	766.3	52.5	11.4	76	S	21	9.4			10s			Inap.	Inap.	Cloudy	
Rio Grande City, Texas	30.00	762.0	30.23	767.8	40	4.4	91	Calm	0	0		0	0			0	0	Clear	
Rochester, New York	29.54	750.3	30.22	767.6	9	—12.8	78	W	3	1.3			10s		W	0.07	1.8	Cloudy	
Roseburg, Oregon	29.22	742.2	30.78	781.8	55	12.8	90	SW	8	3.6			1on		Calm	3.05	77.5	Light rain	
Sacramento, California	30.26	768.6	30.34	770.6	45	7.2	84	SE	5	2.2			10s		Calm	0	0	Cloudy	
St. Louis, Missouri	29.44	747.8	30.05	763.3	21	— 6.1	78	S	10	4.5		1cs	0	Calm		0	0	Clear	
St. Paul, Minnesota	28.81	731.8	29.70	754.4	5	—15.0	65	E	7	3.1		3cs	0	Calm		0.16	4.1	Fair	
Salt Lake City, Utah	25.60	650.2	29.93	760.2	41	5.0	49	SE	5	2.2			10s		Calm	0.08	2.0	Cloudy	
San Antonio, Texas	29.46	748.3	30.21	767.3	33	0.6	70	Calm	0	0		0	0			0	0	Clear	
San Diego, California	30.21	767.3	30.29	769.4	44	6.7	92	N	1	0.4		2c	8s	Calm	Calm	0	0	Cloudy	
Sandusky, Ohio	29.48	748.8	30.22	767.6	13	—10.6	81	S	15	6.7		2c	2s	Calm	Calm	0	0	Fair	
Sandy Hook, New Jersey	30.16	766.1	30.10	764.5	19	— 7.2	69	NW	14	6.3		0	0			0.21	5.3	Clear	
San Francisco, California	30.27	768.8	30.34	770.6	52	11.1	82	SE	5	2.2			10s		Calm	0	0	Cloudy	
Santa Fé, New Mexico	23.26	590.8	29.80	756.9	36	2.2	53	N	15	6.7		0	0			0	0	Clear	
Savannah, Georgia	30.20	767.1	30.30	769.6	38	3.3	81	NW	7	3.1		0	Fog		Calm	0.02	0.5	Clear	
Shreveport, Louisiana	29.94	760.5	30.20	767.1	32	0.0	89	S	4	1.8		0	0			0	0	Clear	
Silver City, New Mexico	24.36	618.8	30.72	780.3	34	1.1	52	NW	8	3.6		0	0			0	0	Clear	
Smithville, North Carolina	30.22	767.6	30.26	768.6	15	- 9.4	90	Calm	0	0		10k	Fog	NW		0.09	2.3	Cloudy	
Socorro, New Mexico	25.39	644.9	29.45	748.0	36	2.2	44	NW	2	0.9		0	5s		W	0	0	Fair	
Springfield, Illinois	29.30	744.2	30.02	762.5	22	— 5.6	72	S	12	5.4		0	0			0	0	Clear	
Springfield, Massachusetts	29.91	759.7	30.05	763.3	18	— 7.8	68	N	3	1.3		0	5s		Calm	0	0	Fair	
Stockton, Texas	26.97	685.0	29.97	761.2	46	7.8	33	SW	12	5.4		0	0			0	0	Clear	
St. Vincent, Minnesota	18.87	733.3	29.75	755.6	— 4	—20.0	100	SW	1	0.4			1on		Calm	0.01	0.3	Light snow	
Thatcher's Island, Mass	29.94	760.5	29.99	761.7	22	— 5.6	88	N	13	5.8			10s		N	0	0	Cloudy	
Toledo, Ohio	29.45	748.0	30.20	767.1	10	—12.2	80	E	4	1.8		2c	Haze	Calm	Calm	Inap.	Inap.	Fair	
Tucson, Arizona	27.74	704.6	30.29	769.4	30	— 1.1	57	S	5	2.2		2c	0	Calm		0	0	Fair	
Umatilla, Oregon	29.23	742.4	29 73	755.1	37	2.8	95	E	2	0.9			1on		Calm	0.06	1.5	Light rain	
Uvalde, Texas	29.16	740.7	30.03	762.7	36	2.2	45	NW	1	0.4		0	0			0	0	Clear	
Vicksburg, Mississippi	30.04	763.0	30.32	770.1	29	— 1.7	89	SE	8	3.6		0	0			0	0	Clear	
Visalia, California	29.96	761.0	30.35	770.9	38	3.3	80	SE	2	0.9		2c	0	Calm		0	0	Clear	
Washington, D. C.	30.10	764.5	30.22	767.6	20	— 6.7	85	NW	6	2.7		0	Fog		Calm	0.73	3.3	Light fog	
Wickenburg, Arizona					27	— 2.8	70	NW			1	0	8s		Calm	0	0	Cloudy	
Wilmington, N. Carolina	30.20	767.1	30.25	768.3	37	2.8	81	N	8	3.6			10s		NE	0.19	4.8	Cloudy	
Winnemucca, Nevada	25.62	650.7	29.98	761.5	43	6.1	36	SW	16	7.2			10ks		SW	0	0	Cloudy	
Woods Holl, Mass	29.90	759.4	29.94	760.5	26	— 3.3	75	N	10	4.5			10s		NW	0.01	0.3	Cloudy	
Yankton, Dakota	28.38	720.8	29.75	755.6	12	—11.1	61	N	3	1.3		0	0			0	0	Clear	
Yuma, Arizona	30.08	764.0	30.23	767.8	41	5.0	49	NE	4	1.8		1c	0	Calm		0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	21.99	558.5			48.5	9.2	67	Calm	0	0		2c	0			0	0	Fair	Thomas Herran.
Havana, Cuba, W. I.	30.13	765.3	30.18	766.6	72	22.2	75	NE	3.6	1.6			8n		NE	1.51	38.4	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	30.31	769.8	30.37	771.4	32.0	0.		Calm			0		1c			0	0		
Kingston, Jamaica, W. I.	30.11	764.8	30.12	765.0	69.3	20.7	75	Calm	0	0		0s	0			0	0	Fine	Maxwell Hall.
Navassa, W. I.	30.01	762.2	30.09	764.3	74.2	23.4	72	E	12	5.4		0	2s		E	0	0	Clear	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	77	25.0	86	E			2	0	5k			0.500	12.70	Raining	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.41	747.0	29.96	761.0	80	26.7	95	Calm			0	0	2s		Calm	0	0	Hazy	Francesco J. Cisneros.
Rivas, Nicaragua					73	23		E			5	0	0			0	0		Earl Flint.
Santiago de Cuba, W. I.	30.10	764.5	30.12	765.0	72	22.2	71	Calm	0	0		Haze	0			0	0		Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	30.21	767.2	30.27	768.8	26.6	— 3.		SE			4		0			0	0		
York Factory, B. A.	29.82	757.4	29.88	758.9	—45.0	—42.8		S	7	3.1		Haze	Haze			0	0	Hazy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandra																			Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. S. Hope.
H. M. S Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. J. F. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.86	758.4	71	21.7		SW			5		10	S						Overcast	Capt. J. Moresby.
H. M. S. Dragon																			Capt. H ulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.88	758.9	79	26.1	82	NW			5		0							Squally	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 11° 47″ W. 77° 12′	29.98	761.5	70	21.1	77	S			2		7							D. clouds	Comm. E. E. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	29.68	753.9	54	12.2	93	ESE			2		10					2	ESE	Raining	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris, N. 36° 10′, E. 15° 15′	29.82	757.4	62	16.7	72	W			6		10					6	W	Squally	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 25° 58′, E. 119° 29′	30.40	772.1	48.1	8.9	71	NE			1		3							Misty	Capt. R. H. Napier.
H. M. S. Malabar, Bombay, India	29.89	759.2	81	27.2	78	W			1		2	N				2	NE	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 38° 42′, W. 9° 06′	29.85	758.2	63	17.2	94	SW			7		8	SW						Squally	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 21° 00′, W. 61° 45′	30.10	764.5	75	23.9	79	ESE			2		3	E				2	E	D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 42′, E. 49° 34′	29.63	752.6	77	25.0	95	ESE			2		1					2	SE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis, N. 33° 39′, E. 24° 05′	29.92	760.0	69	20.6	70	NW			3		8	W				2	NW	D. clouds	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb, N. 37° 03′, E. 15° 18′	29.75	755.6	62	16.7	80	NNW			3-4		8	NW						Squally	Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane,
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	30.04	763.0	67.5	19.7	74	SE			1		6	S						D. clouds	Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	30.02	762.6	77.4	25.2	82	Calm			0		10			0	0	1	SE	Foggy	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando	29.99	761.7	81.5	27.5	80	W			3		4		W	0	0	1	W	D. clouds	G. A. de Brito Capello, Comd t.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.37	771.4	59	15.0	94	N	3	1.3			0			0	0			Clear.	
N. Yard, Portsmouth, N. H.	29.97	761.2	18	— 7.8	84	Calm	0	0		2c		W		0	0			Fair.	
Naval Hospital, Yokohama, Japan	29.80	756.9	31	— 0.6	75	Calm			0		0			0	0			Clear.	
Adams, Huacho, Peru	30.01	762.2	69	20.6	90	SSE			2		2		SSE			Long	SW	Fair.	
Alaska, N. Yard, Mare I'd, Cal.	30.19	766.8	41	5.0	85	S			1		8		S	0	0			Cloudy.	
Alert, Hong-Kong, China *.	30.14	765.5	60	15.6	65	E			2		8		WNW	0	0	Sm'h		Hazy.	
Alliance, Pensacola, Fla.	30.36	771.1	40	4.4	82	NNW			2		0			Light		Sm'h		Clear.	
Ashuelot, Tientsin, China	30.32	770.1	29	— 1.7	100	WNW			1		0							Clear.	
Colorado, New York, N. Y.	30.08	764.0	18	— 7.8		N	2	0.9			0			0	0			Misty.	
Constitution, N. Yard, League I'd., Pa			18	— 7.8		Calm	0	0			0							Hazy.	
Franklin, Off N. Yard, Norfolk, Va	30.15	765.8	28	— 2.2		NNW	12	5.4			0			0.6	15.			Clear.	
Galena, Gibraltar, Mediterranean	30.03	762.7	66	18.9	89	NNE			2		8		N			Mod.	SW	Fair.	
Independence, N. Yard, Mare I'd, Cal.	30.29	769.4	51	10.6	79	SSE	3.6	1.6			10		Calm	0	0			Overcast.	
Kearsarge, N. 17° 47', W. 76° 19'	30.12	765.0	79	26.1	78	E			3		2		E			Long	E	Fair.	
Lackawanna, Ancon, Peru †	30.13	765.3	71	21.7	85	W			0-1		10		S	0	0			Cloudy.	
Marion, S. 53° 10', W. 70° 53'	29.61	752.1	47	8.3	62	SW			4		2					Sm'h		Fair.	
Michigan, Erie, Pennsylvania	30.21	767.3	4	—15.6		S			4		2							Clear.	
Minnesota, New York, N. Y.	30.09	764.3	19	— 7.2		NNW			2		8							Hazy.	
Monocacy, Shanghai, China	30.47	773.9	34	1.1	52	NW			1		0							Clear.	
New Hampshire, Port Royal, S. C.	30.25	768.3	40	4.4	83	NW	14	6.3			5		WSW	0	0			Fair.	
Nipsic, Villafranca, France	29.65	753.1	58	14.4	42	N			1		10					Sm'h		Overcast.	
Onward, Chimbote Bay, Peru †	29.95	760.7	70	21.1	85	S			3		2		NW			Long	N;W	Fair.	
Palos, Shanghai, China	30.50	774.7	32	0.0	79	NNE			1		0							Clear.	
Passaic, Washington, D. C.	30.22	767.6	13	—10.6	80	SW			1		0							Clear.	
Pensacola, Pichilinque, Mexico	30.10	764.5	60	15.6	88	SE			1		0							Clear.	
Portsmouth, Washington, D. C.	30.24	768.1	14	—10.0	100	Calm			0		10?							Clear.	
Powhatan, New York, N. Y.	30.11	764.8	19	— 7.2		NNW			3		2							Clear.	
Quinnebaug, Alexandria, Egypt	29.95	760.7	61	16.1	71	SW			3		10		SW			Mod.		Squally	
Richmond, Pagoda Anchorage, China	30.43	772.9	50	10.0	52	NE			2					0	0			Clear.	
Saratoga, Baltimore, Md	30.17	766.3	20	— 6.7	100	NW			1		2		Calm	Mod.	snow			Hazy.	
Shenandoah, Montevideo, Uruguay *	29.92	760.0	73	22.8	63	SW			1		0					Sm'h		Clear.	
St. Louis, League Island, Pa	30.15	765.8	15	— 9.4	65	Calm	0	0			0			c	0			Clear.	
Swatara, Kobe, Japan †	30.00	762.0	38	3.3	63	N			2		2		W			Sm'h		D. clouds	
Tennessee, St. Croix, W. I.	30.12	765.6	81	27.2	74	ESE	7	3.1			2		ENE	0	0	Sm'h		Fair.	
Trenton, Villafranca, France *	29.62	752.3	52	11.1	66	Var.			0-1		10			3 h'rs	light			Cloudy.	
Vandalia, N. 34° 35', W. 62° 37'	29.80	756.9	66	18.9	94	SSW			4		10		SW			Mod.	SSW	Raining	
Wabash, Boston, Massachusetts	29.97	761.2	20	— 6.7	85	NNW	11	4.9			8		NNW	1.80	45.7			Cloudy.	
Wachusetts, Taboga near Panama. *	29.57	751.1	78	25.6	86	NW			3		2		N	0	0	Sm'h		Clear.	
Wyoming, Naples, Italy	29.73	755.1	56	13.3	81	WSW			1		2		W			Sm'h		Fair.	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic, N 45° 10′, W. 35° 30′	29.53	750.0	55	12.8	100	NE			4		5					5	NE	D. clouds	Capt. H. Parsell.
Ship Baroda, ‡ S. 28° 40′, E. 38° 58′	30.06	763.5	77	25.0	73	ENE			4		6							D. clouds	Capt. C. J. Russell.
British Merchant, ‡ S. 43° 58′, E. 109° 30′	29.87	758.7	51.8	11.0	88	NW			3		10							Misty	Capt. E. J. Molony.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡ N. 34° 36, W. 19° 48′	29.57	751.1	65	18.3	84	S			7		10							Raining	Capt. N. Youlden.
S. S. Cipero, N. 48° 25′, W. 19° 35′	29.86	758.4	55	12.8		NNE			5		5					4	ENE	D. clouds	Capt. W. N. Lailey.
City of Agra, ‡ S. 55° 30′, W. 105° 47′	30.08	764.0	45.3	7.4	90	NNE			5		9							Overcast	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Coppename, N. 34° 30′, W. 22° 06′	29.48	748.8	64.8	18.2	85	SSW			7		10							Overcast	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra, ‡ S. 26° 57′, E. 54° 17′	29.99	761.7	75	23.9	62	SE			6		8							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡ N. 55° 00′, W. 8° 55′	29.66	753.4	41	5.0	74	NNW			6		6					7	NNE	D. clouds	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 17° 45′, E. 84° 30′	29.99	761.7	75.5	24.2	68	ESE			2		0							Blue sky	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 50° 00′, W. 16° 05′	29.81	757.2	42.5	5.8	100	N			5		10							Raining	Capt. H. W. Dyke.
Barque Meriola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 32° 46′, E. 28° 14′	29.82	757.4	59.5	15.3	88	W			6		10							Raining	Capt. C. W. Pearson
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
Moravian																			Capt. W. H. Smith, R.N.R.
S. S. Peruvian																			
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			Capt. W. H. P. Hains.
S. S. Scythia																			
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 42° 33′, W. 60° 30′ †	29.60	751.8	42	5.6		WNW			6		10		NW	24h'rs	light	Mod.	WNW	Cloudy	Capt. Benj. Gleadell.
S. S. Germanic, New York, N. Y †	30.09	764.3	19	— 7.2		NNW			3		0			0	0			Clear	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Undütsch.
S. S. Hermann																			Capt. H. Maur.
S. S. Köln, N. 40° 49′, W. 62° 47′	29.76	755.9	40.1	4.5		NNW			4-5		8		N	0	0	Light	NNW	Fair	
S. S. Leipzig, ‡ N. 46° 36′, W. 40° 12′	29.68	753.9	52.5	11.4	93	ESE			6		8		ESE	1 hour		R'gh	ESE	Cloudy	Capt. P. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolph Fredholm, ‡ S. 22° 24′, W. 28° 19′ †	30.20	757.0	78.8	26	84	NNW			3		2							Blue sky	Capt Albert Fredholm.
Ship Peru, ‡ N. 26° 33′, W. 85° 17′	30.23	757.8	62.8	17.1	85	NNE			5		Ss							Gloomy	Capt. O. F. Sköterbrand

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois.																			
N. 48° 38′, W. 32° 59′	29.81	757.2	57	13.9	81	ENE			5		5?		ENE			Mod.	ENE	Clear?	Capt. J. W. Shackford.
S. S. Indiana, ‡																			
Delaware River, Del. †.	30.06	763.5	26	— 3.3	63	NE			3		5		NE	Snow				Fine	Capt. R. W. Sargent.
S. S. Ohio, ‡																			
Liverpool, England. †*.	29.52	749.8	34	1.1	100	N			2		8		N	Light	snow			Cloudy	Wm. Shakford, 1st Off'r.
S. S. Pennsylvania, ‡																			
N. 45° 54′, W. 40° 08′ †.	29.83	757.7	51	10.6		NE			4		8		ENE	0.25	6.3	R'gh	ENE	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern,																			
N. 23° 05′, W. 108° 48′ †.	30.04	763.0	69	20.6	80	N			5		0			0	0	Short	NNW	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡																			
N. 35° 45′, E. 155° 25′ †.	29.81	757.2	60	15.6	71	WSW			5		8		SW	0	0	High	wsw	Cloudy	Capt. H. Davison.
S. S. Gaelic,																			
San Francisco, Cal. *†.	30.42	772.7	52	11.1	93	NE			2		10		NW					Overcast	Capt. W. H. Kidley.
S. S. Oceanic,																			
N. 44° 45′, E. 165° 36′	29.39	746.5	40	4.4	82	WSW			2		5?		WSW	0.20	5.1	High	w w	Clear?	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon,																			
N. 40° 28′, W. 124° 32′	30.09	764.3	55.0	12.8	93	SW			5		10		SW			Very R'gh	wsw	Misty	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon,																			
San Pedro, Cal.	30.22	767.6	49	9.4	93	NE			1		0							Foggy	Capt. J. N. Ingalls.
S. S. Idaho																			C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. State of California,																			
Portland, Oregon †.	29.57	751.1	53	11.7	93	W			3		10		SW					Raining	Capt. G. Debney.
S. S. Victoria,																			
N. 45° 00′, W. 124° 50′	29.70	754.4	49	9.4	100	SW			6		8					R'gh	S	Cloudy	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York,																			
S. 29° 30′, E. 178° 30′ †.	29.85	758.2	72	22.2	81	SW			2		7		SW	Light	rain	Light	SW	Light rain	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking,																			
N. 31° 11′, W. 148° 02′ †.	29.73	755.1	62	16.7	77	SSE			6		10		SSE	0	0	R.gh	S	Squally	Capt. G. G. Berry.
S. S. City of Sidney,																			
S. 4° 17′, W. 167° 00′ †.	29.88	758.9	80	26.7	82	NNE			3		8		NE	0	0	Mod.	NE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio,																			
Hong Kong, China †.	30.36	771.1	57	13.9	69	E			2		0			0	0	Sm'h		Clear	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡																			
N. 17° 57′, W. 102° 46′ †.	30.02	762.5	77	25.0	84	WNW			3		0			0	0	Sm'h	W	Clear	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada,																			
N. 17° 25′, W. 101° 30′ †.	29.97	761.2	79	26.1	91	ENE			2		0			0	0	Sm'll	SW	Clear	
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland ‡																			Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhyniand ‡																			Capt. W. Geo. Randle.
S. S. Vaderland ‡																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller,																			
Brunswick, Ga	30.23	767.8	42	5.6	83	NW	2	0.9		2c		W		0	0			Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, ‡																			
Arroyo, P. R. †	30.33	770.4	79	26.1		ENE			4		2		E	0	0	Sm'h		Clear	Capt. W. H. Champlin.
U. S. S. Fish Hawk,																			
Navy Yard, Norfolk, Va. †	30.19	766.8	27	— 2.8		N	3	1.3			10s			0.05	1.3			Clearing	
Sch'r Hattie V. Kelsey																			Capt. J. L. Randall.
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡																			
Lisbon, Spain †	29.77	756.1	64	17.8	100	SW			8		10		W	Hea	vy			Rainy	Capt. Jos. Hand.

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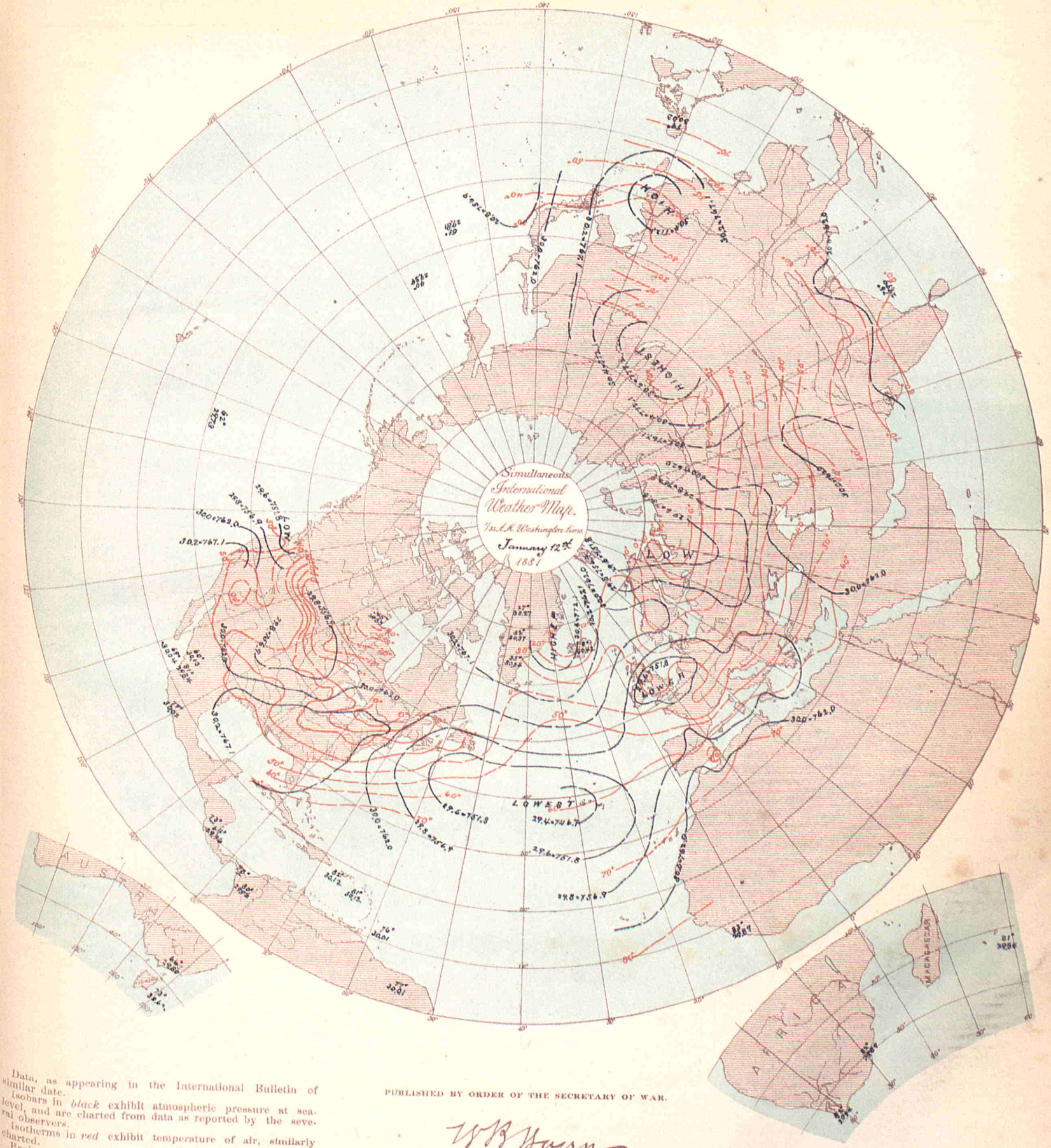
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 13, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.00	761.9	69.8	21.0	64	SW			4		10			0	0	Covered	Dr. Ollive.
Nemours			30.01	762.3	72.9	22.7	55	WNW			1		1			0	0	Very fair	Raynard.
Algiers			29.86	758.4	72.0	22.2	45	WSW			4		2			0	0	Fair	Nicolas.
La Calle			29.89	759.2	75.6	24.2	45	W			4		6			0	0	Cloudy	Fonfrède.
Tunis			29.84	758.0															Jacques.
Sfax			30.00	762.0															Gau.
Saida			30.08	764.1	73.8	23.2	89	WNW			3		3			0	0	Pretty fair	Dumas.
Tebessa			30.06	763.6	74.8	23.8	15	W			7		6			0	0	Cloudy	Watrin.
Gerville																			Lonchamp.
Laghouat			30.21	767.3	78.4	25.8	25	WSW			2		2			0	0	Pretty fair.	Herbin.
Biskra			30.08	764.0	74.8	23.8	60	NW			1		8			0	0	Very cloudy	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.89	759.2	29.98	761.5	59.1	15.1	71	SE	16	7.2			0			0	0	Very fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			30.70	779.8	75	23.9		SE			2		2k			0	0	Clear	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	28.92	734.5	29.48	748.9	30.6	— 0.8	96	SW			2		10			1.016	25.8	Snowing	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.60	726.4	29.40	746.7	24.3	— 4.3	100	ENE	0	0			10			0.118	3.0		Dr. Wiersbicki.
Eperies	28.50	723.9	29.41	747.0	28.4	— 2.0	87	SE			1		10n			0.041	1.05		Julius Mikolik.
Gratz‡	28.23	717.0	29.52	749.7	29.5	— 1.4	72	E			2		10			0	0		Andreas Rospini.
Hermannstadt	27.99	711.0	29.45	747.9	33.8	1.0	82	SW			5		10			0.297	7.55		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.14	714.8	29.54	750.2	28.4	— 2.0	69	WNW			1		4			0.016	0.4		The Staff.
Lemberg	28.40	721.4	29.44	747.7	20.8	— 6.2	90	SE			4		10			0.110	2.8		Dr. T. Stanecki.
Pola	29.26	743.3	29.38	746.2	45.9	7.7	37	N			1		10			0.362	9.2		I. R. HydrographicOffice.
Szathmar	29.02	737.0	29.46	748.3	31.3	— 0.4	100	Calm			0		10			0.276	7.0	Snowing	Beicht Peter, S. J.
Szegedin	29.19	741.3	29.48	748.7	31.6	— 0.2		S			1		10			0.169	4.30		Karl Stancel.
Trieste	29.33	744 9	29.43	747.5	43.3	6.3	87	Calm			0		10			0.055	1.4	Foggy	P. Busin.
Vienna	28.78	730.9	29.52	749.7	30.6	— 0.8	58	W			3		2			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 19, 1882.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.

BRITISH SERIES.

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

Aberdeen	29.66	753.4	29.77	756.1	23.0	— 5.0	80	NW	13	5.8			4			0.150	3.81	Blue sky	W. Boswell.
Armagh, Observatory	29.57	751.1	29.81	757.2	25.7	— 3.5	81	SW	4	1.8			3					Misty	S. Call.
Bidston, Liverpool Obs'y			29.66	753.4	32	0.0	85	N	10	4.5			2					Blue sky	John Hartnup.
Bolton, Sharples	29.10	739.1	29.64	752,8	30.9	— 0.6	99	NNE.	6	2.7			1					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.22	742.2	29.62	752.3	31.3	— 0.4	88	NE			2		2			0	0	Blue sky	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	79.0	26.1	63	NE			1		3					Blue sky	Pvt. J. Surgenor, A. H. C.
Cardington			29.53	750.0	32.0	0.0	90	NW			0.4		8					Snowing	John McLaren.
Chatham, School M. E.	29.41	747.0	29.54	750.3	30.2	— 1.0	91	NW			2		0					Gloomy ?	Cpl. Gwinn, R. E.
Falmouth, Observatory	29.48	748.8	29.71	754.6	33.8	1.0	78	NNE			1		3					Foggy	The Staff.
Fort Napier, Natal	27.51	698.7	29.72	754.9	85.2	29.6	97	NE			1		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	83	28.3	83	NW			2		3					D. clouds	C. E. Keane.
Galway, Queen's College			29.79	756.7	36	2.2	70	N			2		8			0.05	1.3	Overcast	J. O'Donaghadue.
Gibraltar, Mediterranean	29.82	757.4	29.87	758.7	67.2	19.6	95	NW			3		3					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.54	750.3	29.74	755.4	27.0	— 2.8	92	N			1		7					D. clouds	D. G. MacLean.
Greenwich, Royal Obs'y	29.39	746.5	29.57	751.1	31.2	— 0.4	88	N			1		10					Overcast	The Staff.
Guernsey	29.38	746.2	29.60	751.8	36.5	2.5	70	NW			3		5					Snowing	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.53	750.0	29.56	750.8	32.0	0.0	84	NW	6	2.7			10					Threatening	The Met'g'l Office.
Leicester, Museum	29.32	744.7	29.59	751.6	31.8	— 0.1	100	NE			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.68	753.9	29.75	755.6	69.0	20.6	70	W			2		2					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			30.11	764.8	73.0	22.8	73	NE			3		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.08	738.6	29.62	752.3	31.0	— 0.6	86	N			2		9					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	29.35	745.5	29.61	752.1	31	— 0.6	89	NNW			3		10					Threatening	The Staff.
Plymouth	29.59	751.6	29.67	753.6	28.6	— 1.9	88	Calm			0		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			29.76	755.9	17	— 8.3	100	Calm	0	0			0					Blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.62	752.3	29.69	754.1	47.0	8.3	82	NE			1		10			Blank	Blank	Gloomy	Serg't W. H. Lyne.
Sheffield	29.37	746.0	29.66	753.4	33.2	0.7	91	N			1		6			0.05	1.3	Misty	W. F. Cooper.
Silloth Rectory	29.76	755.9	29.79	756.7	27.9	— 2.3	66	N			3		4			0	0	D. clouds	Rev. F. Redford, A. M.
Stonyhurst, Observatory			29.66	753.4	32.5	0.3	75	NE	6	2.7			0					Blue sky	Rev. S. J. Perry.
Strathfield Turgiss					31.5	— 0.3	78	N			2		10					Overcast	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	29.60	751.8	29.69	754.1	38	3.3	72	N			3		0					Blue sky	W. Newcombe.
Valencia, Observatory	29.87	758.7	29.90	759.4	34.8	1.6	72	E	3	1.3			1			Blank	Blank	Blue sky	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B	29.92	760.0	29.96	761.0	4.5	—15.3		Calm	0	0		0	0			Inap.	Inap.	Clear	Hon. J. Ferguson.
Chatham, N. B.*	29.79	756.7	29.85	758.4	— 2	—18.9	94	Calm	0	0		0	0			0.01	0.3	Clear	G. A. Blair.
Charlottetown, P. E. Island	29.76	755.9	29.80	756.9	13	—10.6	100	W	12	5.4		0	0			0.165	4.19	Clear	H. J. Cundall, C. E.
Chicontime, Quebec					— 8.3	—22.4		SE			2		10n			Inap.	Inap.	Light snow	Rev. V. A. Huart.
Cornwall, Ontario	29.48	748.8	29.70	754.4	10.0	—12.2	91	E			1	10cs	0			0	0	Cloudy	James Smith, M. A.
Dalhousie, N. B	29.84	757.9	29.88	758.9	4.0	—15.6		W			1	0	7s			0	0	Fair	H. A. Johnson.
Father Point, Quebec*	29.87	758.7	29.90	759.4	— 3	—19.4	77	S	1	0.4		0	2ks		Calm	0	0	Clear	J. McWilliams.
Fredericton, N. B	29.89	759.2	29.96	761.0	5.9	—14.5	81	NW	4	1.8		0	0			Inap.	Inap.	Clear	Prof. Harrison.
Fort Garry, Manitoba*	29.26	743.2	30.28	769.1	—37	—38.3	100	W	5	2.2		0	0			0	0	Clear	James Stewart.
Granton, Ontario	28.52	724.4	29.65	753.1	30.0	— 1.1	100	S			2		10n			0	0	Cloudy	James Grant.
Halifax, N. S.*	29.71	754.6	29.85	758.2	18	— 7.8	94	NW	9	4.0		0	0			0.160	4.1	Clear	A. Allison.
Hamilton, Ontario	29.21	741.9	29.61	752.1	34.4	1.3	87	SW			1	10ck	0	SW		0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.30	744.2	29.65	753.1	27	— 2.8	79	S	10	4.5			10ks		Calm	0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	29.59	751.6	29.63	752.6	24.5	— 4.2	93	N	3	1.3		7k	0	N		0.060	15.2	Fair	C. H. Rigby.
Montreal, Quebec*	29.58	751.3	29.80	756.9	6	—14.4	93	S	16	7.2			8s;hz		W	0	0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A.
Parry Sound, Ontario*	28.80	731.5	29.51	749.5	27	— 2.8	94	S	12	5.4			10n		S	0.03	0.8	Light snow	Rev. R. Moseley.
Peterboro, Ontario	28.82	732.0	29.59	751.6	30.7	— 0.7	84	SW			1	0	9n			0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	28.95	735.3	29.67	753.6	30	— 1.1	89	SW	10	4.5			10n			0	0	Threatening	H. Morgan.
Port Stanley, Ontario	29.01	736.8	29.68	753.9	31	— 0.6	88	SW	8	3.6			10n		W	0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.54	750.3	29.90	759.4	0	—17.8	85	W			1	0	5ks		NW	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.07	738.4	29.56	750.8	18	— 7.8	84	SE	8	3.6			10n			0	0	Threatening	W. H. McIntyre.
St. Andrews	29.90	759.4	29.96	761.0	10	—12.2	77	NW	1	0.4		0	0			0	0	Clear	
St. John's, N. B	29.75	755.6	29.92	760.0	12.0	—11.1	90	N	2	0.9		0	0			Inap.	Inap.	Clear	G. Murdock, C. E.
Saugeen, Ontario*	28.78	731.0	29.50	749.3	33	0.6	89	SW	17	7.6			10s			0	0	Light snow	K. Stewart.
Stratford, Ontario	28.26	717.8	29.58	751.3	30.0	— 1.1	89	SW	15	6.7			10s			0	0	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.57	751.1	29.61	752.1	25	— 3.9	98	N	11	4.9			10n			0.89	22.6	Light snow	T. C. Hill, C. E.
Toronto, Ontario*	29.24	742.7	29.63	752,6	33	0.6	89	S	18	8.0		5cs	5s			0	0	Cloudy	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario	28.52	724.4	29.61	752.1	32.8	0.4	97	S	27	12.1			10s			0	0	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*	29.90	759.4	29.96	761.0	24	— 4.4	75	NW	5	2.2		0	0			0.01	0.3	Clear	Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. John's, Newfoundland	29.45	748.0	29.62	752.3	35	1.7	100	S				Fog	Fog			0.14	3.6	Foggy	John Delany.
St. Pierre, N. F			29.35	745.5	34.9	1.6		SE			1					0.24	6.1		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			The Staff, for D. Gill.
Cape Town, C. G. H. Obs'y	29.74	755.4	29.77	756.1	89.2	31.8	46	SSE	8.1	3.6		4	6k;ks			0	0		
Cape St. Francis Lt. House	29.80	756.9			71.0	21.7	94	E	16.4	7.3			10n			0	0	Drizzling	John Duthie.

CHINESE SERIES.

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

SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	30.41	772.3	30.43	772.9	31.5	— 0.2	70	SE	3.1	1.4			3ck	W		0	0	Fair	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.21	665.7	29.93	760.2	65.3	18.5	90	NE			1	10d		NE		0	0	Cloudy	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.65	753.0	29.69	754.2	23.9	— 4.5	79	SE	29	13			9						
Faröe	29.61	752.2	29.63	752.7	24.3	— 4.3	79	E			4		1						
Godthaab, Greenland	30.25	768.3	30.29	769.4	29.8	— 1.2	88	ENE			2		2						
Stykkisholm, Iceland	30.29	769.4	30.34	770.5	10.8	—11.8	93	E			6		0						
Thorshavn	29.72	754.8	29.75	755.7	27.7	— 2.4	85	N	18	8			7					Snowing	
Vestervig	29.63	752.5	29.72	754.9	21.9	— 5.6	98	NE			4		6						
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	28.93	734.9	29.60	751.7	37.4	3	89	NNW			1	c	s;nk		E	0.425	10.8		M. Labroue, Director.
Alençon	29.09	738.9	29.64	752.9	29.8	—1.2	92	NW			1		5k		SE	0.008	0.2	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.25	742.9	29.52	749.8	26.2	—3.2	96	WNW					ks						M. Klein, Commandant.
Avignon, Normal School	29.40	746.8	29.48	748.8	38.8	3.8	83	N			1		10			0.047	1.2	Covered	M. Giraud, Director.
Bar-sur-Seine‖	29.02	737.2	29.60	751.8	29.8	—1.2	85	S			1		8kn		WSW	0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.30	744.1	29.57	751.1	28.9	—1.7	94	W			1		0			0.059	1.5	Clear	M. Frère Eugene Marie.
Besançon, Normal School	28.69	728.8	29.62	752.3	30.4	—0.9	100	NNE			2		5n		W	0	0	Cloudy	M. Gobin, Director.
Bordeaux, Observatory	29.34	745.3	29.61	752.1	37.8	3.2	83	N			1		10			0.142	3.6	Covered	M. Rayet, Director.
Bourges, Normal School	29.04	737.7	29.61	752.0	38.5	3.6	93	N			1		5kn		NE	0	0	Cloudy	M. Postel, Director.
Brest, Naval Observatory	29.48	748.7	29.72	754.9	39.2	4.0	57	NE			1		1		NE	0.039	1.00		M. de Rermaree, Dir.
Caen, Normal School	29.43	747.6	29.52	749.9	35.8	2.1	96	W			1		1		W	0.008	0.2	Clear	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.23	742.4	29.56	750.9	28.8	—1.8	SSW				2		5			0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.00	736.6	29.54	750.3	27.0	—2.8	92	SW			1		10		SW	0.16	4.	Covered	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.17	715.6	29.57	751.1	32.0	0.0	81	NW			1		10		W	0.024	0.6	Foggy	M. Alluard, Director.
Cluny, Normal School	28.69	728.6	29.56	750.7	32.7	0.4		NE			1		10			0	0	Covered	M. de Villemontée, Dir.
Commercy, Normal School	28.68	728.4	29.58	751.2	29.3	—1.5	79	W			1		kn	W	W	0	0		Dr. Coulet, Director.
Gap, Normal School	26.92	683.7	29.47	748.4	39.2	4	97	SE			1		n		N	0.224	5.7		M. Jeangirard, Director.
Gréasque, du. Rhone	28.32	719.3	29.46	748.3	43.5	6.4	97	N			1		10		NW	0.098	2.5		M. Kina, Director.
Grenoble, Normal School	28.76	730.5	29.55	750.6	34.0	1.1	96	N			1		10n			0.04	1.	Snowing	M. Ablard, Director.
Guéret, Normal School	27.97	710.3	29.59	751.6	33.8	1	76	E			1		5		W	0	0	Cloudy	M. Rivoir, Director.
Lamballe, Normal School	29.33	744.9	29.61	752.1	36.5	2.5	85	NNE			1		5		NNE			Snowing	M. Ollitrault, Director.
Lescar, Normal School	29.02	737.2	29.71	754.5	40.3	4.6	84	N					10			0.094	2.40	Covered	M. Chauvin, Director.
Lorient, Naval Observatory	29.60	751.9	29.71	754.5	38.1	3.4	47	N			1		0			0	0	Clear	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.51	724.1	29.56	750.9	32.0	0.0	98	N			1		Mist			0	0	Misty	M. André, Director.
Mans, Normal School	29.30	744.2	29.62	752.3	29.8	—1.2	96	SW			1		8		W	0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.14	740.0	29.41	746.9	47.5	8.6	89	NNW			0-1		10			0.146	3.70	Raining	M. Stephan, Director.
Montlouis l'Instituteur	24.33	618.0	29.57	751.0	38.8	3.8	87	W	26.2	11.7			8		S	0.067	1.7		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.35	745.4	29.46	748.2	39.2	4	98	N			2		10			0.205	5.2	Raining	M. Galzin, Director.
Nancy, Normal School	28.80	731.6	29.60	751.8	30.2	—1.0	92	NW			1	5ck		W		0	0	Cloudy	M. Hasse.
Nantes, Observatory	29.51	749.5	29.67	753.6	36.0	2.2	89	W			1		9n		W	0	0		M. Larocque, Dir.
Nice	29.30	744.2	29.34	745.1	50.0	10.0	86	W			2		10	W	W	0	0	Covered	Capt. Boissière, Director.
Perpignan, Observatory	29.37	746.0	29.48	748.7	42.3	5.7	82	NE	5.6	2.5			10		NW	0.142	3.6		Dr. Fines.
Pic-du-Midi, Plantade	22.03	559.5			31.5	—0.3							10		SW	1.902	48.3	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.52	724.3	29.61	752.1	36.7	2.6	86	Calm			0		10	SE				Snowing	M. Taillen.
Puy de Dôme O. s'y, Summit	24.58	624.3			24.4	—4.2	68	NW			2		8			0.150	3.8		M. Alluard, Director.
Rochefort, Naval Obs'y	29.59	751.6	29.62	752.4	38.3	3.5	76	E			1		10			0	0	Covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.41	747.1	29.63	752.7	36.7	2.6	58	W			1		8		WSW	0	0	Very cloudy	M. Mouillot, Director.
Rodez, Normal School	27.37	695.1	29.56	750.8	33.1	0.6	99	SE			2		10		W	0.374	9.5	Raining	M. Richard, Director.
Rouen, Normal School	29.47	748.5	29.48	748.7	32.7	0.4	92	SW			1		2		SW	0	0	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	29.47	748.5	29.63	752.5	29.8	—1.2	92	NW			1		5			0.20	5.	Snowing	M. Delaplanche, Dir.
Saint Maur, Observatory	29.41	747.0	29.58	751.2	28.2	—2.1	92	SSW			1		10		W				M. Renou, Director.
Toulouse, Observatory	28.87	733.3	29.58	751.4	37.4	3.0	100	NW			1		10			0.866	22.0	Covered	M. Baillard, Director.
Tours	29.40	746.7	29.60	751.7				N			1		8		W	0	0	¼ covered	M. de Tastes.
Versailles, Observatory	29.06	738.2	29.56	750.7	30.2	—1.0	88	W			1		10			0	0	Covered	Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.59	726.2	29.44	747.7	29.3	— 1.5	80	W			3		6k	W		0.055	1.4	Snowing	Prof. Dr. Hoh.
Berlin	29.35	745.6	29.54	750.3	19.4	— 7.0	81	NE			4		8			0.020	0.5	Snowing	Prof. Dr. Arndt.
Breslau	28.91	734.3	29.43	747.5	18.7	— 7.4	86	NW			2		10			0.144	3.65	Snow-flakes	Royal University Obs'y.
Carlsruhe	29.16	740.6	29.60	751.7	32.0	0.0	78	S			2		0			0	0		Albert Senz.
Cassel	28.83	732.2	29.42	747.3	27.3	— 2.6	87	S			4		10			0.054	1.62	Snowing	Dr. H. Möhl.
Frankfort on the Main	29.22	742.1	29.60	751.7	30.2	— 1.0	73	SSW			1		5			0.063	1.6		Physical Society.
Friedrichshafen	28.08	713.3	29.56	750.8	32.2	0.1	52	WSW			2		5	SSW		0.031	0.8		Chief Telegrapher Wilhelm.
Hamburg	29.48	748.9	29.56	750.7	18.1	— 7.7	78	E			5		6			0.122	3.1		Dr. R. Kleeman.
Kiel	29.57	751.0	29.58	751.4	22.3	— 5.4	79	E			5		0			0.008	0.20	Snowing	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.06	738.1	29.50	749.4	18.7	— 7.4	92	NE			2		9			0.126	3.2		Prof. Dr. Bruhns.
Magdeburg	29.29	742.9	29.52	749.9	19.2	— 7.1	87	NE			3		10ks			0.102	2.6	Snowing	Dr. Assmans.
Memel	29.83	757.7	29.88	758.9	2.3	—16.5	75	SSE			2		1k					Foggy	Reinbrecht & Issermann.
Munich	27.67	702.9	29.50	749.4	28.4	— 2.0	49	NW			1		4	NW		0	0		Central Station.
Neufahrwasser	29.71	754.5	29.72	754.9	16.5	— 8.6	70	ENE			4		9			0.004	0.1		A Lothes.
Neustadt, Palatinate	28.91	734.2	29.42	747.3	31.6	— 0.2		W			2		0			0	0		Dicknether.
Stuttgart	28.61	725.8	29.54	750.4	28.4	— 2.0	64	N			1		5	W		0.028	0.7		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.00	711.2	29.50	749.4	28.4	— 2.0	75	Calm			0		1	W		0.028	0.7		Prof. Kemlein.
Wustrow	29.62	752.3	29.64	752.9	21.9	— 5.6	100	E			5		5s			0	0		Prof. S. Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.34	745.1	29.73	755.1	57.7	14.3		S			1.0		0					Clear	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.96	761.0	30.01	762.3	75.3	24.1	44	SW	5.0	2.2			0			0	0	Blue sky	
Deesa	29.45	747.9	29.92	760.0	79.7	26.5	31	Calm	6.7	3.0			0			0	0	Blue sky	
Bombay	29.84	757.9	29.88	758.8	82.2	27.9	62	WNW	7.0	3.1			0			0	0	Blue sky	
Poona, Yarrowda	28.04	712.1	29.88	758.9	83.1	28.4	20	SE	6.0	2.7			2		ESE	0	0	D. clouds	
Belgaum	27 33	694.2	29.86	758.3	79.0	26.1	29	E	5.0	2.2			0			0	0	Blue sky	
Lahore	29.27	743.5	30.05	763.2	60.6	15.9	40	Calm	1.0	0.4			4			0	0	Gloomy	
Roorkee	29.13	739.8	30.07	763.7	61.4	16.3	53	Calm	1.6	0.7			3			0	0		
Agra	29.48	748.9	30.08	763.9	64.4	18.0	44	SW	1.5	0.7			0			0	0		
Nagpur	28.91	734.3	29.96	761.0	78.2	25.7	43	Calm	3.1	1.4			1			0	0	Blue sky	
Jubbulpore	28.64	727.5	30.05	763.3	66.7	19.3	43	Calm	1.3	0.6			0			0	0	Blue sky	
Lucknow	29.68	753.8	30.07	763.8	65.8	18.8	36	Calm	0.4	0.2			0			0	0	Blue sky	
Allahabad	29.74	755.5	30.07	763.8	60.0	15.6	64	Calm	0.7	0.3			0			0	0	Blue sky	
Patna	29.83	757.6	30.02	762.4	62.1	16.7	47	W	0.8	0.4			2	W	W	0	0		
Hazaribagh	27.99	710.9	30.09	764.2	59.8	15.4	37	NNW	4.4	2.0			0			0	0.	Blue sky	
Cuttack	29.93	760.3	30.02	762.4	77.0	25.0	58	E	1.0	0.4			3			0	0	D. clouds	
Calcutta, Alipore	30.01	762.2	30.03	762.8	67.2	19.6	66	Calm	0	0			0			0	0	Blue sky	
Goalpara	29.63	752.6	30.05	763.3	66.3	19.1	64	ENE	1.6	0.7			0			0	0	Blue sky	
Chittagong	29.93	760.1	30.02	762.5	68.8	20.4	51	NNE	2.3	1.0			1			0	0	Blue sky	
Silsagar	29.73	755.1	30.08	764.1	59.9	15.5	82	NE	1.3	0.6			0			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.01	736.9	29.44	747.7	39.2	4.0	72	Calm	0	0			10			0	0		Prof. Giovanni Clodig.
Milan	28.87	733.2	29.41	747.0	35.4	1.9	79	SW	2.5	1.1			8	SW		0	0		Prof. Schiaparelli.
Padua	29.31	744.5	29.42	747.3	37.2	2.9	78	NNW	3.1	1.4			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.48	723.3	29.42	747.3	36.7	2.6	68	E	1.3	0.6			4	E		0	0		Prof. P. F. Denza.
Genoa	29.18	741.2	29.38	746.2	42.8	6.0	70	NE	4.3	1.9			10	SE		0	0		Prof. G. M. Garibaldi.
Mondovi	27.54	699.6	29.54	750.4	34.2	1.2	70	W			2		1	W		0	0		Prof. D. C. Bruno.
Pesaro	29.38	746.3	29.43	747.6	37.0	2.8	80	NW	13.6	6.1			10			0.020	0.5		Prof. Luigi Guidi.
Florence	29.10	739.2	29.37	745.9	48.4	9.1	97	E			2		10			0.598	15.2		Cav. F. Meucci.
Leghorn	29.27	743.5	29.36	745.7	50.7	10.4	92	WSW	1.3	0.6			10	NE		0.630	16.0		Prof. P. Monte.
Rome	29.22	742 2	29.40	746.7	53.1	11.7	94	S	3.8	1.7			10			0.571	14.5		Prof. P. S. Ferrari.
Lecce	29.28	743.8	29.54	750.3	57.2	14.0	94	SSE	9.4	4.2			10	S		0.173	4.4		Prof. C. de Giorgi.
Cosenza	28.70	729.0	29.60	751.7	58.3	14.6	70	SW	6.3	2.8			10	W		0.445	11.3		Prof. D. Conti.
Cagliari	29.33	745.0	29.52	749.9	68.4	20.2	58	WNW			2		8	W		0	0		Prof. A. Pacinotti.
Palermo	29.34	745.3	29.59	751.6	70.3	21.3	52	W	27.3	12.2			9			0	0		Prof. G. Ciacciatore.
Syracuse	29.60	751.8	29.64	752.9	67.3	19.6	57	WSW	15.0	6.7			10	WNW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R.	28.95	735.4	29.47	748.5	56.5	13.6	97	SSW	0	0			10k	WSW		0.228	5.8		Prof. F. Brioschi.
Stelvio	21.85	555.2			15.1	— 9.4	75	E					8			0	0		P. F. Denza.
Valdobbia	21.48	545.5			20.5	— 6.4	92	NE					10			0	0		
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y†	30.31	769.9	30.33	770.4	32.2	0.1	69	NNE	1.7	0.8			5ck			0	0	Fair	K. Sasaki.
Kioto	30.07	763.8	30.26	768.6	32.8	0.4	88						10s;ck		NW	0	0	Cloudy	
Nagasaki, I. M. Obs'y	30.15	765.8	30.36	771.1	37.0	2.8	83	Calm	0	0		9ck				0.010	0.25	Cloudy	S. Takehayashi.
Tokei Obs'y, Yeddo	30.03	762.7	30.11	764.8	35.0	1.7	58	NNW	7.3	3.3		ck	8ks;s		SW	0	0	Cloudy	The Staff.
Wakayama	30.21	767.1	30.27	768.8	38.6	3.7	59	NW	6.5	2.9			0			0	0	Clear	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.62	752.3	29.80	757.0	78.0	25.6	76	ESE	21.5	9.6			8		ESE	0.03	0.8	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.83	757.6	30.09	764.3	63.8	17.7	.62	ENE			1	1cs	0			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.44	747.8	29.44	747.8	34.3	1.3		N			4					0.039	1.0		
Groningen	29.40	746.7	29.45	748.1	23.0	— 5.0		ENE			4					0.173	4.4		
Helder	29.44	747.7	29.44	747.7	29.7	— 1.3		NW			5					0	0		
Hellevoetsluis	29.42	747.2	29.42	747.2	30.7	— 0.7	86	N			1					0	0		
Utrecht	29.37	745.9	29.41	747.1	27.9	— 2.3	85	NNW			2		10			0.071	1.8	Dull	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.76	756.0	29.83	757.6	16.5	— 8.6	76	Calm	0	0			6			0	0		
Christiania	29.73	755.1	29.89	759.3	— 3.5	—19.7	62	ENE	4	2			0			0	0		
Gjæsvær	29.34	745.2	29.36	745.8	10.0	—12.2		NNW			4		10						
Lodingen	29.46	748.3	29.51	749.5	16.9	— 8.4	79	N			4		8			0.067	1.7		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.03	737.3	29.19	741.3	57.9	14.4	93	E	13.6	6.1			4			0.709	18.0		Dr. J. A. Sampaio.
Campo Major	28.79	731.2	29.78	756.3	61.9	16.6	85	W	8.7	3.9			10			0.472	12.0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.65	753.2	29.74	755.4	64.9	18.3	88	SSW	9.8	4.4			10			1.658	42.1	Rain & fog..	Capt. D. A. de Cunha.
Lisbon, Observatory	29.44	747.7	29.79	756.6	61.0	16.1	92	SW	21.7	9.7			10			0.475	12.1	Raining	The Staff.
Ponta Delgada, Azores	29.07	738.4	29.14	740.2	60.1	15.6	89	SE	4.9	2.2			10			0.605	15.4	Raining	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinsk	28.94	735.1	30.12	765.1	6.8	—14.0	100	NNE	4	2			10						Capt. Lasarew.
Archangel	29.46	748.2	29.48	748.7	—19.7	—28.7	79	S	4	2			20cs						Capt. Sseliwerstow.
Astrakhan	29.94	760.4	29.85	758.3	33.1	0.6	90	ESE	7	3			10ks			Blank	Blank		Capt. Wisganow.
Barnaul	29.58	751.4	30.12	765.1	12.7	—10.7	85	Calm	0	0			10						Meteorological Obs'y.
Dorpat	29.65	753.1	29.92	759.9	5.0	—15.0	87	SW	2	1		6ck							Observatory.
Ekaterinburg	28.86	733.0	29.90	759.5	7.3	—13.7	80	SE	4	2			3s					Light clouds	Meteorological Obs'y.
Kasan	29.53	750.1	29.83	757.6	3.9	—15.6	76	W	4	2			8						Observatory.
Kertch	29.64	752.9	29.66	753.4	34.0	1.1	87	NNE	7	3			10						Lagorio.
Kieff	29.14	740.1	29.82	757.5	13.8	—10.1	87	SE	7	3		c	10cs;ks					Solar halo	Observatory.
Krotkowo, N. 63°47', E. 48°34'																			Cand. Fatjanow.
Lugan	29.60	751.9	29.82	757.4	21.9	— 5.6	75	N	2	1			1			Blank	Blank	Light clouds	Meteorological Obs'y.
Moscow	29.29	744.0	29.91	759.8	— 8.0	—22.2	77	S	4	2			0						Meteorological Obs'y.
Nertchinsk	27.80	706.0	30.37	771.3	— 4.4	—20.2	81						0						Meteorological Obs'y.
Nikolaiev	29.76	756.0	29.84	757.8	28.2	— 2.1	55	ENE	9	4			9cs						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.91	759.6	29.99	761.8	—11.2	—24.0	77	Calm	0	0		7ck							Lieut. Iwanow.
Nukuss	30.05	763.3	30.30	769.5	32.0	0.0	96	ENE	7	3			10n						Dr. Dobrochotow.
Pekin, China	30.11	764.7	30.25	768.3	29.5	— 1.4	45	Calm	0	0			0						Physical Observatory.
St. Petersburg	29.78	756.4	29.80	756.8	6.3	—14.3	83	WSW	9	4			6ks						Central Physical Obs'y.
Tashkend, Laboratory	28.52	724.4	30.11	764.9	49.6	9.8	59	Calm	0	0			5						Teich, A. M.
Tiflis	28.40	721.3	29.82	757.5	49.1	9.5	56	Calm	0	0			2ks						Physical Observatory.
Warsaw	29.05	738.1	29.51	749.6	13.5	—10.3	87	E	20	9			10n					Snowing	Astronomical Obs'y
Wilna	29.45	748.1	29.92	760.0	0.3	—17.6	77	E	2	1			7					Light clouds	Berg, Assistant.
Yeniseisk	30.24	768.1	30.58	776.8	—22.0	—30.0	76	Calm	0	0			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.78	756.4	29.8	— 1.2	62	NE			2		Sk	S		0.05	1.3	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.74	755.4	33	0.6	89	W			4	5	3	S					J. Youngclause.
North Unst, Shetland Isl'ds			29.81	757.2				SW			3	5	5	W		0	0		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.44	747.8	29.55	750.5	65.3	18.5	55	W	12.1	5.4			3k			0.015	0.38		Antonio Rave, Director.
Bilbao, Met. Obs'y	29.79	756.7	29.85	758.2	48.4	9.1	99	W	1.0	0.46			10			0.539	13.7	Raining	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.64	676.6			47.7	8.7	97	W	21.3	9.53			9			1.299	33.0	Raining	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.47	697.8	29.66	753.4	58.6	14.8	78	SW	34.2	15.3		0	7			0.394	10.0	Very cloudy	The Staff.
Murcia, Met. Obs'y. ‡	29.60	751.8	29.75	755.6	77.5	25.3	53	WNW	10.1	4.5		4	4	SE		0	0	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.71	729.2	29.01	752.1	47.7	8.7	98	SE	0.7	0.3			10			2.106	53.5	Misty	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.02	762.4	30.08	764.1	68.5	20.3	92	Calm	0	0		ck	1k;s			0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	30.01	762.3	30.06	763.6	78.4	25.8	76	NE	3.9	1.8		4ck	3k	SW	NE	0.05	1.6	Very cloudy	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.88	758.9	29.98	751.4	61.5	16.4	89	S	13.1	5.9			10		SW	0.014	0.4		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.00	762.0	30.09	764.3	84.2	29.0	62	SE	0	0		3cs	4k	SE	SE	0.039	1.00	D. clouds	Enrique Gaden, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.54	750.2	29.58	751.2	— 9.8	—23.2	100	Calm			0		0			0	0		
Umea	29.56	750.8	29.61	752.1	11.8	—11.2	93	NW			2		10			0	0		
Hernosand	29.61	752.1	29.66	753.4	2.7	—16.3	85	NE			2		10			0	0		
Stockholm	29.65	753.1	29.83	757.6	2.1	—16.6	90	W			2		1			0	0		
Wisby	29.76	756.0	29.82	757.5	18.0	— 7.8	89	SE			2		0			0	0		
Sub-Series.																			
Upsala	29.73	755.1	29.82	757.3	— 2.4	—19.1	94	SW	0	0			2	ENE		0	0	Foggy	Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.09	713.4	29.57	751.1	35.6	2.0	67	SW			1		10			0	0	Covered	The Observatory.
Zurich	27.89	708.3	29.61	752.1	29.5	— 1.4	70	W			2		6			0.016	0.4	Cloudy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —14.3 mm.; Ther. +2°.6 cent.; Hum. —12 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.73	755.2	46.2	7.9	80	NE	7	3.0			10		N	0	0		The Observatory.
Valona			29.58	751.3	57.4	14.1		SW			2		10			0	0	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.71	754.5	63.0	17.2	52	SW			3		8n		SW	0.425	10.80		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum't'al error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.90	759.4	29.99	761.7	20	— 6.7	70	S	4	1.8		0	8ks		Calm	0	0	Fair	
Alpena, Michigan	28.83	732.3	29.48	748.8	25	— 3.9	87	NW	7	3.1			10s		Calm	0	0	Threatening	
Atlanta, Georgia	28.91	734.3	30.10	764.5	34	1.1	79	SE	6	2.7		0	Sm'e		Calm	0	0.	Clear.	
Atlantic City, New Jersey	30.08	764.0	30.10	764.5	35	1.7	80	S	17	7.6		5k	0	N		0	0	Fair	
Augusta, Georgia	30.01	762.2	30.22	767.6	33	0.6	79	Calm	0	0		0	Sm'e		Calm	0	0	Clear	
Baltimore, Maryland	29.98	761.5	30.03	762.7	25	— 3.9	75	SW	1	0.4			Fog		Calm	0	0	Dense fog	
Barnegat, New Jersey	30.05	763.3	30.08	764.0	32	0.0	89	S	16	7.2		5ck	Haze	NW	Calm	0	0	Fair	
Benton, Montana	27.21	641.1			—10	—23.3	76	Calm	0	0		10k	0	Calm		0.30	7.6	Cloudy	
Bismarck, Dakota	28.30	718.8	30.15	765.8	—31	—35.0		Calm	0	0		0	0			0.15	3.8	Clear	
Boise City, Idaho	27.21	691.1	30.17	766.3	27	— 2.8	85	NW	8	3.6		0	5s		W	0.20	5.1	Fair	
Boston, Massachusetts	29.86	758.4	30.03	762.7	23	— 5.0	47	SW	7	3.1		2cs	0	W		0	0	Fair	
Brackettville, Texas	28.64	727.4	29.71	754.6	42	5.6	83	E	6	2.7		0	0			0	0	Clear	
Brownsville, Texas	29.88	758.9	29.93	760.2	56	13.3	94	S	8	3.6		0	0			0	0	Clear	
Buffalo, New York	28.96	735.6	29.66	753.4	35	1.7	80	SW	14	6.3			10s		SW	Inap.	Inap.	Cloudy	
Burlington, Vermont	29.64	752.8	29.95	760.7	20	— 6.7	70	S	16	7.2			10s		W	0	0	Cloudy	
Cairo, Illinois	29.35	745.5	29.74	755.4	43	6.1	75	SE	12	5.4			10s		SE	0	0	Threatening	
Campo, California	27.48	698.0	30.05	763.3	24	— 4.4	87	S	3	1.3		5c	0	Calm		0	0	Fair	
Camp Thomas, Arizona	27.25	692.1			26	— 3.3	75	Calm			0	0	8s		Calm	0	0	Cloudy	
Cape Henry, Virginia	30.15	765.8	30.17	766.3	33	0 6	70	SW	14	6.3		0	0			0	0	Clear	
Cape May, New Jersey	30.06	763.5	30.09	764.3	36	2.2	70	S	21	9.4		2c	2s	NW	Calm	0	0	Fair	
Castroville, Texas	29.03	737.3	29.75	755.6	40	4.4	100	NW	2	0.9			Fog		Calm	0	0	Dense fog	
Cedar Keys, Florida	30.16	766.1	30.18	766.6	43	6.1	83	NE	5	2.2		0	0			0	0	Clear	
Champaign, Illinois	28.73	729.7	29.53	750.0	37	2.8	80	S	14	6.3			10s		S	0	0	Cloudy	
Charleston, S. Carolina	30.14	765.5	30.20	767.1	41	5.0	91	S	2	0.9		0	0			0	0	Clear	
Charlotte, N. Carolina	29.26	743.2	30.11	764.8	32	0.0	89	S	2	0.9		0	Fog		Calm	0	0	Clear	
Chattanooga, Tennessee	29.26	743.2	30.09	764.3	37	2.8	71	S	7	3.1			10s		SW	0	0	Cloudy	
Cheyenne, Wyoming	23.66	601.0	29.60	751.8	— 3	—19.4	66	N	15	6.7			10n		Calm	0.01	0.3	Light snow	
Chicago, Illinois	28.76	730.5	29.44	747.8	37	2.8	81	S	12	5.4			10n		Calm	Inap.	Inap.	Light rain	
Chincoteague, Virginia	30.14	765.5	30.16	766.1	35	1.7	100	SW	20	8.9		1k	0	SW		0	0	Clear	
Cincinnati, Ohio	29.21	741.9	29.87	758.7	43	6.1	51	SE	10	4.5			10ks		Calm	0	0	Cloudy	
Cleveland, Ohio	28.96	735.6	29.69	754.1	38	3.3	63	S	12	5.4			10s		Calm	0	0	Cloudy	
Coleman City, Texas	27.92	709.2	29.58	751.3	45	7.2	68	SW	16	7.2		0	5s		Calm	0	0	Fair	
Columbus, Ohio	28.90	734.0	29.74	755.4	36	2.2	61	S	10	4.5			10s		Calm	0	0	Cloudy	
Concho, Texas	27.79	705.8	29.46	748.3	46	7.8	62	SW	15	6.7		2c	0	Calm		0	0	Fair	
Corsicana, Texas	29.25	742.9	29.71	754.6	54	12.2	87	S	16	7.2		0	5s		S	0	0	Fair	
Davenport, Iowa	28.99	733.8	29.55	750.6	22	— 5.6	72	NW	16	7.2			10s	Calm		0	0	Cloudy	
Dayton, Washington T'y	28.31	719.1	30.04	763.0	30	— 1.1	100	SW	4	1.8		0	0			1.17	29.7	Clear	
Deadwood, Dakota	25.17	639.3			—14	—25.6	73	W	4	1.8		5ck	0	W		0	0	Fair	
Decatur, Texas	28.41	721.6	29.55	750.6	51	10.6	59	S	19	8.5		0	2s		Calm	0.	0	Fair	
Delaware Breakwater, Del.	30.07	763.8	30.09	764.3	31	0.6	79	S	12	5.4			10ks		Calm	0	0	Cloudy	
Denison, Texas	28.76	730.5	29.54	750.3	51	10.6	86	S	12	5.4		10cs	0	Calm		0	0	Cloudy	
Denver, Colorado	24.42	620.3	29.64	752.8	20	— 6.7	85	NE	27	12.1			10s		Calm	0	0	Threatening	
Des Moines, Iowa	28.88	733.5	29.84	757.9	3	—16.1	87	N	16	7.2			10n		N	0.14	3.6	Light snow	
Detroit, Michigan	28.90	734.0	29.57	751.1	33	0.6	89	SW	13	5.8			10s		Calm	0	0	Cloudy	
Dodge City, Kansas	27.10	688.3	29.54	750.3	8	—13.3	55	N	28	12.5			10s		N	0	0	Cloudy	
Dubuque, Iowa	28.90	734.0	29.64	752.8	13	—10.6	100	NW	8	3.6			10n		Calm	0.26	6.6	Heavy snow	
Duluth, Minnesota	29.22	742.2	30.00	762.0	—16	—26.7		NW	9	4.0		0	2s		NW	0.50	12.7	Clear	
Eagle Pass, Texas	29.68	738.6	29.84	757.9	34	1.1	79	SE	1	0.4		0	0			0	0	Clear	
Eagle Rock, Texas	25.11	637.8	29.76	755.9	19	— 7.2	85	SW	14	6.3		5cs	5s	NW	W	0	0	Cloudy	
Eastport, Maine	29.89	759.2	29.96	761.0	12	—11.1	61	NW	8	3.6		0	0			0	0	Clear	
Edinburg, Texas					55	12.8	68	S			1	0	2ks		Calm	0	0	Fair	
El Paso, Texas	26.13	663.7			50	10.0		NW	8	3.6		0	2s		W	0	0	Clear	
Erie, Pennsylvania	28.96	735.6	29.68	753.9	38	3.3	81	SW	18	8.0			10s		Calm	0	0	Cloudy	
Escanaba, Michigan	28.95	735.3	29.65	753.1	6	—14.4	100	N	17	7.6			10n		Calm	0.10	2.5	Light snow	
Florence, Arizona	28.55	725.2	30.15	765.8	40	4.4	65	SW	1	0.4			10s		W	0	0	Cloudy	
Fort Apache, New Mexico	24.98	634.5	30.42	772.7	24	— 4.4	74	SE	1	0.4			10s		Calm	0	0	Cloudy	
Fort Assinniboine, Montana	27.10	688.3			—11	—23.9	52	NW	20	8.9		0	0			0.85	21.6	Clear	
Fort Bennett, Dakota	28.50	723.9			—20	—28.9	64	NW	16	7.2		0	0			0.15	3.8	Clear	
Fort Buford, Dakota	28.14	723.9	30.41	772.4	—41	—40.6	100	Calm	0	0		2c	0	W		0.03	0.8	Clear	
Fort Custer, Montana	26.82	681.2			—14	—25.6	73	SE	2	0.9			10s		Calm	0.93	23.6	Cloudy	
Fort Davis, Texas	25.02	635.5	29.98	761.5	35	1.7	80	W	18	8.0		0	0			0	0	Clear	
Fort Elliott, Texas	26.80	680.7	29.03	737.3	42	5.6	83	W	8	3.6			10s		W	0	0	Cloudy	
Fort Gibson, Indian T'y	28.95	735.3	29.47	748.5	49	9.4	78	S	10	4.5			10s	Calm		0	0	Cloudy	
Fort Grant, Arizona	25.15	638.8	29.95	760.7	39	3.9	31	E	4	1.8		8k	0	Calm		0	0	Cloudy	
Fort Griffin, Texas	28.32	719.3	29.56	750.8	51	10.6	40	S	12	5.4		0	5s		Calm	0	0	Fair	
Fort Keogh, Montana	27.59	700.8			—13	—25.0		Calm	0	0			10s		Calm	1.34	34.0	Cloudy	
Fort Macon, North Carolina	30.10	764.5	30.20	767.1	39	3.9	91	SE	2	0.9		0	0			0	0	Clear	
Fort Missoula, Montana	26.60	675.6			6	—14.4	100	NW	1	0.4		0	0			0.49	12.4	Clear	
Fort McKavett, Texas	27.51	698.7	29.40	746.7	49	9.4	78	SW	12	5.4		3cs	0	Calm		0	0	Fair	
Fort Shaw, Montana	26.30	668.0			—25	—31.7	100	W	22	9.8		5k	0	Calm		0.81	20.6	Fair	
Fort Sill, Indian Territory	28.28	718.3	29.29	744.0	36	2.2	80	S	6	2.7			10s		Calm	0	0	Cloudy	
Fort Stevenson, Dakota	28.26	717.8			—30	—34.4	100	N	6	2.7		0	0			0.02	0.5	Clear	
Fort Verde, Arizona					26	— 3.3	75	W			1		10s		W	0	0	Cloudy	
Fredericksburg, Texas	28.04	712.2	29.64	752.8	50	10.0	86	W	8	3.6		1cs	0	Calm		0	0	Clear	
Galveston, Texas	29.86	758.4	29.90	759.4	56	13.3	94	S	11	4.9		0	2s		Calm	0	0	Clear	
Grand Haven, Michigan	28.79	731.3	29.43	747.5	37	2.8	81	SW	20	8.9			10n		Calm	0.01	0.3	Light snow	
Hatteras, North Carolina	30.18	766.6	30.20	767.1	37	2.8	81	SE	2	0.9		0	0			0	0	Clear	
Helena, Montana	25.67	652.0			—13	—25.0	100	S	1	0.4		5cs	0	S		1.10	27.9	Fair	
Henrietta, Texas	28.54	724.9	29.45	748.0	47	8.3	70	SW	13	5.8		0	8s		S	0	0	Cloudy	
Indianapolis, Indiana	28.84	732.5	29.61	752.1	40	4.4	65	S	11	4.9			9ks		S	0	0	Cloudy	
Indianola, Texas	29.89	759.2	29.91	759.7	57	13.9	94	S	23	10.3		0	0			0	0	Clear	
Jacksboro, Texas	28.39	721.1	29.48	748.8	53	11.7	49	SW	18	8.0			10s		Calm	0	0	Cloudy	
Jacksonville, Florida	30.15	765.8	30.20	767.1	40	4.4	82	NE	2	0.9		2cs	0	Calm		0	0	Clear	
Keokuk, Iowa	28.87	733.3	29.53	750.0	25	— 3.9	75	N	10	4.5			10s		Calm	0	0	Cloudy	
Key West, Florida	30.10	764.5	30.13	765.3	67	19.4	84	E	12	5.4			10s		E	0	0	Cloudy	
Kittyhawk, North Carolina	30.19	766.8	30.21	767.3	34	1.1	79	SW	9	4.0		0	0			0	0	Clear	
Knoxville, Tennessee	29.03	737.3	30.08	764.0	30	— 1.1	89	SE	1	0.4		0	2s sm'e		Calm			Fair	
La Crosse, Wisconsin	28.91	734.3	29.71	754.6	5	—15.0	100	N	16	7.2			10n		Calm	0.26	6.6	Heavy snow	
La Mesilla, New Mexico	26.01	660.6	30.16	766.1	35	1.7	45	SE	2	0.9		5c	1s	Calm	Calm	0	0	Fair	
Laredo, Texas	29.43	747.5	29.78	756.4	48	8.9	93	S	1	0.4		0	0			0	0	Clear	
Leavenworth, Kansas	28.86	733.0	29.77	756.1	10	—12.2	79	N	20	8.9			10s			0	0	Cloudy	
Lewiston, Idaho	29.30	744.2	29.97	761.2	34	1.1	61	S	3	1.3		5k	0	SW		0.54	13.7	Fair	
Little Rock, Arkansas	29.36	745.7	29.67	753.6	52	11.1	87	S	8	3.6			10s		Calm	0	0	Cloudy	
Los Angeles, California	29.76	755.9	30.11	764.8	41	5.0	82	NE	3	1.3		4c	0	Calm		0	0	Fair	
Louisville, Kentucky	29.17	740.9	29.73	755.1	44	6.7	60	S	16	7.2			10s		Calm	0	0	Cloudy	
Lynchburg, Virginia	29.36	745.7	30.08	764.0	27	— 2.8	88	Calm	0	0		2cs	Fog	Calm	Calm	0	0	Fair	
Madison, Wisconsin	28.47	723.1	29.50	749.3	16	— 8.9	83	N	18	8.0			10n		Calm	0.23	5.8	Light snow	
Marquette, Michigan	28.94	735.1	29.71	754.6	0	—17.8	85	NW	20	8.9			10s		NW	0.18	4.6	Cloudy	
Mason, Texas	28.07	713.0	29.80	756.9	52	11.1	79	W	10	4.5		0	2s		Calm	0	0	Fair	
Memphis, Tennessee	29.47	748.5	29.81	757.2	47	8.3	70	SE	6	2.7			10s		Calm	0	0	Cloudy	
Milwaukee, Wisconsin	28.73	729.7	29.46	748.3	28	— 2.2	88	NW	12	5.4			10n		Calm	0.30	7.6	Heavy snow	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.99	761.7	30.07	763.8	41	5.0	91	S	3	1.3	.....	2k	o	S	.....	o	o	Clear.	
Montgomery, Alabama	29.90	759.4	30.15	765.8	34	1.1	90	SE	1	0.4	.....	.....	Fog	.....	Calm	o	o	Dense fog	
Morgantown, W. Virginia	28.87	733.3	29.86	758.4	45	7.2	39	SW	8	3.6	.....	.....	10s	.....	Calm	o	o	Cloudy	
Moorhead, Minnesota	29.11	739.4	30.26	768.6	—30	—34.4	38	NW	6	2.7	.....	o	o	.....	.....	0.14	3.6	Clear	
Mt. Washington, N. H.	23.42	594.9	29.78	756.4	17	— 8.3	67	NW	58	25.9	.....	8k	o	NW	.....	o	o	Fair	
Nashville, Tennessee	29.34	745.2	29.89	759.2	42	5.6	74	S	13	5.8	.....	o	8ks	.....	SW	o	o	Fair	
New Haven, Connecticut	29.92	760.0	30.05	763.3	20	— 6.7	70	W	2	0.9	.....	5c	2s;sm	W	W	o	o	Cloudy	
New London, Connecticut	29.99	761.7	30.05	763.3	23	— 5.0	60	Calm	o	o	.....	o	o	.....	.....	o	o	Clear	
New Orleans, Louisiana	29.96	761.0	30.02	762.5	49	9.4	85	S	7	3.1	.....	o	Sm'o	.....	S	o	o	Clear	
Newport, Rhode Island	29.99	761.7	30.04	763.0	27	— 2.8	88	SW	4	1.8	.....	1c	Haze	Calm	.....	o	o	Fair	
New River, N. Carolina	.....	.....	.....	.....	39	3.9	83	W	.....	.....	2	o	Haze	.....	Calm	.....	.....	Hazy	
New Shoreham, Rhode I'd	30.02	762.5	30.05	763.3	39	3.9	64	N	18	8.0	.....	o	o	.....	.....	o	o	Clear	
New York, New York	29.86	758.4	30.05	763.3	23	— 5.0	86	SW	2	0.9	.....	5cs	Fog	W	Calm	o	o	Fair	
Norfolk, Virginia	30.12	765.0	30.18	766.6	34	1.1	79	SW	10	4.5	.....	o	o	.....	.....	o	o	Clear	
North Platte, Nebraska	26.95	684.5	29.81	757.2	— 5	—20.6	63	N	26	11.6	.....	.....	10s	.....	Calm	o	o	Cloudy	
Olympia, Washington T'y	30.03	762.7	30.07	763.8	33	0.6	94	S	3	1.3	.....	1k	o	Calm	.....	0.32	8.1	Clear	
Omaha, Nebraska	28.71	729.2	29.94	760.5	— 6	—21.1	80	N	28	12.5	.....	.....	10n	.....	Calm	0.02	0.5	Light snow	
Oswego, New York	29.39	746.5	29.72	754.9	27	— 2.8	71	S	12	5.4	.....	.....	10s	.....	Calm	0.06	1.5	Cloudy	
Pensacola, Florida	30.09	764.3	30.13	765.3	41	5.0	91	NE	4	1.8	.....	4k	Fog	SW	Calm	o	o	Light fog	
Philadelphia, Pa	30.00	762.0	30.05	763.3	27	— 2.8	76	S	4	1.8	.....	5ck	Fog	W	Calm	o	o	Fair	
Phœnix, Arizona	28.89	733.8	30.80	782.3	32	0.0	69	E	4	1.8	.....	.....	10s	.....	Calm	o	o	Cloudy	
Pike's Peak, Colorado	17.30	439.4	29.51	749.5	8	—13.3	78	S	8	3.6	.....	.....	Fog	.....	S	0.08	2.0	Dense fog	
Pilot Point, Texas	28.80	731.5	29.64	752.8	51	10.6	79	S	22	9.8	.....	o	5s	.....	S	o	o	Fair	
Ploche, Nevada	23.91	607.3	29.68	753.9	34	1.1	43	S	11	4.9	.....	5k	o	NW	.....	o	o	Fair	
Pittsburg, Pennsylvania	28.99	736.3	29.80	756.9	43	6.1	43	S	2	0.9	.....	Haze	Fog	Calm	Calm	o	o	Clear	
Port Huron, Michigan	28.87	733.3	29.54	750.3	33	0.6	79	S	18	8.0	.....	10cs	o	Calm	.....	o	o	Cloudy	
Portland, Maine	29.92	760.0	29.97	761.2	17	— 8.3	67	W	1	0.4	.....	o	2s	.....	Calm	o	o	Clear	
Portland, Oregon	30.04	763.0	30.12	765.0	38	3.3	95	S	1	0.4	.....	.....	Fog	.....	Calm	1.16	29.5	Dense fog	
Portsmouth, N. Carolina	.....	.....	.....	.....	45	7.2	92	S	3	1.3	.....	2k	o	W	.....	o	o	Fair	
Prescott, Arizona	24.72	627.9	30.08	764.0	31	— 0.6	58	S	2	0.9	.....	.....	10s	.....	SW	o	o	Cloudy	
Punta Rassa, Florida	30.12	765.0	30.14	765.5	52	11.1	86	NE	14	6.3	.....	1ck	o	Calm	.....	o	o	Clear	
Red Bluff, California	29.67	753.6	30.02	762.5	52.0	11.1	93	S	12	5.4	.....	.....	10n	.....	Calm	0.67	17.0	Light rain	
Rio Grande City, Texas	29.75	755.6	29.97	761.2	46	7.8	84	SE	8	3.6	.....	o	o	.....	.....	o	o	Clear	
Rochester, New York	29.05	737.9	29.67	753.6	36	2.2	80	SW	4	1.8	.....	5cs	1s;hz	W	Calm	0.10	2.5	Cloudy	
Roseburg, Oregon	29.48	748.8	30.06	763.5	42	5.6	91	Calm	o	o	.....	.....	10s	.....	Calm	1.34	34.0	Cloudy	
Sacramento, California	30.02	762.5	30.10	764.5	51	10.6	93	SE	12	5.4	.....	.....	10n	.....	Calm	0.08	2.0	Light rain	
St. Louis, Missouri	28.97	735.8	29.54	750.3	41	5.0	73	S	14	6.3	.....	10cs	o	Calm	.....	o	o	Cloudy	
St. Paul, Minnesota	28.97	735.8	29.89	759.2	— 4	—20.0	82	NW	18	8.0	.....	.....	10s	.....	NW	0.56	14.2	Cloudy	
Salt Lake City, Utah	25.40	645.2	29.73	755.1	44	6.7	76	NW	16	7.2	.....	.....	10n	.....	Calm	0.26	6.6	Light rain	
San Antonio, Texas	29.14	740.1	29.86	758.4	42	5.6	100	NE	1	0.4	.....	.....	Fog	.....	Calm	o	o	Dense fog	
San Diego, California	30.06	763.5	30.14	765.5	40	4.4	91	Calm	o	o	.....	5c	o	Calm	.....	o	o	Fair	
Sandusky, Ohio	28.95	735.3	29.62	752.3	37	2.8	81	S	18	8.0	.....	.....	10s	.....	Calm	o	o	Cloudy	
Sandy Hook, New Jersey	29.99	761.7	30.03	762.7	28	— 2.2	66	SW	9	4.0	.....	o	o	.....	.....	o	o	Clear	
San Francisco, California	30.05	763.3	30.11	764.8	57	13.9	94	SW	12	5.4	.....	.....	10n	.....	SW	0.49	12.4	Light rain	
Santa Fé, New Mexico	23.06	585.7	29.60	751.8	31	— 0.6	57	E	4	1.8	.....	o	o	.....	.....	o	o	Clear	
Savannah, Georgia	30.11	764.8	30.21	767.3	40	4.4	82	S	2	0.9	.....	o	Fog	.....	Calm	o	o	Clear	
Shreveport, Louisiana	29.49	749.0	29.73	755.1	57	13.9	87	SW	8	3.6	.....	o	5s	.....	Calm	o	o	Fair	
Silver City, New Mexico	21.20	614.7	30.44	773.2	39	3.9	38	W	6	2.7	.....	5c	o	Calm	.....	o	o	Fair	
Smithville, North Carolina	30.20	767.1	30.23	767.8	44	6.7	68	SE	3	1.3	.....	o	o	.....	.....	o	o	Clear	
Socorro, New Mexico	25.39	644.9	29.46	748.3	12	—11.1	61	NW	6	2.7	.....	o	o	.....	.....	o	o	Clear	
Springfield, Illinois	28.85	732.8	29.52	749.8	38	3.3	81	S	17	7.6	.....	.....	10s	.....	.....	o	o	Cloudy	
Springfield, Massachusetts	29.91	759.7	30.05	763.3	15	— 9.4	65	E	2	0.9	.....	.....	10s	.....	Calm	o	o	Cloudy	
Stockton, Texas	26.72	678.7	29.72	754.9	57	13.9	52	S	24	10.7	.....	o	5s	.....	S.	o	o	Fair	
St. Vincent, Minnesota	29.25	743.2	30.22	767.0	—34	—36.7	100	W	6	2.7	.....	o	o	.....	.....	Inap.	Inap.	Clear	
Thatcher's Island, Mass	29.97	761.2	30.03	762.7	27	— 2.8	88	W	18	8.0	.....	2cs	5s	NW	W	o	o	Fair	
Toledo, Ohio	28.91	734.3	29.60	751.8	35	1.7	80	S	18	8.0	.....	.....	10s	.....	Calm	o	o	Cloudy	
Tucson, Arizona	27.59	700.8	30.14	765.5	37	2.8	38	S	2	0.9	.....	.....	10s	.....	SW	o	o	Cloudy	
Umatilla, Oregon	29.77	756.1	30.30	769.6	25	— 3.9	87	SE	8	3.6	.....	o	o	.....	.....	0.54	13.7	Clear	
Uvalde, Texas	28.80	731.5	29.68	753.9	40	4.4	83	S	4	1.8	.....	o	o	.....	.....	o	o	Clear	
Vicksburg, Mississippi	29.66	753.4	29.92	760.0	52	11.1	80	S	14	6.3	.....	.....	10s	.....	SW	o	o	Cloudy	
Visalia, California	29.80	756.9	30.18	766.6	41	5.0	87	SE	3	1.3	.....	8ck	o	Calm	.....	o	o	Fair	
Washington, D. C.	29.90	759.4	30.02	762.5	29	— 1.7	78	S	7	3.1	.....	5c	o	W	.....	o	o	Fair	
Wickenburg, Arizona	.....	.....	.....	.....	39	3.9	38	NW	.....	.....	1	.....	10s	.....	Calm	o	o	Cloudy	
Wilmington, N. Carolina	30.15	765.8	30.21	767.3	37	2.8	81	Calm	o	o	.....	o	o	.....	.....	o	o	Clear	
Winnemucca, Nevada	25.53	648.4	29.89	759.2	43	6.1	75	SW	10	4.5	.....	.....	10ks	.....	SW	o	o	Cloudy	
Wood's Holl, Mass	30.00	762.0	30.04	763.0	31	— 0.6	79	SW	12	5.4	.....	o	o	.....	.....	o	o	Clear	
Yankton, Dakota	28.68	728.5	30.15	765.8	—10	—23.3	54	N	28	12.5	.....	.....	10s	.....	N	0.01	0.3	Cloudy	
Yuma, Arizona	29.86	758.4	30.02	762.5	41	5.0	49	NE	4	1.8	.....	2c	o	Calm	.....	o	o	Fair	
Sup-Series.																			
Bogota, U. S. Columbia	21.99	558.5	.....	.....	48.5	9.2	69	Calm	o	o	.....	2c;cs	1s	.....	.....	o	o	Fair	Thomas Herran.
Havana, Cuba, W. I.	30.05	763.3	30.10	764.5	71	21.7	85	Calm	o	o	.....	o	o	.....	.....	o	o	Fair	Charles Hasselbrink.
Jakobshavn, Greenland	30.21	767.3	30.27	768.8	18.9	— 7.3	.....	Calm	.....	.....	o	.....	10	.....	.....	0.043	1.1	.....	
Kingston, Jamaica, W. I.	30.05	763.3	30.06	763.5	66.0	18.9	74	N	1	0.4	.....	o	o	.....	.....	o	o	Fine	Maxwell Hall.
Navassa, W. I.	29.98	761.5	30.06	763.5	74.5	23.6	72	NE	9	4.0	.....	o	o	.....	.....	o	o	Clear	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	74	23.3	95	E	.....	.....	2	.....	10n	E	.....	3.100	78.74	Raining	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.42	747.3	29.97	761.2	83	28.3	68	Calm	.....	.....	o	5c	o	N	.....	o	o	Fair	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	73	23	.....	SE	.....	.....	1	o	10ks	.....	SE	o	o	.....	Earl Flint.
Santiago de Cuba, W. I.	30.07	763.8	30.10	764.5	72	22.2	71	Calm	.....	.....	.....	Haze	o	.....	.....	o	o	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	30.29	769.3	30.35	770.9	16.2	— 8.8	.....	W	.....	.....	4	.....	3	.....	.....	0.079	2.0	.....	
York Factory, B. A.	29.75	755.6	29.80	756.9	—45.0	—42.8	.....	SW	11	4.9	.....	3k	3s	SW	SW	0.1	2.5	Cloudy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
M.H. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandre																			Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curaçoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.08	764.0	62	16.7		NW			4		10	NW						Overcast	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J.Garforth
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.91	760.5	79	26.1	78	NW			1-3		0							Squally	Capt. R. D. King.
H. M. S. Falcon,																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Ancon Bay, Peru	29.97	761.2	66.5	19.2	92	Calm			0		8							Misty	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	29.67	753.6	54	12.2	90	SE			3		10	SE				3	SE	Raining	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P.Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 25° 58′, E. 119° 29′	30.41	772.4	49.0	9.4	77	NE			2		5							Misty	Capt. R. H. Napier.
H. M. S. Malabar, Bombay, India	29.88	758.9	81	27.2	83	W			1		3	N				2	NE	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 38° 42′, W. 9° 05′	29.73	755.1	61.5	16.4	97	WSW			6		10							Drizzling	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 17° 59′, W. 62° 14′	30.07	763.8	78	25.6	69	ESE			3		4	E				2	E	D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Khnahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 40′, E. 49° 30′	29.66	753.4	76	24.4	86	SE			2		1					1	SE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis, N. 32° 22′, E. 25° 00′	29.87	758.7	67	19.4	69	NW			5		8	NW				4	NW	D. clouds	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb, N. 37° 03′, W. 15° 18′	29.65	753.1	69.5	20.8	65	W			3-5		4	NW						Squally	Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	29.85	758.2	61.5	16.4	88	SE			4-5		7							Showery	Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	30.02	762.5	76.6	24.8	89	Calm			0		10			0	0			Misty	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando	29.96	761.0	81.3	27.4	77	W			3		3		W	0	0	1	W	D. clouds	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			

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

UNITED STATES NAVAL SERIES.

By authority of the Secretary of the Navy.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

N. Yard, Pensacola, Fla	30.04	763.0	62	16.7	88	SE	8	3.6			8		SE	0	0			Fair	
N. Yard, Portsmouth, N. H.	29.98	761.5	15	— 9.4	?	W	2	0.9		2c		W		0	0			Fair	
Naval Hospital, Yokohama, Japan	29.89	759.2	36	2.2	51	N			3		2		W	0	0			Clear	
Adams, Ancon, Peru	30.03	762.7	69	20.6	90	Calm			0		10					Sm'h	SW	Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.03	762.7	54	12.2	93	SW			4		10		SW					Drizzling	
Alert, Hong-Kong, China *	30.17	756.3	61	16.1	66	ENE			2		5		WSW	0	0	Sm'h		Hazy	
Alliance, Pensacola, Fla	30.13	765.3	55	12.8	86	SSE			1		2		SSE	0	0	Sm'h		Fair	
Ashuelot, Tientsin, China	30.25	768.3	28	— 2.2	100	NW			1		0							Clear	
Colorado, New York, N. Y	30.03	762.7	23	— 5.0	73	Calm	0	0			0							Clear	
Constitution, N. Yard, League I'd., Pa			22	— 5.6		Calm	0	0			8							Hazy	
Franklin, Off N. Yard, Norfolk, Va	30.15	765.8	32	0.0		SSW	7	3.1			0			0	0			Clear	
Galena, Gibraltar, Mediterranean	29.94	760.5	65	18.3	94	SSW			2		8		W			Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	30.11	754.8	55	12.8	93	SE	16.8	7.5			10		Calm	0.14	3.6			Overcast	
Jamestown, Sitka, Alaska *	29.94	760.5	30	— 1.1		Calm			0		10			0	0	Sm'h		Cloudy	
Kearsarge, Port Royal, Jamaica, W.I.	30.07	763.8	70	21.1	80	NW			1		2		Calm			Sm'h		Fair	
Lackawanna, Ancon, Peru †	30.13	765.3	69	20.6	85	Calm			0		10		W	0	0			Cloudy	
Marion, S. 53° 10′, W. 70° 53′	29.95	760.7	47	8.3	62	S			4		8		SW			Mod.	S	Fair	
Michigan, Erie, Pennsylvania	29.62	752.3	38	3.3		SSW			4		10		SW					Cloudy	
Minnesota, New York, N. Y	30.05	763.3	27	— 2.8		SW			1		8		WNW					Hazy	
Monocacy, Shanghai, China	30.44	773.2	35	1.7	63	SE			1		5							Fair	
New Hampshire, Port Royal, S. C	30.16	766.1	43	6.1	92	E	2	0.9			0							Clear	
Nipsic, Villafranca, France	29.33	745.0	55	12.8	74	NNW			2		10					Sm'h		Overcast	
Onward, Chimbote Bay, Peru †	29.92	760.0	69	20.6	90	S			3		8		NNW			Long	N;W	Cloudy	
Palos, Shanghai, China	30.48	774.2	36	2.2	79	SE			1		2							Fair	
Passaic, Washington, D. C	30.06	763.5	32	0.0	89	SW			2		5		SW					Fair	
Pensacola, Pichilinque, Mexico	30.10	764.5	60	15.6	88	SE			1		0							Clear	
Portsmouth, Washington, D. C	30.00	762.0	32	0.0	100	W			3		5							Clear?	
Powhatan, New York, N. Y	30.08	764.0	24	— 4.4		SW			1		2							Hazy	
Quinnebaug, Alexandria, Egypt	29.83	757.7	64	17.8	73	WNW			5		10		NW			Mod.		Showery	
Richmond, Pagoda Anchorage, China	30.43	772.9	52	11.1	60	NE			2		5?		NE	0	0			Cloudy?	
Saratoga, Baltimore, Md	30.03	762.7	23	— 5.0	100	Calm			0		8			0	0			Cloudy	
Shenandoah, Montevideo, Uruguay *	30.03	762.7	75	23.9	81	ESE			2		0					Sm'h		Clear	
St. Louis, League Island, Pa	30.12	765.0	20	— 6.7	100	ENE	1	0.4			2		N;W	0	0			Clear	
Swatara, Kobe, Japan †	30.13	765.3	40	4.4	56	W			3		0					Sm'h		Hazy	
Tennessee, St. Croix, W. I	30.08	764.0	80	26.7	71	ENE	10	4.5			5?		ENE	0.01	0.3	Sm'h		Cloudy?	
Trenton, Villafranca, France *	29.29	744.0	53	11.7	73	W			3		10			7 h'rs	light			Rainy	
Vandalia. N. 31° 35′, W. 60° 27′	30.04	763.0	61	16.1	66	NNW			6		2		NNW			Long	NW	Fair	
Wabash, Boston, Massachusetts	30.09	764.3	20	— 6.7	56	SW	10	4.5			2		SW	0	0			Misty	
Wachusetts, Panama, Panama	29.57	751.1	77	25.0	91	NW			2		8			0	0	Sm'h		Fair	
Wyoming, Naples, Italy	29.48	748.8	60	15.6	88	Calm			0		10		SW			Sm'h		Raining	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic, N. 46° 25′, W. 31° 55′	29.78	756.4	50	10.0	100	E			6		7					6	E	Squally	Capt. H. Parsell.
Ship Baroda, ‡ S. 29° 49′, E. 36° 12′	29.97	761.2	70.2	21.2	96	ENE			4		5							D. clouds	Capt. C. J. Russell.
British Merchant, ‡ S. 44° 00′, E. 112° 10′	29.74	755.4	50.5	10.3	96	W			2–3		10							Overcast	Capt. E. J. Molony.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡ N. 34° 37′, W. 20° 15′	29.46	748.3	65	18.3	89	SW			7		4							D. clouds	Capt. H. Youlden.
S. S. Cipero, N. 45° 55′, W. 23° 15′	29.82	757.4	50	10.0		ENE			6		5					6	E	D. clouds	W. N. Lailey.
City of Agra, ‡ S. 56° 04′, W. 98° 28′	30.30	769.6	44.7	7.1	92	NNW			4		10							Overcast	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Coppename, N. 33° 40′, W. 20° 43′	29.49	749.0	63.8	17.7	79	WSW			6		6							D. clouds	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡ S. 27° 23′, E. 49° 59′	30.00	762.0	75	23.9	77	ESE			6		9							Overcast	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ N. 18° 32′, E. 84° 53′	30.03	762.7	75.5	24.2	71	E			1		3							D. clouds	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, N. 46° 35′, W. 18° 15′	29.82	757.4	47.5	8.6	63	ENE			6		3							Hailing	Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 33° 30′, E. 25° 17′	29.78	756.4	63.0	17.2	83	WNW			5		5							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia, N. 40° 31′, W. 69° 39′	29.96	761.0	36	2.2	100	SSW			4		6			0	0	Sm'h		Fair	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Britanic																			
S. S. Celtic, N. 40° 41′, W. 66° 48′ †	30.00	762.0	40	4.4		WNW			6		2		WNW	0	0	Sm'h		Fair	Capt. H. Perry.
S. S. Germanic, New York, N. Y. †	30.05	763.3	28	— 2.2		W			2		0			0	0			Clear	Capt. Benj. Gleadell.
S. S. Republic																			Capt. Ch. W. Kennedy.
																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Köln, N. 42° 32′, W. 57° 28′	29.46	748.3	32.9	0.5		WNW			6–7		10		NW	Rain	& s'w	Cross	WNW	Drizzling	
S. S. Leipzig, ‡ N. 45° 40′, W. 45° 50′	29.52	749.8	48.5	9.2	89	SE			4		5		SE	0	0	Mod.	ESE	Fair	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡ S. 21° 57′, W. 27° 48′ *†	30.24	768.0	77.0	25.	83	N			2		3							Blue sky	Capt. Albert Fredholm.
Ship Peru, ‡ N. 27° 59′, W. 87° 00′	30.11	764.7	65.1	18.4	78	S			4		0							Blue sky	Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 46° 48′, W. 40° 32′	29.68	753.9	56	13.3	87	ESE			6		8		ESE			R'gh	E	Misty	Capt. J. W. Shackford
S. S. Indiana, ‡ N. 39° 43′, W. 70° 46′ †	30.13	765.3	45	7.2	84	WSW			3		2		SW	0	0	Sm'h	SW	Fine	Capt. R. W. Sargent.
S. S. Ohio, ‡ Liverpool, England †*	29.71	754.6	34	1.1	100	NW			2		8		NW	Light	snow			Cloudy	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, ‡ N. 47° 14′, W. 36° 25′ †	30.02	762.5	50	10.0		E			6		8		E	0.25	6.3	Very R'gh	E	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, Mazatlan, Mexico †	29.88	758.9	69	20.6	95	Calm			0		0			0	0			Clear.	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 35° 42′, E. 151° 20′ †	29.73	755.1	58	14.4	64	WSW			6		8		W	Ha	il	High	wsw	Cloudy	Capt. H. Davison.
S. S. Gaelic, San Francisco, Cal. †*	30.46	773.7	51	10.6	100	NNE			1		2		NE					Clear	Capt. W. H. Kidley.
S. S. Oceanic, N. 44° 55′, E. 173° 07′	29.66	753.4	38	3.3	90	SW			2		10		SW	0.08	2.0	High	W	Squally	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia																			Capt. Fred. Bolles
S. S. Oregon, N. 45° 55′, W. 124° 15′ †	30.07	763.8	45.0	7.2	84	NW			2		10		NW			Mod.	WNW	Cloudy	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, Santa Barbara, Cal. †	30.04	763.0	48	8.9	85	NW			1		10		NW					Cloudy	Capt. J. N. Ingalls.
S. S. Idaho																			C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. State of California, Portland, Oregon †	30.08	764.0	38	3.3	100	Calm			0		10		Calm					Cloudy	Capt. G. Debney.
S. S. Victoria, N. 42° 40′, W. 124° 48′ †	30.00	762.0	49	9.4	85	N			4		10					R'gh	S	Rainy	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, S. 32° —′, E. 177° —′ †	30.03	762.7	68	20.0	90	E			4		4?		E	0	0	Light	E	Cloudy?	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, N. 30° 10′, W. 152° 56′ †	29.97	761.2	59	15.0	70	NW			4		8		NW	0	0	Mod.	NW	Cloudy	Capt. G. G. Berry.
S. S. City of Sidney, N. 0° 08, W. 165° 53′ †	29.95	760.7	80	26.7	82	ENE			4		8		NE	0	0	Long	NW	Cloudy	Capt. H. C. Dearborn
S. S. City of Tokio, N. 22° 10′, E. 115° 00′ †	30.40	772.1	61	16.1	66	NE			1		0			0	0	Sm'h		Clear	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 20° 25′, W. 105° 48′ †	30.03	762.7	73	22.8	72	NE			3		5		E	0	0	Sm'h	NW	Fair	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, N. 16° 10′, W. 98° 38′ †	29.92	760.0	79	26.1	95	Calm			0		0			0	0	Sm'll	SSE	Clear	
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland ‡																			Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland ‡																			Capt. W. Geo. Randle.
S. S. Vaderland ‡																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Brunswick, Ga	30.19	766.8	41	5.0	82	Calm	0	0			0			0	0			Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, ‡ Arroyo, P. R. †	30.31	769.9	77	25.0		ENE			4		2		E	0	0	Sm'h		Clear	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	30.14	765.5	34	1.1	71	S	1	0.4		0	25			0	0			Clear	
Sch'r Hattie V. Kelsey																			Capt. J. L. Randall.
Ship Jumna																			Capt. James S. Gawin
Bark Sunbeam, ‡ Lisbon, Portugal †	29.70	754.4	64	17.8	?	SW			6		10		W	Hea	vy			Rainy	Capt. Jos. Hand.

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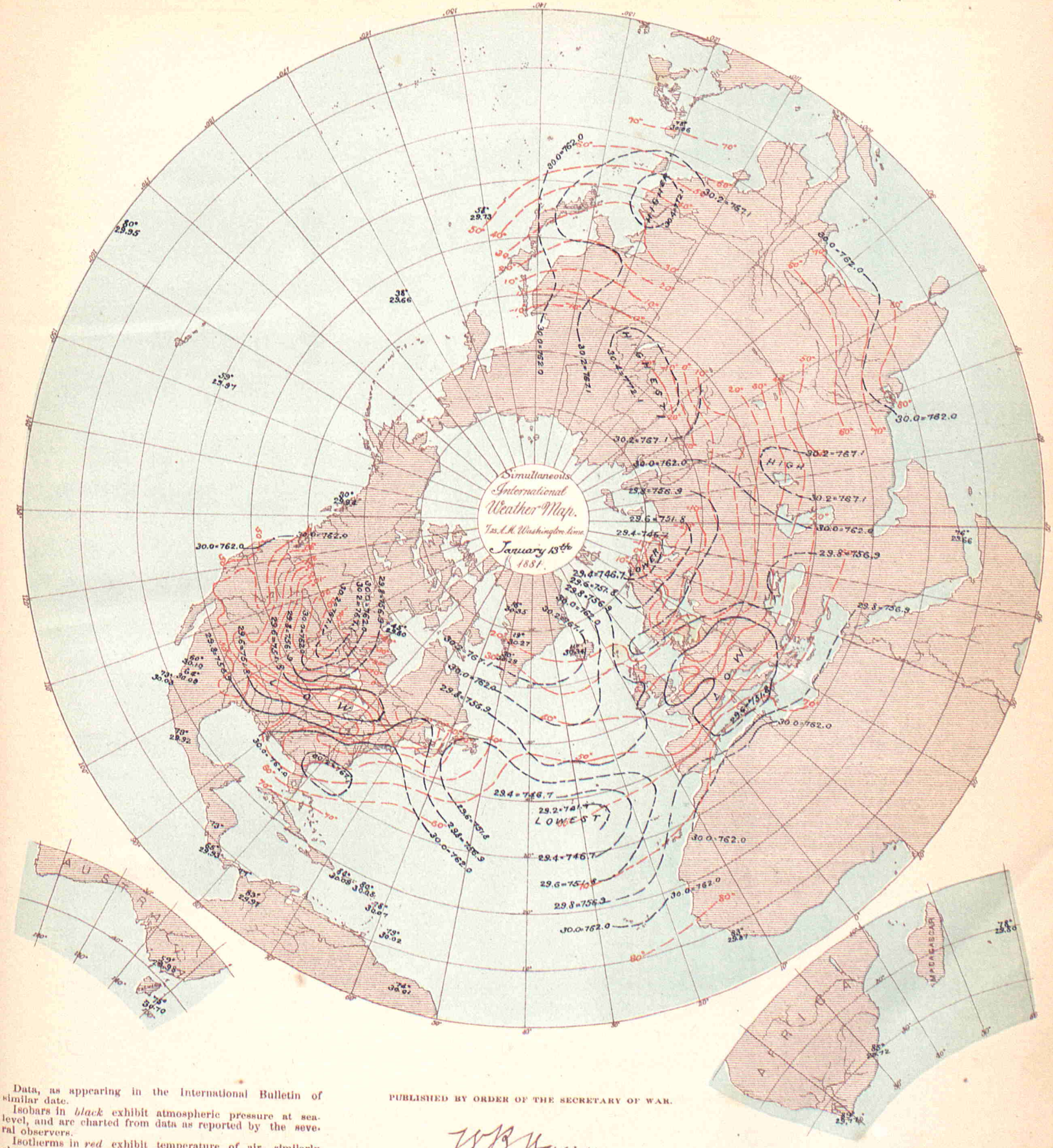
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 14, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instru-m'tal error and tem-perature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.91	759.7	67.3	19.6	81	SW			6		10			0.157	4.0	Covered	Dr. Ollive.
Nemours			29.84	757.9	66.6	19.2	77	WNW			2		3			0.055	1.4	Pretty fair	Raynard.
Algiers			29.76	755.8	75.2	24.0	27	SW			6		10			0	0	Covered	Nicolas.
La Calle			29.80	756.9	80.6	27.0	31	WSW			4		5			0	0	Cloudy	Fonfrède.
Tunis			29.78	756.5															Jacques.
Sfax			29.97	761.1															Gau.
Saida			29.96	761.0	64.4	18.0	90	SW			5		0			0	0	Clear	Dumas.
Tebessa			30.02	762.6	73.0	22.8	19	W			6		9			0	0	Covered	Watrin.
Gerville																			Lonchamp.
Laghouat			30.14	765.6	73.8	23.2	34	SW			1		2			0	0	Fair	Herbin.
Biskra			30.02	762.5	66.2	19.0	75	NE			1		10			0	0	Covered	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	28.82	757.4	29.91	759.7	65.0	18.3	61	ESE	16	7.2			0			0	0	Very fine	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania			30.70	779.8	78	25.6		E			3		0			0	0	Clear	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.15	740.3	29.72	754.8	31.5	— 0.3	78	NW			2		10			0.150	3.8		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.90	734.1	29.74	755.4	6.1	—14.4	100	SW	16.1	7.2			1			0	0		Dr. Wiersbicki.
Eperies	28.63	727.3	29.58	751.3	14.4	— 9.8	65	NW			5		2cs			0	0		Julius Mikolik.
Gratz‡	28.48	723.3	29.78	756.5	30.2	— 1.0	79	S			1		5			0.008	0.2		Andreas Rospini.
Hermannstadt	28.05	712.5	29.55	750.5	24.1	— 4.4	56	WNW			5		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.32	719.2	29.72	752.0	25.9	— 3.4	89	Calm			0		10			0.118	3.0		The Staff.
Lemberg	28.45	722.5	29.51	749.5	12.7	—10.7	83	NW			4		10			0.024	0.6		Dr. T. Staneckl.
Pola	29.52	749.9	29.64	752.8	41.9	5.5	66	E			1		3			0	0		I. R. HydrographicOffice.
Szathmar	29.11	739.4	29.56	750.7	18.1	— 7.7	65	W			2		9			0.024	0.6		Beicht Peter, S. J.
Szegedin	29.37	746.0	29.67	753.5	25.9	— 3.4		W			2		0			0	0		Karl Stancel.
Trieste	29.57	751.1	29.67	753.7	38.1	3.4	76	ENE			3		6			0	0	½ clear	P. Busin.
Vienna	29.01	736.9	29.78	756.4	17.2	— 8.2	71	NW			2		2			0.020	0.5		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 19, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.78	756.4	29.88	758.9	22.9	— 5.1	75	W	8	3.6			4			0.260	6.60	Misty	W. Boswell.
Armagh, Observatory	29.67	753.6	29.92	760.0	27.0	— 2.8	88	NE	3	1.3			2			Blank	Blank	D. clouds	S. Call.
Bidston, Liverpool Obs'y			29.89	759.2	26.5	— 3.1	94	ESE	5	2.2			2					Foggy	John Hartnup.
Bolton, Sharples	29.34	745.2	29.89	759.2	27.7	— 2.4	94	N	6	2.7			0					Blue sky	Thomas Mackereth.
Bradford, Yorkshire	29.49	749.0	29.88	758.9	21.3	— 5.9	45	NE			2		4			0	0	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	82.0	27.8	60	NE			2		2					Blue sky	Pvt. J. Surgenor, A. H. C.
Cardington			29.87	758.7	21.4	— 5.9	83	NW			0.4		2					Blue sky	John McLaren.
Chatham, School M. E.	29.71	754.6	29.84	757.9	25.2	— 3.8	90	Calm			0		0?					Snowing?	Cpl. Gwinn, R. E.
Falmouth, Observatory	29.53	750.0	29.76	755.9	37.4	3.0	69	ENE			1		4					D. clouds	The Staff.
Fort Napier, Natal	27.34	694.4	29.56	750.8	90.2	32.3	93	NE			1		3?					Overcast?	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.89	759.2	84	28.9	91	Calm			0		5					D. clouds	C. E. Keane.
Galway, Queen's College			29.78	756.4	31	— 0.6	79	NE			3		8					Overcast	J. O'Donaghadue.
Gibraltar, Mediterranean	29.73	755.1	29.79	756.7	64.6	18.1	94	W			5		9					Raining	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.71	754.6	29.92	760.0	27.8	— 2.3	88	N			1							Blue sky	D. G. MacLean.
Greenwich, Royal Obs'y	29.69	754.1	29.88	758.9	23.6	— 4.7	100	NE			1		10					Foggy	The Staff.
Guernsey	29.52	749.8	29.74	755.4	38	3.3	63	NE			2		3					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.84	757.9	29.88	758.9	23.2	— 4.9	93	NNW	5	2.2								Foggy	The Met'g'l Office.
Leicester, Museum	29.61	752.1	29.88	758.9	20.4	— 6.4	100	NE			1		10					Foggy	J. E. Carryer.
Malta, Mediterranean	29.66	753.4	29.73	755.1	75.4	24.1	86	SW			3		4					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.04	763.0	71.0	21.7	95	SE			3		10					Overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.35	745.5	29.91	759.7	19.6	— 6.9	100	NNE			1		0					Light fog	Robert Pate.
Oxford, Radcliffe Obs'y	29.63	752.6	29.89	759.2	24	— 4.4	87	NNW			1		0					Misty	The Staff.
Plymouth	29.71	754.6	29.78	756.4	33.8	1.0	76	ENE			3		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			29.79	756.7	30	— 1.1	100	N	26	11.6			10					Snowing	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.20	741.7	29.27	743.4	56.0	13.3	78	SW			4		10			Blank	Blank	D. clouds	Serg't W. H. Lyne.
Sheffield	29.59	751.6	29.88	758.9	20.1	— 6.6	99	Calm			0		10			0	0	Foggy	W. F. Cooper.
Silloth Rectory	29.88	758.9	29.90	759.4	19.7	— 6.8	61	Calm			0		0			0	0	Blue sky	Rev. F. Redford, A. M.
Stonyhurst, Observatory			29.89	759.2	24.0	— 4.4	79	NNE	5	2.2			0					Blue sky	Rev. S. J. Perry.
Strathfield Turgiss					15.5	— 9.2	65	N			1		1					Blue sky	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	29.66	753.4	29.77	756.1	38	3.3	72	NE			4		3					D. clouds	W. Newcombe.
Valencia, Observatory	29.67	753.6	29.70	754.4	35.9	2.2	85	ENE	7	3.1			8			Blank	Blank	D. clouds	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	29.78	756.4	29.83	757.7	22.7	— 5.2		Calm	0	0			10n			0	0	Cloudy	Hon. J. Ferguson.
Chatham, N. B.*	29.76	755.9	29.82	757.4	21	— 6.1	93	Calm	0	0			10s		SE	0	0	Cloudy	G. A. Blair.
Charlottetown, P. E. Island	29.87	758.7	29.92	760.0	19	— 7.2	100	S	4	1.8			10s			0	0	Cloudy	H. J. Cundall, C. E.
Chicontime, Quebec					24.5	— 4.2		SE			5		10s			0	0	Cloudy	Rev. V. A. Huart.
Cornwall, Ontario	29.41	747.0	29.62	752.3	15.2	— 9.3	89	NW			4		10n			0.12	3.0	Cloudy	James Smith, M. A.
Dalhousie, N. B	29.73	755.1	29.77	756.1	24.5	— 4.2		E			2		10s			0	0	Cloudy	H. A. Johnson.
Father Point, Quebec*	29.60	751.8	29.62	752.3	29	— 1.7	76	Calm	0	0			10s		Calm	0	0	Threatening	J. McWilliams.
Fredericton, N. B	29.72	754.9	29.79	756.7	29.0	— 1.7	91	Calm	0	0			10s			0	0	Cloudy	Prof. Harrison.
Fort Garry, Manitoba*	29.05	737.9	30.04	763.0	—32	—35.6	100	Calm	0	0			0			0	0	Clear	James Stewart.
Granton, Ontario	28.81	731.8	30.01	762.2	8.7	—12.9	85	NW			1		10n			0.20	5.1	Cloudy	James Grant.
Halifax, N. S.*	29.84	757.9	29.98	761.5	22	— 5.6	97	Calm	0	0			Haze			0	0	Hazy	A. Allison.
Hamilton, Ontario	29.56	750.8	29.99	761.7	9.9	—12.3	89	NW			2	rock	0	SW		0.13	3.3	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.37	746.0	29.73	755.1	22	— 5.6	73	NW	10	4.5			10s		SW	0.16	4.1	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	29.98	761.5	30.02	762.5	30.0	— 1.1	96	S	1	0.4			10n			0	0	Cloudy	C. H. Rigby.
Montreal, Quebec*	29.31	744.5	29.51	749.5	34	1.1	88	SW	16	7.2			10n;s			0.07	1.8	Light rain	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A.
Parry Sound, Ontario*	29.25	742.9	30.05	763.3	—12	—24.4	51	W	6	2.7		0	0			0.50	12.7	Clear	Rev. R. Moseley.
Peterboro, Ontario	29.09	738.9	29.93	760.2	2.6	—16.3	57	W			3	0	5ks			0	0	Fair	J. F. Jeffers, M. A.
Port Dover, Ontario	29.20	741.7	29.96	761.0	12	—11.1	83	NW	12	5.4			10k		NW	0.26	6.6	Cloudy	H. Morgan.
Port Stanley, Ontario	29.29	744.0	30.00	762.0	8	—13.3	87	W	25	11.2			10n		NW	0.24	6.1	Cloudy	M. Payne.
Quebec, Quebec*	29.23	742.4	29.57	751.1	25	— 3.9	100	NE			5		8n		NE	0.00	1.5	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.41	747.0	29.93	760.2	— 8	—22.2	79	W	5	2.2		0	2s		NW	0.18	4.6	Fair	W. H. McIntyre.
St. Andrews	29.70	754.4	29.74	755.4	37	2.8	90	S	2	0.9			10n			0	0	Cloudy	
St. John's, N. B	29.63	752.6	29.80	756.9	35.0	1.7	95	SE	7	3.1			10ks			Inap.	Inap.	Cloudy	G. Murdock, C. E.
Saugeen, Ontario*	29.25	742.9	30.05	763.3	— 2	—18.9	90	SW	10	4.5			10s			0.45	11.4	Cloudy	K. Stewart.
Stratford, Ontario	28.61	726.7	30.03	762.7	3.2	—16.0	95	NW	5	2.2			10s			0.15	3.8	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.95	760.7	30.00	762.0	26	— 3.3	98	Calm	0	0			Fog			0.15	3.8	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.54	750.3	29.96	761.0	8	—13.3	86	NW	16	7.2			10ks			0.19	4.8	Cloudy	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario	28.83	732.3	29.99	761.7	8.2	—13.3	91	W	15	6.7		8cs	0	NW		0.16	4.1	Fair	Prof. Wolverton.
Yarmouth, N. S.*	29.78	756.4	29.85	758.2	39	3.9	91	SE	3	1.3		5cs	0	SW		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	30.01	762.2	30.18	766.6	38	3.3	100	S	1	0.4		10k	10s			0	0	Cloudy	John Delany.
St. Pierre, N. F			29.84	757.9	36.7	2.6		E			1					0	0		N. F. Land, Comd't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			The Staff, for D. Gill.
Cape Town, C. G. H. Obs'y	29.86	758.4	29.90	759.4	76.2	24.6	49	SW				4ck	4			0	0		John Duthie.
Cape St. Francis Lt. House	29.78	756.4			71.0	21.7	80	SW	13.3	5.9			6k			0.408	10.36		
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.37	771.3	30.39	772.0	34.3	1.3	76	SE	2.7	1.2			0			0	0	Clear	M. Marc Dechevrens, S J.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.22	666.0	29.94	760.5	55.4	13.0	88	SE			1	2ck				0	0	Clear	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.75	755.6	29.80	756.8	21.4	—5.9	74	SW	16	7			10					Snowing	
Faröe	29.81	757.1	29.83	757.6	27.7	—2.4	71	W			2		8						
Godthaab, Greenland	30.24	768.1	30.28	769.2	37.2	2.9	76	S			4		10					Raining	
Stykkisholm, Iceland	30.31	769.9	30.35	771.0	18 3	—7.6	95	E			7		0						
Thorshavn	29.84	757.8	29.87	758.7	25.2	—3.8	80	N	11	5			7					Snowing	
Vestervig	29.63	752.7	29.73	755.1	27.5	—2.5	81	W			2		3						
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.04	737.5	29.71	754.7	28.0	—2.2	92	SSE			1		10			0.04	1.	Snowing	M. Labroue, Director.
Alençon	29.25	742.9	29.80	756.9	23.4	—4.8	90	N			1		2s			0	0	Misty	M. Nicot, Director.
Arras, Engineer School	29.58	751.2	29.85	758.3	17.2	—8.2	94	ENE	3.4	1.5			Fog					Foggy	M. Klein, Commandant.
Avignon, Normal School	29.48	748.7	29.56	750.7	34.9	1.6	71	N			2		10			0	0	Covered	M. Giraud, Director.
Bar-sur-Seine	29.19	741.4	29.78	756.3	28.9	—1.7	75	E			1		10			0.039	1.0	Covered	M. Saillard, Director.
Beauvais, Normal School	29.54	750.3	29.82	757.5	24.8	—4	91	NE			1		0			0	0	Clear	M. Frère Eugene Marie.
Besançon, Normal School	28.82	732.0	29.68	753.9	30.0	—1.1	100	NNE			1		8n		ENE	0	0	Very cloudy	M. Gobin, Director.
Bordeaux, Observatory	29.22	742.1	29.49	749.0	30.6	—0.8	91	SE			2		10					Snowing	M. Rayet, Director.
Bourges, Normal School	29.07	738 4	29.64	752.8	29.8	—1.2	100	N			1		5n		NW	0	0	Cloudy	M. Postel, Director.
Brest, Naval Observatory	29.50	749.4	29.75	755.6	35.6	2.0	64	ENE			2		1		NE	0	0		M. de Rermaree, Dir.
Caen, Normal School	29.64	752.9	29.73	755.1	33.4	0.8	96	W			1		2		NE	0.008	0.2	Slightly cl'dy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.43	747.5	29.84	757.9	27.7	—2.4		Calm			0		10			0	0	Covered	M. Jadot, Director.
Charleville, Normal School	29.27	743.4	29.62	752.3	24.4	—4.2	86	E			1		10		S	0.16	4.	Covered	M. Baumier, Director.
Clermont-Ferrand Obs'y	28.23	717.1	29.65	753.1	27.7	—2.4	83	NNE			1		10		ENE	0	0		M. Alluard, Director.
Cluny, Normal School	28.81	731.8	29.68	753.9	29.5	—1.4		NE			3		10	NW	S	0	0	Covered	M. de Villemontée, Dir.
Commercy, Normal School	28.87	733.4	29.78	756.4	26.6	—3	78	N			1		n		N	0	0		Dr. Coulet, Director.
Gap, Normal School	28.08	687.9	29.70	754.3	29.8	—1.2	89	SE			2		n		W	0	0		M. Jeangirard, Director.
Grénasque, du. Rhone	28.43	722.0	29.57	751.0	32.4	0.2	96	E			1		10		E	0.08	2.	Rain & sleet	M. Kina, Director.
Grenoble, Normal School	28.84	732.6	29.64	752.9	32.0	0		NE			1		cn			0.016	0.40		M. Ablard, Director.
Guéret, Normal School	27.91	708.8	29.56	750.9	26.1	—3.3	78	E			1		10		W	0.	0	Covered	M. Rivoir, Director.
Lamballe, Normal School	29.39	746.6	29.68	753.9	29.5	—1.4	98	NNE			3		0		NNE	0	0	Foggy	M. Ollitrault, Director.
Lescar, Normal School	28.80	731.6	29.49	749.1	33.8	1	81	E			3		10			0.39	10.	Covered	M Chauvin, Director.
Lorient, Naval Observatory	29.69	754.0	29.77	756.6	32.9	0.5	74	ENE			1		10		E	0	0	Covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.57	725.6	29.03	752.7	28.4	—2.0	72	NNW			3		cs		N	0	0		M. André, Director.
Mans, Normal School	29.44	747.7	29.76	755.9	25.7	—3.5	95	E			1		10			0	0	Covered	M. Piboen, Director.
Marseille, Observatory	29.24	742 7	29.51	749.6	40.6	4.8	54	E			1		10		SE	0.091	2.30		M. Stephan, Director.
Montlouis Pinstituteur	24.16	613.6	29.39	746.6	30.9	—0.6	100	SW	28.0	12.5			10	W		0.094	2.4		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.41	747.0	29.52	749.8	38.5	3.6	56	NNE			3		10					Snowing	M. Galzin, Director.
Nancy, Normal School	28.97	735.8	29.77	756.2	26.0	—3.0	78	NW			1		5k	N		0	0	Cloudy	M. Hasse.
Nantes, Observatory	29.57	751.0	29.73	755.1	30.6	—0.8	92	NNE			2		10n		W	0	0		M. Larocque, Dir.
Nice	29.51	749.5	29.54	750.4	48.6	9.2	48	E			4		10	E	E			Raining	Capt. Boissière, Director.
Perpignan, Observatory	29.35	745.0	29.46	748.3	38.3	3.5	77	SW	1.8	0.8			10			0.024	0.6		Dr. Fines.
Pic-du-Midi, Plantade	21.81	554.2			31.6	—0.2							10		SW	1.425	36.2	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.51	724.2	29.62	752.3	32.0	0.0		S			3		10	N	N	0	0	Misty	M. Tallieu.
Puy de Dôme O. s'y, Summit	24.55	623.3			13.6	—10.2	100	E			6		10			0.008	0.2	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.55	750.5	29.58	751.3	32.9	0.5	96	E			1		10			0	0	Covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.42	747.2	29.64	752.9	32.7	0.4	74	NE			1		10			0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	27.33	694.2	29.50	749.4	34.7	1.5	76	SE			2		10					Snowing	M. Richard, Director.
Rouen, Normal School	29.71	754.5	29.79	756.7	26.1	—3.3	40	SE			1		2		SE	0	0	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	29.63	752.5	29.78	756.5	30.7	—0.7	90	WNW			1		Mist		NE	0.051	1.3	Misty	M. Delaplanche, Dir.
Saint Maur, Observatory	29.62	752.3	29.78	756.5	24.8	—4.0	89	NE			1		10						M. Renou, Director.
Toulouse, Observatory	28.80	731.5	29.51	749.5	31.3	—0.4	96	NE			2		10			0.075	1.9	Covered	M. Bailland, Director.
Tours	29.48	748.7	29.67	753.7				NE			2		10			0	0	Covered	M. de Tastes.
Versailles, Observatory	29.28	743.8	29.78	756.3	22.3	—5.4	85	NE			1		10			0	0	Gloomy	Dr. A. Bérigny, Director.
Sun-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.87	733.2	29.72	754.9	18.1	— 7.7	80	E			5		4k	W		0.091	2.3		Prof. Dr. Holl.
Berlin	29.65	753.0	29.83	757.7	17.6	— 8.0	72	NW			2		4			0.008	0.2	Foggy	Prof. Dr. Arndt.
Breslau	29.26	743.2	29.79	756.6	6.1	—14.4	96	WNW			2		1					Snow-flakes	Royal University Obs'y.
Carlsruhe	29.37	746.1	29.82	757.4	26.6	— 3.0	87	ENE			2		10	NW		0.024	0.6		Albert Senz.
Cassel	29.21	741.9	29.81	757.1	13.3	—10.4	83	NE			2		0			0	0		Dr. H. Möhl.
Frankfort on the Main	29.56	750.7	29.95	760.6	17.6	— 8.0	94	N			2		8			0.039	1.0		Physical Society.
Friedrichshafen	28.28	718.4	29.76	756.0	29.8	— 1.2	51	SW			3		8	SW		0	0		Chief Telegrapher Wilhelm.
Hamburg	29.81	757.1	29.88	758.9	17.1	— 8.3	82	WSW			3		0			0	0		Dr. R. Kleeman.
Kiel	29.85	758.1	29.86	758.5	22.6	— 5.2	82	Calm			0		1			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.45	747.9	29.91	759 6	9.3	—12.6	100	SW			1		9			0.091	2.3	Snow and fog	Prof. Dr. Bruhns.
Magdeburg	29.64	752.8	29.88	759.0	7.9	—13.4	80	Calm			0					0.043	1.1		Dr. Assmans.
Memel	29.69	754.1	29.74	755.3	—5.3	—21.3	57	NE			1		18						Reinbrecht & Issermann.
Munich	27.85	707.5	29.70	754.3	25.7	— 3.5	81	W			2		7	W		0.020	0.5	Snowing	Central Station.
Neufahrwasser	29.69	754 1	29.71	754.5	20.8	— 6.2	59	NNE			3		9			0.016	0.4		A Lothes.
Neustadt, Palatinate	29.17	740.8	29.69	754.0	23.4	— 4.8		NE			3		10			0	0		Dickmether.
Stuttgart	28.79	731.2	29.72	754.9	26.2	— 3.2	57	N			1		6	W		0.035	0.9		Prof. Dr. Schoder.
Thorn																			Dr. O. Canerth.
Weissenburg, Bavaria	28.20	726.2	29.71	754.7	24.1	— 4.4	93	W			2		10			0.039	1.0		Prof. Kemlein.
Wustrow	29.82	757.4	29.84	758.0	23.4	— 4.8	100	NE			2		10s			0.059	1.5		Prof. S. Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill	Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof., Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.13	739.9	29.52	749.7	67.1	19.5		SW			2.5		0					Clear	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.01	762.3	30.06	763.6	77.4	25.2	35	ENE	8.0	3.6			0			0	0	Blue sky	
Deesa	29.52	749.8	29.99	761.8	84.3	29.1	35	E	10.1	4.5			2	ESE		0	0	D. clouds	
Bombay	29.93	760.3	29.97	761.2	83.0	28.3	64	W	7.0	3.1			2	SSE		0	0	D. clouds	
Poona, Yarrowda	28.10	713.8	29.96	760.9	81.3	27.4	21	E	12.0	5.4			4		E	0	0	D. clouds	
Belgaum	27.41	696.2	29.96	760.9	76.1	24.5	33	E	8.0	3.6			0			0	0	D. clouds	
Lahore	29.42	747.2	30.20	767.0	61.6	16.4	41	Calm	0.9	0.4			6			0	0	Gloomy	
Roorkee	29.24	742.8	30.19	766.8	62.2	16.8	53	NW	1.2	0.5			1			0	0		
Agra	29.59	751.6	30.18	766.5	68.3	20.2	43	E	2.8	1.2			0			0	0		
Nagpur	29.01	736.7	30.06	763.5	79.7	26.5	32	Calm	4.3	1.9			0			0	0	Blue sky	
Jubbulpore	28.71	729.3	30.12	765.0	68.7	20.4	37	Calm	1.5	0.7			0			0	0	Blue sky	
Lucknow	29.78	756.4	30.18	766.5	63.3	17.4	36	Calm	0.4	0.2			0			0	0	Blue sky	
Allahabad	29.83	757.6	30.16	766.0	62.3	16.8	59	Calm	0.9	0.4			0			0	0	Blue sky	
Patna	29.97	761.1	30.16	766.0	61.3	16.3	63	W	1.0	0.4			0			0	0	Blue sky	
Hazaribagh	28.05	712.5	30.14	765.6	62.8	17.1	43	NNW	3.0	1.3			0			0	0	Blue sky	
Cuttack	30.01	762.2	30.09	764.4	73.6	23.1	57	NE	3.3	1.5			0			0	0	Blue sky	
Calcutta, Alipore	30.08	764.0	30.10	764.6	66.7	19.2	50	NNW	2.0	0.9			0			0	0	Blue sky	
Goalpara	29.68	753.9	30.10	764.6	67.5	19.7	55	ENE	5.4	2.4			0			0	0	Blue sky	
Chittagong	29.99	761.8	30.09	764.2	68.6	20.3	52	WNW	2.7	1.2			0			0	0	Blue sky	
Sibsagar	29.80	757.0	30.16	766.0	61.0	16.1	81	NE	1.4	0.6			0			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.25	743.0	29.68	753.8	37.8	3.2	48	E	0.7	0.3			9			0	0		Prof. Giovanni Clodig.
Milan	29.09	738.8	29.63	752.6	36.7	2.6	79	ESE	0.7	0.3			8			0	0		Prof. Schiaparelli.
Padua	29.55	750.6	29.66	753.4	40.1	4.5	87	NNE	3.1	1.4			4	NW		0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.74	730.0	29.69	754.1	36.3	2.4	82	NE	0.7	0.3			8			0.177	4.5		Prof. P. F. Denza.
Genoa	29.37	745.9	29.56	750.9	42.8	6.0	31	NE	7.4	3.3			10	S		0	0		Prof. G. M. Garibaldi.
Mondovi	27.70	703.6	29.70	754.4	34.7	1.5	41	W			4		3	W		0	0		Prof. D. C. Bruno.
Pesaro	29.60	751.7	29.65	753.0	40.6	4.8	77	W	11.9	5.3			10	W		0.063	1.6		Prof. Luigi Guidi.
Florence	29.30	744.3	29.57	751.0	45.5	7.5	54	NE			4		10			0.260	6.6		Cav. F. Meucci.
Leghorn	29.45	748.0	29.54	750.2	45.5	7.5	60	ENE	8.7	3.9			10			0	0		Prof. P. Monte.
Rome	29.39	746.4	29.56	750.9	50.4	10.2	70	SW	3.1	1.4			10			0.047	1.2		Prof. P. S. Ferrari.
Lecce	29.31	744.4	29.56	750.9	57.9	14.4	76	NE	10.5	4.7			9	NE		0.031	0.8		Prof. C. de Giorgi.
Cosenza	28.74	729.9	29.63	752.6	63.0	17.2	72	NW	2.5	1.1			10	WNW		0.106	2.7		Prof. D. Conti.
Cagliari	29.33	745.0	29.52	749.9	65.1	18.4	69	Calm			0		10			0	0		Prof. A. Pacinotti.
Palermo	29.39	746.5	29.64	752.8	73.0	22.8	32	WSW	23.7	10.6			8			0	0		Prof. G. Cacciatore.
Syracuse	29.61	752.1	29.65	753.2	72.0	22.2	50	S	19.9	8.9			7	W		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R.	29.06	738.0	29.58	751.2	55.0	12.8	80	WSW	13.6	6.1			10	W		0.059	1.5		Prof. F. Brioschi.
Stelvio	21.87	555.4			4.1	—15.5	64	S					3			0	0		P. F. Denza.
Valdobbia	21.58	548.0			11.1	—11.5	79	NNW					10			11.811‖	300.0‖		
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y†	30.33	770.4	30.34	770.6	35.2	1.8	80	NNE	2.9	1.3			9cl;s		W	0	0	Cloudy	K. Sasaki.
Kioto	30.16	766.0	30.34	770.6	27.9	— 2.3	83						5cs;s			0	0	Fair	
Nagasaki, I. M. Obs'y	30.15	765.8	30.37	771.4	38.8	3.8	89	Calm	0	0			5cs			0.020	0.51	Fair	S. Takehayashi.
Tokei Obs'y, Yeddo	30.21	767.3	30.28	769.1	32.6	0.3	56	WNW	2.5	1.1		0	0			0	0	Clear	The Staff.
Wakayama	30.29	769.3	30.34	770.6	32.7	0.4	69	N	4.5	2.0			0?			0	0	Cloudy?	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.66	753.4	29.84	758.0	80.9	27.2	63	E	14.5	6.5		2	4	WNW	E	0.02	0.5	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.77	756.1	30.03	762.8	64.0	17.8	62	NE			2	1cs	0			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barreda, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.87	758.8	29.87	758.8	18.0	— 7.8		ENE			2					0.102	2.6		
Groningen	29.85	758.1	29.90	759.5	18.1	— 7.7		SSW			1					0	0		
Helder	29.88	759.0	29.88	759.0	22.6	— 5.2		SW			1					0	0		
Hellevoetsluis	29.86	758.4	29.86	758.4	14.9	— 9.5	81	ENE			3					0	0		
Utrecht	29.85	758.3	29.90	759.5	15.6	— 9.1	81	NW			2		0			0	0	Clear	H. van der Blink

‖ Total precipitation for 23 hours.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

NORWEGIAN SERIES.

Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.

Bergen	29.53	750.1	29.60	751.7	23.7	— 4.6	90	E	14.8	6.6			10			0.102	2.6	Snowing	
Christiania	29.49	749.0	29.65	753.2	— 3.6	—19.8	87	ENE	7	3			8			0	0	Light fog	
Gjæsvær	29.47	748.6	29.50	749.2	16.5	— 8.6		Calm			0		10						
Lodingen	29.39	746.6	29.44	747.8	11.3	—11.5	78	NNE			4		4			0	0		

PORTUGUESE SERIES.

Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Angra, Azores	29.24	742.6	29.39	746.6	56.1	13.4	86	ENE	10.5	4.7			3			0.079	2.0		Dr. J. A. Sampaio.
Campo Major	28.51	724.2	29.50	749.2	58.6	14.8	76	W	23.0	10.3			9			0.618	15.7		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.62	752.3	29.71	754.5	66.4	19.1	85	WSW					10			0.587	14.9	Foggy	Capt. D. A. de Cunha.
Lisbon, Observatory	29.13	739.9	29.48	748.8	61.0	16.1	83	SW	31.1	13.9			10			1.583	40.2		The Staff.
Ponta Delgada, Azores	29.33	745.0	29.40	746.8	60.8	16.0	75	Calm	0	0			4			0.388	9.8		

RUSSIAN SERIES.

Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.

Akmolinsk	29.21	742.0	30.44	773.1	— 4.0	—20.0	100	Calm	0	0			10					Light clouds	Capt. Lasarew.
Archangel	29.69	754.0	29.71	754.5	—15.2	—26.2	82	SSW	4	2			2cs						Capt. Sseliwerstow.
Astrakhan	29.83	757.6	29.74	755.5	34.2	1.2	96	E	9	4			10			Blank	Blank	Foggy	Capt. Wisganow.
Barnaul	29.78	756.4	30.32	770.2	16.7	— 8.5	88	NW	9	4			10					Light clouds	Meteorological Obs'y.
Dorpat	29.54	750.4	29.82	757.4	— 9.6	—23.1	83	E	2	1		2ck							Observatory.
Ekaterinburg	29.06	738.1	30.10	764.6	13.1	—10.5	83	WSW	4	2		ck	7s					Snowing	Meteorological Obs'y.
Kasan	29.89	759.2	30.21	767.2	—17.5	—27.5	81	Calm	0	0			2						Observatory.
Kertch	29.26	743.2	29.28	743.7	43.7	6.5	94	S	11	5			10					Heavy clouds	Lagorio.
Kieff	28.47	723.0	29.12	739.7	21.0	— 6.1	93	NW	9	4			10n					Snowing	Observatory.
Krotkowo, N. 58°47′, E. 48°34′																			Cand. Fatjanow.
Lugan	29.14	740.2	29.35	745.5	34.5	1.4	91	SE	34	15			10			Blank	Blank		Meteorological Obs'y.
Moscow	29.25	742.9	29.87	758.6	— 7.1	—21.7	78	ESE	4	2			10s						Meteorological Obs'y.
Nertchinsk	28.02	711.6	30.64	778.2	— 9.2	—22.9	53	NW	2	1			0						Meteorological Obs'y.
Nikolaiev	29.09	738.9	29.16	740.7	29.7	— 1.3	98	NW	22	10			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.99	761.8	30.08	764.0	—23.1	—30.6	74	Calm	0	0			0						Lieut. Iwanow.
Nukuss	29.97	761.1	30.21	767.3	36.3	2.4	89	ENE	13	6			10n						Dr. Dobrochotow.
Pekin, China	30.30	769.5	30.44	773.1	30.0	— 1.1	31	NW	7	3			0						Physical Observatory.
St. Petersburg	29.82	757.3	29.83	757.7	— 8.9	—22.7	60	SE	9	4			1s						Central Physical Obs'y.
Tashkend, Laboratory	28.54	725.0	30.14	765.5	49.6	9.8	43	N	7.8	3.5			0						Teich, A. M.
Tiflis	28.31	719.1	29.73	755.1	52.0	11.1	52	Calm	0	0			2k						Physical Observatory.
Warsaw	29.17	740.9	29.63	752.6	2.1	—16.6	75	NW	11	5			0						Astronomical Obs'y
Wilna	29.10	739.1	29.56	750.9	0.9	—17.3	76	NNE	4	2			9						Berg, Assistant.
Yeniseisk	30.14	765.5	30.47	774.0	—12.6	—24.8	81	Calm	0	0			0						M. O. Marks.

SCOTTISH SERIES.

Furnished by the co- peration of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.

Leith, Restalrig Park			29.94	760.5	25.2	— 3.2	95	W			2		0			0	0	Clear	Andrew Gibb.
Monach Lt. House, Hebrides			29.88	758.9	33	0.6	89	NW			4	5	3	N					J. Youngclause.
North Unst, Shetland Isl'ds			29.71	754.6				N			6		10			Blank	Blank		Robert Burnet.

SPANISH SERIES.

Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.

Barcelona, Met. Obs'y ‡	29.37	746.0	29.48	748.8	43.5	6.4	86	NE	10.1	4.5			10			0.511	12.97	Raining	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.29	743.9	29.35	745.4	35.4	1.9	97	E	0.6	0.25			10			0.980	24.9	Snowing	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.36	669.5			48.2	9.0	89	SW	23.7	10.60			10			0.827	21.0	Raining	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.11	688.5	29.31	744.4	51.8	11.0	77	SW	45.2	20.2			10			0.311	7.9	Covered	The Staff.
Murcia, Met. Obs'y. ‡	29.38	746.3	29.53	750.1	73.8	23.2	53	WSW	20.6	9.2		4	5	NE		0	0	Almost cov'd	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.30	718.9	29.21	741.8	41.0	5.0	94	NNE	16.1	7.2			10			2.390	60.7	Raining	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	29.96	760.9	30.02	762.6	70.6	21.4	93	Calm	0	0		6ck	2s	WSW		0.035	0.9	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	30.06	763.5	30.11	764.8	77.6	25.3	74	SE	2.6	1.2			1s			0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.63	752.6	29.73	755.1	63.0	17.2	81	S	7.3	3.3		1	8	S	S	0.106	2.7		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.97	761.2	30.06	763.5	72.7	22.6	95	SW	0	0		2cs	3k	E	E	0.059	1.50	Clear	Enrique Gadea, Chief Engineer.

SWEDISH SERIES.

Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.

Haparanda	29.49	749.1	29.53	750.1	—12.6	—24.8	100	N			2		10			0	0		
Umea	29.42	747.2	29.47	748.5	5.0	—15.0	100	Calm			0		10			0.075	1.9		
Hernosand	29.47	748.5	29.52	749.8	— 2.0	—18.9	94	Calm			0		6			0	0		
Stockholm	29.45	747.9	29.62	752.4	7.0	—13.9	79	WSW			2		6			0	0		
Wisby	29.60	753.3	29.72	754.8	19.4	— 7.0	68	NW			2		3			0	0		
SUB-SERIES.																			
Upsala	29.28	743.7	29.37	745.9	0.1	—17.7	100	SW	4.9	2.2			1			0.002	0.05		Nils Ekholm

SWISS SERIES.

Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.

Geneva	28.19	715.9	29.69	754.0	30.6	— 0.8	75	NE			5		9			0	0	Vapory	The Observatory.
Zurich	28.04	712.3	29.77	756.1	29.5	— 1.4	58	E			1		5			0	0	Slightly cld'y	The Observatory.

At Geneva the corresponding departures from the normal values are: Bar. —11.7 mm.; Ther. —2°.2 cent.; Hum. —4 per cent.

TURKISH SERIES.

Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.

Constantinople			29.31	744.4	56.7	13.7	77	SW	13	6.0			10		SW	0.252	6.4	Raining	The Observatory.
Valona			29.58	751.3	62.1	16.7		S			1		10			0.28	7.	Covered	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.85	758.1	63.0	17.2	73	SW			2		10n		SW	0.05	1.5		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.54	750.3	29.63	752.6	41	5.0	82	S	6	2.7	.....	.....	10s;fg	.....	Calm	-0	0	Cloudy	
Alpena, Michigan	29.41	747.0	30.16	766.1	—15	—26.1	72	W	10	4.5	.....	0	0	.....	.....	0.30	7.6	Clear	
Atlanta, Georgia	28.62	726.9	29.75	755.6	48	8.9	92	NW	19	8.5	.....	.....	10n	.....	Calm	0.18	4.6	Light rain	
Atlantic City, New Jersey	29.68	753.9	29.69	754.1	39	3.9	91	S	13	5.8	.....	.....	10n;fg	.....	S;Calm	0	0	Threatening	
Augusta, Georgia	29.62	752.3	29.82	757.4	53	11.7	80	S	3	1.3	.....	5ck	5s	SW	SW	0	0	Cloudy	
Baltimore, Maryland	29.62	752.3	29.67	753.6	41	5.0	91	SW	1	0.4	.....	.....	10n;fg	.....	SW;C	0.18	4.6	Light rain	
Barnegat, New Jersey	29.66	753.4	29.68	753.9	36	2.2	95	S	10	4.5	.....	.....	10s	.....	SW	0	0	Threatening	
Benton, Montana	26.81	681.0	.....	.....	—11	—23.9	76	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Bismarck, Dakota	27.93	709.4	29.79	756.7	—17	—27.2	.....	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Boise City, Idaho	26.91	683.5	29.87	758.7	35	1.7	80	SE	8	3.6	.....	.....	10n	.....	Calm	0.21	5.3	Heavy rain	
Boston, Massachusetts	29.55	750.6	29.71	754.6	41	5.0	74	S	8	3.6	.....	.....	10s	.....	SW	0	0	Cloudy	
Brackettville, Texas	29.11	739.4	30.26	768.6	23	— 5.0	60	N	9	4.0	.....	5cs	0	Calm	.....	0	0	Fair	
Brownsville, Texas	30.05	763.5	30.11	764.8	38	3.3	91	N	8	3.6	.....	.....	10ks	.....	N	0	0	Cloudy	
Buffalo, New York	29.15	740.4	29.90	759.4	14	—10.0	82	W	15	6.7	.....	.....	10s	.....	Calm	0.19	4.8	Cloudy	
Burlington, Vermont	29.32	744.7	29.61	752.1	37	2.8	81	S	15	6.7	.....	.....	10s	.....	S	0	0	Cloudy	
Cairo, Illinois	29.94	760.5	30.39	771.9	3	—16.1	73	NW	14	6.3	.....	0	0	.....	.....	0.09	2.3	Clear	
Campo, California	27.46	697.5	30.03	762.7	30	— 1.1	89	S	2	0.9	.....	.....	10s	.....	W	0	0	Cloudy	
Camp Thomas, Arizona	27.31	693.7	.....	.....	28	— 2.2	66	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	29.71	754.6	29.73	755.1	54	12.2	74	SW	17	7.6	.....	0	8ks	.....	SW	0	0	Fair	
Cape May, New Jersey	29.65	753.1	29.68	753.9	41	5.0	82	S	19	8.5	.....	.....	10s	.....	SW	0.01	0.3	Cloudy	
Castroville, Texas	29.36	745.7	30.12	765.0	26	— 3.3	63	NW	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Cedar Keys, Florida	29.94	760.5	29.96	761.0	57	13.9	94	SE	8	3.6	.....	5ck	1ks	Calm	NW	0	0	Fair	
Champaign, Illinois	29.41	747.0	30.34	770.6	—11	—23.9	52	NW	15	6.7	.....	0	0	.....	.....	0	0	Clear	
Charleston, S. Carolina	29.85	758.2	29.91	759.7	53	11.7	93	S	12	5.4	.....	2c	2s	SW	SW	0	0	Fair	
Charlotte, N. Carolina	28.85	732.8	29.65	753.1	50	10.0	86	SW	6	2.7	.....	.....	10s	.....	SW	0	0	Cloudy	
Chattanooga, Tennessee	29.14	740.1	29.96	761.0	33	0.6	89	NW	10	4.5	.....	.....	10n	.....	NW	0.47	11.9	Light snow	
Cheyenne, Wyoming	23.72	602.5	29.66	753.4	21	— 6.1	43	SW	1	0.4	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Chicago, Illinois	29.50	749.3	30.30	769.6	—10	—23.3	76	NW	6	2.7	.....	0	0	.....	.....	0.04	1.0	Clear	
Chincoteague, Virginia	29.70	754.4	29.72	754.9	39	3.9	100	SW	18	8.0	.....	8k	0	SW	.....	0	0	Cloudy	
Cincinnati, Ohio	29.44	747.8	30.13	765.3	21	— 6.1	71	NW	8	3.6	.....	.....	10n	.....	NW	0.22	5.6	Light snow	
Cleveland, Ohio	29.30	744.2	30.10	764.5	6	—14.4	76	NW	17	7.6	.....	0	5ks	.....	NW	0.20	5.1	Fair	
Coleman City, Texas	28.41	721.6	30.25	768.3	15	— 9.4	65	N	24	10.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Columbus, Ohio	29.15	740.4	30.06	763.5	14	—10.0	82	NW	19	8.5	.....	.....	10s	.....	NW	0.25	6.3	Cloudy	
Concho, Texas	28.30	718.8	30.12	765.0	20	— 6.7	85	N	10	4.5	.....	8c	0	Calm	.....	0	0	Cloudy	
Corsicana, Texas	29.83	757.7	30.35	770.9	17	— 8.3	51	N	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Davenport, Iowa	29.63	752.6	30.40	772.1	—20	—28.9	63	W	6	2.7	.....	0	0	.....	.....	0.08	2.0	Clear	
Dayton, Washington T'y	27.79	705.8	29.49	749.0	28	— 2.2	100	Calm	0	0	.....	.....	10n	.....	Calm	0.11	2.8	Light snow	
Deadwood, Dakota	24.98	634.5	.....	.....	14	—10.0	82	SW	1	0.4	.....	5cs	0	Calm	.....	0	0	Fair	
Decatur, Texas	29.07	738.4	30.38	771.6	10	—12.2	79	N	14	6.3	.....	5c	0	Calm	.....	0	0	Fair	
Delaware Breakwater, Del.	29.66	753.4	29.68	753.9	50	10.0	79	S	24	10.7	.....	.....	10s	.....	S	0	0	Cloudy	
Denison, Texas	29.48	748.8	30.37	771.4	10	—12.2	79	N	8	3.6	.....	8cs	0	Calm	.....	0	0	Fair	
Denver, Colorado	24.49	622.0	29.71	754.6	16	— 8.9	66	S	4	1.8	.....	0	0	.....	.....	0.16	4.1	Clear	
Des Moines, Iowa	29.35	745.5	30.38	771.6	—15	—26.1	71	NW	2	0.9	.....	0	0	.....	.....	0.01	0.3	Clear	
Detroit, Michigan	29.39	746.5	30.14	765.5	— 1	—18.3	68	NW	6	2.7	.....	0	0	.....	.....	0.05	1.3	Clear	
Dodge City, Kansas	27.44	697.0	29.97	761.2	6	—14.4	52	S	8	3.6	.....	0	5s	.....	Calm	0	0	Fair	
Dubuque, Iowa	29.53	750.0	30.36	771.1	—21	—29.4	62	Calm	0	0	.....	0	0	.....	.....	0.23	5.8	Clear	
Duluth, Minnesota	29.33	745.0	30.13	765.3	—23	—30.6	.....	SW	1	0.4	.....	0	2s	.....	SW	0	0	Clear	
Eagle Pass, Texas	29.48	748.8	30.27	768.8	28	— 2.2	66	N	16	7.2	.....	0	0	.....	.....	0	0	Clear	
Eagle Rock, Texas	24.76	628.9	29.41	747.0	20	— 6.7	85	SW	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Eastport, Maine	29.69	754.1	29.75	755.6	38	3.3	81	S	11	4.9	.....	.....	10s	.....	S	0	0	Cloudy	
Edinburg, Texas	.....	.....	.....	.....	39	3.9	64	N	.....	.....	6	.....	10s	.....	N	0	0	Cloudy	
El Paso, Texas	26.24	666.5	.....	.....	44	6.7	16	NW	4	1.8	.....	0	5s	.....	Calm	0	0	Fair	
Erie, Pennsylvania	29.19	741.4	29.95	760.7	16	— 8.9	83	NW	22	9.8	.....	.....	10s	.....	Calm	0.17	4.3	Cloudy	
Escanaba, Michigan	29.46	748.3	30.23	767.8	—24	—31.1	100	SW	3	1.3	.....	0	0	.....	.....	0.03	0.8	Clear	
Florence, Arizona	28.52	724.4	30.12	765.0	40	4.4	65	Calm	0	0	.....	8c	0	Calm	.....	0	0	Fair	
Fort Apache, New Mexico	25.04	636.0	30.49	774.4	26	— 3.3	63	NE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Fort Assinniboine, Montana	26.79	680.4	.....	.....	—15	—26.1	42	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Bennett, Dakota	28.22	716.8	.....	.....	—22	—30.0	61	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Buford, Dakota	27.65	702.3	29.75	755.6	—23	—30.6	100	Calm	0	0	.....	5cs	0	W	.....	0	0	Fair	
Fort Custer, Montana	26.46	672.1	.....	.....	— 1	—18.3	68	SE	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Davis, Texas	25.16	639.0	30.12	765.0	35	1.7	70	W	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort Elliott, Texas	27.35	694.7	29.86	758.4	8	—13.3	11	SW	4	1.8	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Fort Gibson, Indian T'y	29.78	756.4	30.39	771.9	2	—16.7	72	N	8	3.6	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Fort Grant, Arizona	25.22	640.6	30.02	762.5	43	6.1	28	NE	6	2.7	.....	2cs	0	Calm	.....	0	0	Clear	
Fort Griffin, Texas	29.02	737.1	30.44	773.2	13	—10.6	44	N	12	5.4	.....	0	5s	.....	Calm	0	0	Fair	
Fort Keogh, Montana	27.17	690.1	.....	.....	—19	—28.3	.....	Calm	0	0	.....	10c	0	Calm	.....	0	0	Cloudy	
Fort Macon, North Carolina	29.83	757.7	29.85	758.2	55	12.8	87	SW	10	4.5	.....	10c	0	SW	.....	0	0	Cloudy	
Fort Missoula, Montana	26.28	667.5	.....	.....	9	—12.8	100	N	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort McKavett, Texas	27.80	706.1	29.90	759.4	15	— 9.4	65	N	13	5.8	.....	5cs	0	Calm	.....	0	0	Fair	
Fort Shaw, Montana	25.88	657.3	.....	.....	21	— 6.1	86	SW	28	12.5	.....	10cs	0	Calm	.....	0	0	Cloudy	
Fort Sill, Indian Territory	29.00	736.6	30.25	768.3	7	—13.9	77	N	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Stevenson, Dakota	27.89	708.4	.....	.....	—17	—27.2	100	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort Verde, Arizona	.....	.....	.....	.....	30	— 1.1	78	N	.....	.....	1	.....	10s	.....	N	0	0	Cloudy	
Fredericksburg, Texas	28.36	720.3	30.07	763.8	20	— 6.7	85	N	16	7.2	.....	1cs	0	Calm	.....	0	0	Clear	
Galveston, Texas	30.04	763.0	30.08	764.0	33	0.6	79	N	28	12.5	.....	2cs	0	Calm	.....	0	0	Clear	
Grand Haven, Michigan	29.46	748.3	30.18	766.6	0	—17.8	100	NE	4	1.8	.....	10k	0	NW	.....	0.15	3.8	Cloudy	
Hatteras, North Carolina	29.80	756.9	29.82	757.4	51	10.6	93	SW	8	3.6	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy	
Helena, Montana	25.35	643.9	.....	.....	— 1	—18.3	100	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Henrietta, Texas	29.31	744.5	30.37	771.4	7	—13.9	77	NW	10	4.5	.....	0	5s	.....	.....	0	0	Fair	
Indianapolis, Indiana	29.36	745.7	30.24	768.1	1	—17.2	57	NW	7	3.1	.....	0	0	.....	.....	0.10	2.5	Clear	
Indianola, Texas	30.07	763.8	30.10	764.5	29	— 1.7	67	N	38	17.0	.....	0	0	.....	.....	0	0	Clear	
Jacksboro, Texas	29.12	739.6	30.39	771.9	10	—12.2	.....	NW	14	6.3	.....	.....	10s	.....	NW	0	0	Cloudy	
Jacksonville, Florida	29.94	760.5	29.99	761.7	52	11.1	86	SE	4	1.8	.....	5k	0	SW	.....	0	0	Fair	
Keokuk, Iowa	29.66	753.4	30.42	772.7	—11	—11.7	75	NW	3	1.3	.....	0	0	.....	.....	0.03	0.8	Clear	
Key West, Florida	29.99	761.7	30.03	762.7	72	22.2	90	S	5	2.2	.....	.....	10ks	.....	Calm	0.03	0.8	Cloudy	
Kittyhawk, North Carolina	29.91	759.7	29.93	760.2	52	11.1	86	SW	18	8.0	.....	0	5s	.....	SW	0	0	Fair	
Knoxville, Tennessee	28.92	734.6	29.97	761.2	31	— 0.6	100	N	9	4.0	.....	.....	10n	.....	Calm	0.26	6.6	Light snow	
La Crosse, Wisconsin	29.44	747.8	30.33	770.4	—25	—31.7	100	S	4	1.8	.....	0	0	.....	.....	0.62	0.5	Clear	
La Mesilla, New Mexico	26.09	662.7	30.24	768.1	37	2.8	38	SE	3	1.3	.....	2c	5s	Calm	Calm	0	0	Cloudy	
Laredo, Texas	29.74	755.4	30.10	764.5	36	2.2	61	N	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Leavenworth, Kansas	29.43	747.5	30.41	772.4	— 7	—21.7	59	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Lewiston, Idaho	28.64	727.4	29.29	744.0	31	— 0.6	100	E	7	3.1	.....	.....	10n	.....	Calm	0.01	0.3	Light snow	
Little Rock, Arkansas	29.94	760.5	30.29	769.4	20	— 6.7	56	N	12	5.4	.....	2ck	0	NW	.....	0	0	Clear	
Los Angeles, California	29.74	755.4	30.09	764.3	43	6.1	83	N	2	0.9	.....	4c	.....	Calm	.....	0	0	Fair	
Louisville, Kentucky	29.53	750.9	30.14	765.5	13	—10.6	81	NW	9	4.0	.....	2k	5s	NW	Calm	0.26	6.6	Cloudy	
Lynchburg, Virginia	28.96	735.6	29.65	753.1	40	4.4	91	Calm	0	0	.....	.....	10n;fg	.....	Calm	0.12	3.0	Light rain	
Madison, Wisconsin	29.15	740.4	30.32	770.1	—19	—28.3	65	W	6	2.7	.....	0	0	.....	.....	0.44	11.2	Clear	
Marquette, Michigan	29.34	745.2	30.18	766.6	—21	—29.4	62	SW	6	2.7	.....	5cs	0	SW	.....	0	0	Fair	
Mason, Texas	28.40	721.3	30.31	769.9	16	— 8.9	83	W	20	8.9	.....	0	0	.....	.....	0	0	Clear	
Memphis, Tennessee	29.88	758.9	30.26	768.6	17	— 8.3	67	NW	12	5.4	.....	5cs	Fcg	Calm	Calm	0.18	4.6	Fair	
Milwaukee, Wisconsin	29.44	747.8	30.30	769.6	—17	—27.2	100	NW	8	3.6	.....	0	0	.....	.....	0.10	2.5	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
United States Series—Continued.																			
Mobile, Alabama	29.82	757.4	29.90	759.4	61	16.1	94	SW	6	2.7			10s		SW	0.01	0.3	Cloudy	
Montgomery, Alabama	29.64	752.8	29.87	758.7	59	15.0	94	SW	12	5.4			10ks		SW	0.01	0.3	Threatening	
Morgantown, W. Virginia	28.85	732.8	29.88	758.9	26	— 3.3	88	N	20	8.9			10n		Calm	0.35	8.9	Heavy snow	
Moorhead, Minnesota	28.91	734.3	30.00	762.0	—14	—25.6	72	Calm	0	0			10s		SW	0	0	Cloudy	
Mt. Washington, N. H.	23.32	592.3	29.68	753.9	25	— 3.9	100	W	52	23.2			Fog		W	0	0	Dense fog	
Nashville, Tennessee	29.58	751.3	30.16	766.1	19	— 7.2	85	NW	10	4.5			10n		NW	0.45	11.4	Light snow	
New Haven, Connecticut	29.56	750.8	29.68	753.9	33	0.6	89	S	1	0.4			10n;fog		Calm	0.05	1.3	Light rain	
New London, Connecticut	29.68	753.9	29.73	755.1	37	2.8	71	SW	1	0.4			10s		Calm	0	0	Cloudy	
New Orleans, Louisiana	29.85	758.2	29.91	759.7	62	16.7	88	SW	6	2.7			10s		SW	0	0	Cloudy	
Newport, Rhode Island	29.66	753.4	29.71	754.6	39	3.9	100	S	4	1.8			10s;fg		Calm	0	0	Cloudy	
New River, N. Carolina																			
New Shoreham, Rhode I'd	29.71	754.6	29.74	755.4	44	6.7	84	S	16	7.2			10s		S	0	0	Cloudy	
New York, New York	29.49	749.0	29.67	753.6	39	3.9	100	S	5	2.2			10n;fg		Calm	0.01	0.3	Light rain	
Norfolk, Virginia	29.65	753.1	29.71	754.6	53	11.7	73	S	12	5.4			10s		S	0.04	1.0	Cloudy	
North Platte, Nebraska	26.96	684.8	29.79	756.7	— 1	—18.3	84	W	6	2.7		8cs	0	W		0	0	Fair	
Olympia, Washington T'y	29.43	747.5	29.47	748.5	37.0	2.8	90	N	4	1.8			10n		Calm	0.01	0.3	Light rain	
Omaha, Nebraska	29.04	737.6	30.32	770.1	—14	—25.6	45	S	5	2.2		0	0			Inap.	Inap.	Clear	
Oswego, New York	29.43	747.5	29.76	755.9	25	— 3.9	74	NW	20	8.9			10s		NW	0.04	1.0	Cloudy	
Pensacola, Florida	29.90	759.4	29.93	760.2	59	15.0	94	S	10	4.5		4cs	7ks	SW	SW	0.01	0.3	Cloudy	
Philadelphia, Pa	29.61	752.1	29.66	753.4	42	5.6	83	SW	6	2.7			10n	SW	SW	Inap.	Inap.	Light rain	
Phœnix, Arizona	28.93	734.8	30.84	783.3	32	0.0	69	E	4	1.8		2c	0	S		0	0	Fair	
Pike's Peak, Colorado	17.38	441.4	29.58	751.3	7	—13.8	77	NW	6	2.7			Fog		NW	0.24	6.1	Light fog	
Pilot Point, Texas	29.51	749.5	30.45	773.4	12	—11.1	23	N	10	4.5		0	5s		Calm	0	0	Fair	
Ploche, Nevada	23.92	607.6	29.69	754.1	34	1.1	52	S	20	8.9			10ks		W	0	0	Cloudy	
Pittsburg, Pennsylvania	29.08	738.6	29.94	760.5	21	— 6.1	86	NW	9	4.0			10n		NW	0.32	8.1	Light snow	
Port Huron, Michigan	29.38	746.2	30.13	765.3	— 7	—21.7	59	NW	16	7.2		0	0			0.19	4.8	Clear	
Portland, Maine	29.63	752.6	29.68	753.9	32	0.0	79	NW	1	0.4			Fog			0	0	Dense fog	
Portland, Oregon	29.38	746.2	29.46	748.3	35	1.7	90	NW	8	3.6			10n		N	0.75	19.1	Sleeting	
Portsmouth, N. Carolina					55	12.8	87	SW	19	8.5		10k	0	W		0	0	Cloudy	
Prescott, Arizona	24.75	628.6	30.11	764.8	29	— 1.7	67	S	1	0.4		5c	0	SW		0	0	Fair	
Punta Rassa, Florida	29.96	761.0	29.98	761.5	66	18.9	89	SE	6	2.7			10ks		SE	0	0	Cloudy	
Red Bluff, California	29.46	748 3	29.81	757.2	53.5	11.9	93	S	23	10.3			10n		S	0.79	20.1	Light rain	
Rio Grande City, Texas	29.97	761.2	30.20	767.1	40	4.4	73	N	15	6.7		0	0			0	0	Clear	
Rochester, New York	29.18	741.1	29.84	757.9	17	— 8.3	83	NW	16	7.2			10s		Calm	0.10	2.5	Cloudy	
Roseburg, Oregon	28.94	735.1	29.49	749.0	51	10.6	93	Calm	0	0			10n		Calm	1.97	50.0	Light rain	
Sacramento, California	29.96	761.0	30.03	762.7	52	11.1	93	SE	14	6.3			10s		Calm	0.11	2.8	Cloudy	
St. Louis, Missouri	29.76	755.9	30.43	772.9	— 8	—22.2	79	NW	10	4.5		0	0			0.07	1.8	Clear	
St. Paul, Minnesota	29.19	741.4	30.17	766.3	—24	—31 1	55	SE	6	2.7		2cs	0	W		0	0	Clear	
Salt Lake City, Utah	25.37	644.4	29.70	754.4	40	4.4	73	Calm	0	0			10n		Calm	0.14	3.6	Light rain	
San Antonio, Texas	29.40	748.3	30.21	767.3	25	— 3.9	75	N	10	4.5		0	0			0	0	Clear	
San Diego, California	30.03	762.7	30.11	764.8	45	7.2	92	NE	3	1.3			10s		Calm	0	0	Cloudy	
Sandusky, Ohio	29.37	746.0	30.11	764.8	5	—15.0	75	NW	28	12.5		0	0			0.25	6.3	Clear	
Sandy Hook, New Jersey	29.64	752.8	29.67	753.6	39	3.9	91	SE	6	2.7			10s		Calm	0	0	Cloudy	
San Francisco, California	29.96	761.0	30.02	762.5	57	13.9	87	SE	8	3.6			10s		S	0.29	7.4	Threatening	
Santa Fé, New Mexico	23.16	588.2	29.70	754.4	33	0.6	79	Calm	0	0		5k	0	N		0	0	Fair	
Savannah, Georgia	29.83	757.7	29.92	760.0	54	12.2	87	S	14	6.3		2k	8ks	W	SW	0	0	Cloudy	
Shreveport, Louisiana	29.96	761.0	30.22	767.6	26	— 3.3	75	NW	7	3.1		0	0			0	0	Clear	
Silver City, New Mexico	24.28	616 7	30.62	777.7	35	1.7	36	NW	6	2.7		5c	0	Calm		0	0	Fair	
Smithville, North Carolina	29.86	758.4	29.90	759.4	50	10.0	86	SW	7	3.1		8k	2ks	SW	Calm	0	0	Cloudy	
Socorro, New Mexico	25.38	644.6	29.44	747.8	37	2.8	57	Calm	0	0			10s		Calm	0	0	Cloudy	
Springfield, Illinois	29.03	752.6	30.42	772.7	— 8	—22.2	58	NW	9	4.0		0	0			Inap.	Inap.	Clear	
Springfield, Massachusetts	29.55	750.6	29.68	753 9	37	2.8	81	S	3	1.3			10s		Calm	0	0	Cloudy	
Stockton, Texas	27.13	689.1	30.13	765.3	20	— 6.7	85	N	4	1.8			10s		N	0	0	Cloudy	
St. Vincent, Minnesota	28.97	735.8	29.90	759.4	— 25	—31.7	100	S	3	1.3		0	0			Inap.	Inap.	Clear	
Thatcher's Island, Mass	29.65	753.1	29.70	754.4	39	3.9	100	S	20	8.9			10s		S	0	0	Cloudy	
Toledo, Ohio	29.40	746.7	30.15	765.8	9	—12.8	79	NW	9	4.0		0	1s		Calm	0.16	4.1	Clear	
Tucson, Arizona	27.58	700.5	30.13	765.3	35	1.7	53	W	2	0.9		0	0			0	0	Clear	
Umatilla, Oregon	29.30	744.2	29.81	757.2	24	— 4.4	87	SW	7	3.1			10n		Calm	0.51	13.0	Heavy snow	
Uvalde, Texas	29.31	744.5	30.22	767.6	26	— 3.3	53	N	8	3.6		0	0			0	0	Clear	
Vicksburg, Mississippi	29.87	758.7	30.15	765.8	34	1.1	79	N	14	6.3			10s		Calm	0.09	2.3	Cloudy	
Visalia, California	29.71	754 6	30.08	764.0	52.5	11.4	83	Calm	0	0			10s		Calm	0	0	Cloudy	
Washington, D. C.	29.53	750.0	29.65	753.1	39	3.9	91	S	6	2.7			10n		Calm	Inap.	Inap.	Light rain	
Wickenburg, Arizona					31	— 0.6	79	W			1		10s		Calm	0	0	Cloudy	
Wilmington, N. Carolina	29.78	756.4	29.84	757.9	57	13.9	81	SW	15	6.7		8cs	0	Calm		0	0	Fair	
Winnemucca, Nevada	25.32	643.1	29.68	753.9	48	8.9	56	SW	28	12.5			10ks		SW	0.72	18.3	Cloudy	
Wood's Holl, Mass	29.68	753.9	29.72	754.9	42	5.6	91	SW	18	8.0			10s		SW	0	0	Cloudy	
Yankton, Dakota	28.75	730.2	30.25	768.3	—16	—26.7	70	Calm	0	0		0	0			0	0	Clear	
Yuma, Arizona	29.88	758.9	30.03	762.7	43	6.1	51	NE	5	2.2			10ks		Calm	0	0	Cloudy	
Sun-Series.																			
Bogota, U. S. Columbia	21.98	558.3			48.5	9.2	62	Calm	0	0		0	0			0	0	Clear	Thomas Herran.
Havana, Cuba, W. I.	30.00	762.0	30.05	763.3	73	22.8	90	Calm	0	0		8cs	4ks	SW	SW	0.01	0.3	Foggy	Charles Hasselbrink.
Jakobshavn, Greenland	30.23	767.9	30.29	769.4	28.9	— 1.7		W			4		4			0	0		
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	64.8	18.2	91	Calm	0	0		0	0			0	0	Fair	Maxwell Hall.
Navassa, W. I.	29.96	761.0	30.04	763.0	75	23.9	79	NE	12	5.4		2k	5s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	29.99	761.7	29.99	761.7	73	22.8	95	SE			2		10n	E		1.310	32.27	Raining	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.43	747.5	29.98	761.5	79	26.1	85	Calm			0	5c	2s	S	Calm	0	0	Hazy	Francesco J. Cisneros.
Rivas, Nicaragua																			Earl Flint.
Santiago de Cuba, W. I.	30.02	762.5	30.04	763.0	73	23		SE			1		10ks		SE	0	0		Robert Mason.
St. Thomas, W. I.					70	21.1	75	Calm	0	0		0	0			0	0		G. O. Gellich.
Upernavik, Greenland	30.15	765.9	30.21	767.3	30.9	— 0.6		W			2		0			0	0		
York Factory, B. A.	29.64	752.8	29.69	754.1	—40.0	—40.0		S	4	1.8			10s		S	0.06	1.5	Snowing	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandra, N. 35° 51′, E. 14° 31′	29.77	56.1	76	24.4		WNW			1		2					2		D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. S. Hope.
H. M. S Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. J. F. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.21	767.3	61	16.1		N			1		1	N						Blue sky	Capt. J. Moresby.
H. M. S. Dragon																			Capt. H ulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.91	759.7	82	27.8	75	WSW			2		1							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Callao Bay, Peru	29.83	757.7	63	17.2	94	Calm			0		10							Misty.	Comm. E. E. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	29.58	751.3	64	17.8	75	WSW			2		7	WSW				2	W	D. clouds	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 26° 08′, E. 119° 41′	30.38	771.6	52.6	11.4	79	Calm			0		4							D. clouds	Capt. R. H. Napier.
H. M. S. Malabar, Bombay, India	29.93	760.2	80	26.7	78	W			1		3	NW				2	NE	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 38° 42′, W. 9° 05′	29.45	748.0	62	16.7	86	WSW			7		10	WSW						Squally	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S Northampton, St. John's, Antigua, W.I	30.04	763.0	74	23.3	81	NE			1		3	E				1	SE	D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 56′	29.70	754.4	78	25.6	86	E			1		0							D. clouds	Comm. M. Byles.
H. M. S. Seraphis, Suez Canal	29.96	761.0	74	23.3	68	SW			5		6	SW						D. clouds	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb, N. 37° 03′, E. 15° 18′	29.73	755.1	74.5	23.6	97	WNW			3-4		4	NW						Squally	Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane,
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, India	29.93	760.2	64.5	18.1	68	WSW			1		1							Blue sky	Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	30.01	762.3	77.0	25.0	82	NE			3		5			0	0	1	SE	D. clouds	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando	29.91	759.6	81.0	27.2	69	WNW			3		5			50 minutes		1	W	D. clouds	G. A. de Brito Capello, Comd t.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, N. 31° 23′, E. 29° 20′	29.85	758.3	69.8	21.0	70	WSW			4		0							Blue sky	

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	Up'er 0—10	Lo'er 0—10	Upper From.	Lower. From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.12	765.0	39	3.9	91	N	5	2.2			8		N	0	0			Fair	
N. Yard, Portsmouth, N. H.	29.71	754.6	35	1.7	61	Calm	0	0		10c?		S		0	0			Clear?	
Naval Hospital, Yokohama, Japan	30.09	764.3	34.5	1.4	67	NW			1		8		SW	0	0			Fair	
Adams, Ancon, Peru	30.01	762.2	66	18.9	94	Calm			0		5					Sm'h		Fair	
Alaska, N. Yard, Mare I'd, Cal.	29.95	760.7	55	12.8	93	S			2		10		S	0.04	1.0			Rainy	
Alert, Hong-Kong, China *.	30.19	766.8	62	16.7	72	ENE			1		10		WSW	0	0	Sm'h		Hazy	
Alliance, Pensacola, Fla	29.91	759.7	62	16.7	88	WSW			1		5		S	0	0	Sm'h		Fair	
Ashuelot, Tientsin, China	30.41	772.4	26	— 3.3	100	SE			1		0							Clear	
Colorado, New York, N. Y	29.86	758.4	38	3.3	100	S	1	0.4			10			0	0			Misty	
Constitution. N. Yard, League I'd., Pa			40	4.4	82	Calm	0	0			10							Drizzling	
Franklin, Off N. Yard, Norfolk, Va	29.70	754.4	52	11.1	79	S	12	5.4			5		WSW	0	0			Fair	
Galena, Gibraltar, Mediterranean	29.73	755.1	65	18.3	94	SW			5		8		W			R'gh	SSW	Rainy	
Independence, N. Yard, Mare I'd, Cal.	30.00	762.0	55	12.8	93	S	6.0	2.7			10		Calm	0.07	1.8			Overcast	
Jamestown, Sitka, Alaska *	29.76	755.9	35	1.7	90	ENE			1		10			0.07	1.8			Drizzling	
Kearsarge, Port Royal, Jamaica, W.I.	30.03	762.7	73	22.8	76	NW			1		0					Sm'h		Clear	
Lackawanna, Ancon, Peru †.	30.10	764.5	67	19.4	95	Calm			0		10			0	0			Cloudy	
Marion, S. 53° 10′, W. 70° 53′	30.25	768.3	49	9.4	71	SSW			2		8		SW			Sm'h		Fair	
Michigan, Erie, Pennsylvania	29.93	760.2	16	— 8.9		NW			6		10		NW					Cloudy	
Minnesota, New York, N. Y	29.67	753.6	44	6.7	76	S			1		2							Rain & fog	
Monocacy, Shanghai, China	30.39	771.9	40	4.4	64	S			1		0							Hazy	
New Hampshire, Port Royal, S. C.	29.88	758.9	50	10.0	100	S	21	9.4			8		SW	0	0			Cloudy	
Nipsic, Villafranca, France	29.54	750.3	53	11.7	48	NE			2		10					Long	SSW	Overcast	
Onward, Chimbote Bay, Peru †	29.93	760.2	70	21.1	80	SSE			2		5		NNW			Long	N;W	Fair	
Palos, Shanghai, China	30.41	772.4	41	5.0	65	SE			1		0							Clear	
Passaic, Washington, D. C.	29.70	754.4	41	5.0	82	SW			4		10		SW					Raining	
Pensacola, Pichilinque, Mexico	30.06	763.5	66	18.9	74	SSE			3		0							Clear	
Portsmouth, Washington, D. C.	29.62	752.3	40	4.4	82	S			3		10		SW					Raining	
Powhatan, New York, N. Y.	29.73	755.1	39	3.9	55	SE			1		10							Drizzling	
Quinnebaug, Alexandria, Egypt	29.86	758.4	69	20.6	61	SW			4		1					Mod.		Clear	
Richmond, Pagoda Anchorage, China	30.39	771.9	54	12.2	55	NE			2		2		NE	0	0			Hazy	
Saratoga, Baltimore, Md	29.82	757.4	38	3.3	100	NE			1		10		Calm	Light				Raining	
Shenandoah, Montevideo, Uruguay *	30.11	764.8	68	20.0	90	WNW			2		10					Sm'h		Cloudy	
St. Louis, League Island, Pa	29.83	757.7	38	3.3	91	Calm	0	0			10			0.1	3.			Drizzling	
Swatara, Kobe, Japan †.	30.22	767.6	42	5.6	66	W			1		2		W			Sm'h		Hazy	
Tennessee, St. Croix, W. I.	30.06	763.5	75	23.9	77	E	6	2.7			2		E	0.03	0.8	Sm'h		Fair	
Trenton, Villafranca, France *	29.41	747.0	50	10.0	58	SE			2-3		10			1 h'r	light			Cloudy	
Vandalia. N. 29° 40′, W. 58° 07′	30.06	763.5	63	17.2	72	NNW			5		8		N			Long	N	Fair	
Wabash, Boston, Massachusetts	29.73	755.1	41	5.0	74	SSW	10	4.5			10		SW	0	0			Misty	
Wachusetts, Panama, Panama	29.57	751.1	76	24.4	86	NW			2		5		N	0	0	Sm'h		Fair	
Wyoming, Naples, Italy	29.56	750.8	59	15.0	70	WSW			1		10		WSW			Sm'h		Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic, N. 47° 50′, W. 27° 40′	29.89	759.2	48	8.9	92	NE			5		5					5	ENE	Showery	Capt. H. Parsell.
Ship Baroda, ‡ S. 30° 40′, E. 32° 37′	29.67	753.6	78.6	25.9	87	N			6		7							D. clouds	Capt. C. J. Russell.
British Merchant, ‡ S. 43° 58′, E. 115° 34′	29.64	752.8	51.5	10.8	86	S			6		10							Showery	Capt. E. J. Molony.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡ N. 33° 58, W. 19° 40′	29.55	750.6	66	18.9	81	SW			6		10							Showery	Capt. N. Youlden.
S. S. Cipero, N. 43° 20′, W. 27° 30′	29.68	753.9	54	12.2		NE			6		2					5	E	Blue sky.	Capt. W. N. Lailey.
City of Agra, ‡ S. 56° 08′, W. 92° 14′	30.38	771.6	44.7	7.1	91	WNW			4		10							Overcast	Capt. T. Young.
Barque Commewyne, ‡																			Capt. W. Scott.
Barque Coppename, N. 31° 22′, W. 19° 31′	29.69	754.1	67.8	19.9	82	WSW			6		8							D. clouds	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra, ‡ S. 28° 11′, E. 46° 44′	29.99	761.7	74.8	23.8	67	ENE			6		6							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 19° 02′, E. 86° 00′	30.10	764.5	74.5	23.6	68	NE			3		18							Blue sky	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 42° 40′, W. 20° 00′	29.38	746.2	48.5	9.2	100	ENE			8		10							Raining	Capt. H. W. Dyke.
Barque Meriola																			Capt E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 34° 27′, E. 22° 19′	29.72	754.9	65.5	18.1	94	WNW			6		6							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			Capt. F. Archer.
S. S. Hibernian																			
Moravian																			Capt. W. H. Smith, R.N.R.
S. S. Peruvian																			
CUNARD LINE. *Ch. G. Francklyn.*																			Capt. W. Watson.
S. S. Algeria																			
S. S. Bothnia																			
S. S. Scythia, N. 40° 55′, W. 62° 33′	29.88	758.9				E			3		0			0	0	Sm'h		Fine	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			Capt. J. W. Jennings.
S. S. Adriatic																			Capt. H. Perry.
S. S. Britanic																			
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, New York, N. Y †	29.71	751.6	41	5.0		SW			1		10?		SW	2 hours				Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			Capt. C. Undütsch.
S. S. Braunschweig																			Capt. H. Maur.
S. S. Hermann																			
S. S. Köln, N. 43° 58′, W. 52° 37′	29.79	756.7	40.1	4.5		ENE			3-4		8		E	Fog	Fog	Long	E	Fair	
S. S. Leipzig, ‡ N. 44° 16′, W. 51 39	29.80	756.9	44.0	6.7	92	E			4		2		E	0	0	Mod.	E	Clear	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolph Fredholm, ‡ S. 21° 25′, W. 28° 23′ *†	30.20	767.0	18.6	27	77	NNE			1		2							Blue sky	Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Sköterbrand

UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. N. 44° 42′, W. 47° 00′	29.66	753.4	47	8.3	92	NE			5		5		ESE			Mod.	ENE	Misty	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 41° 51′, W. 63° 37′ †	29.91	759.7	50	10.0	86	SW			2		5		W	0	0	Sm'h	SW	Partly cl'dy	Capt. R. W. Sargent.
S. S. Ohio, ‡ Liverpool, England. †*	29.79	756.7	25	— 3.9	?	W			1		10		W	Fog				Dense fog	Wm. Shakford, 1st Off'r.
S. S. Pennsylvania, ‡ N. 48° 25′, W. 32° 23′ †	30.10	764.5	48	8.9		E			5		8		E	0	0	R'gh	E	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 24° 14′, W. 109° 31′ †	29.98	761.5	69	20.6	80	WNW			2		2		NW	0	0	Sm'll	NW	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 35° 38′, E. 147° 05′ †	30.16	766.1	50	10.0	65	NNW			5		8		W	Hail		High	WNW	Cloudy	Capt. H. Davison.
S. S. Gaelic, San Francisco, Cal. *†	30.43	772.9	51	10.6	?	SW			5		10		SW					Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 44° 55′, W. 179° 27′	29.59	751.6	41	5.0	82	WSW			5		2		WSW	0.36	9.1	Mod.	W	Fine	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon †	29.36	745.7	36.0	2.2	90	NW			2		10		NW					Snowing	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, N. 35° 31′, W. 121° 08′ †	30.08	764.0	56	13.3	87	NW			1		10		W			H'vy		Cloudy	Capt. J. N. Ingalls.
S. S. Idaho																			C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. State of California, Astoria, Oregon †	29.42	747.3	36	2.2	90	NE			3		10		N					Cloudy	Capt. G. Debney.
S. S. Victoria, N. 40° 36′, W. 124° 40′ †	30.07	763.8	54	12.2	93	S			6		10					R'gh	SW	Rainy	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, S. 35° —′, E. 175° 50′ †	30.03	762.7	68	20.0	84	E			3		8		E	0	0	Light	E	Cloudy	Wm. H. Hawes, 2d Officer,
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, N. 29° 40′, W. 157° 57′ †	30.20	767.1	59	15.0	82	WNW			2		2		NW	0	0	Light	W	Fair	Capt. G. G. Berry.
S. S. City of Sidney, N. 3° 39′, W. 164° 52′ †	29.92	760.0	80	26.7	82	ENE			3		5		NE	0	0	H'vy	N	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 24° 12′, E. 118° 18′ †	30.42	772.7	58	14.4	76	NE			4		10			0	0	Sm'h		Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 23° 12′, W. 106° 23′ †	30.04	763.0	67	19.4	74	N			2		0			0	0	Sm'h		Clear	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, N. 15° 20′, W. 94° 10′ †	29.96	761.0	80	26.7	78	Calm			0		0			0	0	Sm'll	SE	Clear	
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland ‡																			Capt. Sam'l Jackson.
S. S. Nederland ‡																			Capt. S. Stokes.
S. S. Rhyniand ‡																			Capt. W. Geo. Randle.
S. S. Vaderland ‡																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Brunswick, Ga	29.95	760.7	53	11.7	80	SW	5	2.2			Haze			0	0			Hazy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, ‡ Arroyo, P. R. †	30.33	770.4	78	25.6		ENE			4		2		E	0	0	Sm'h		Clear	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va. †	29.89	759.2	52	11.1	86	S	3	1.3		2c	5n			0.04	1.0			Cloudy	
Sch'r Hattie V. Kelsey,																			Capt. J. L. Randall.
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Spain †	29.37	746.0	63	17.2	100	SSW			9		10		W	Heavy				Cloudy	Capt. Jos. Hand.

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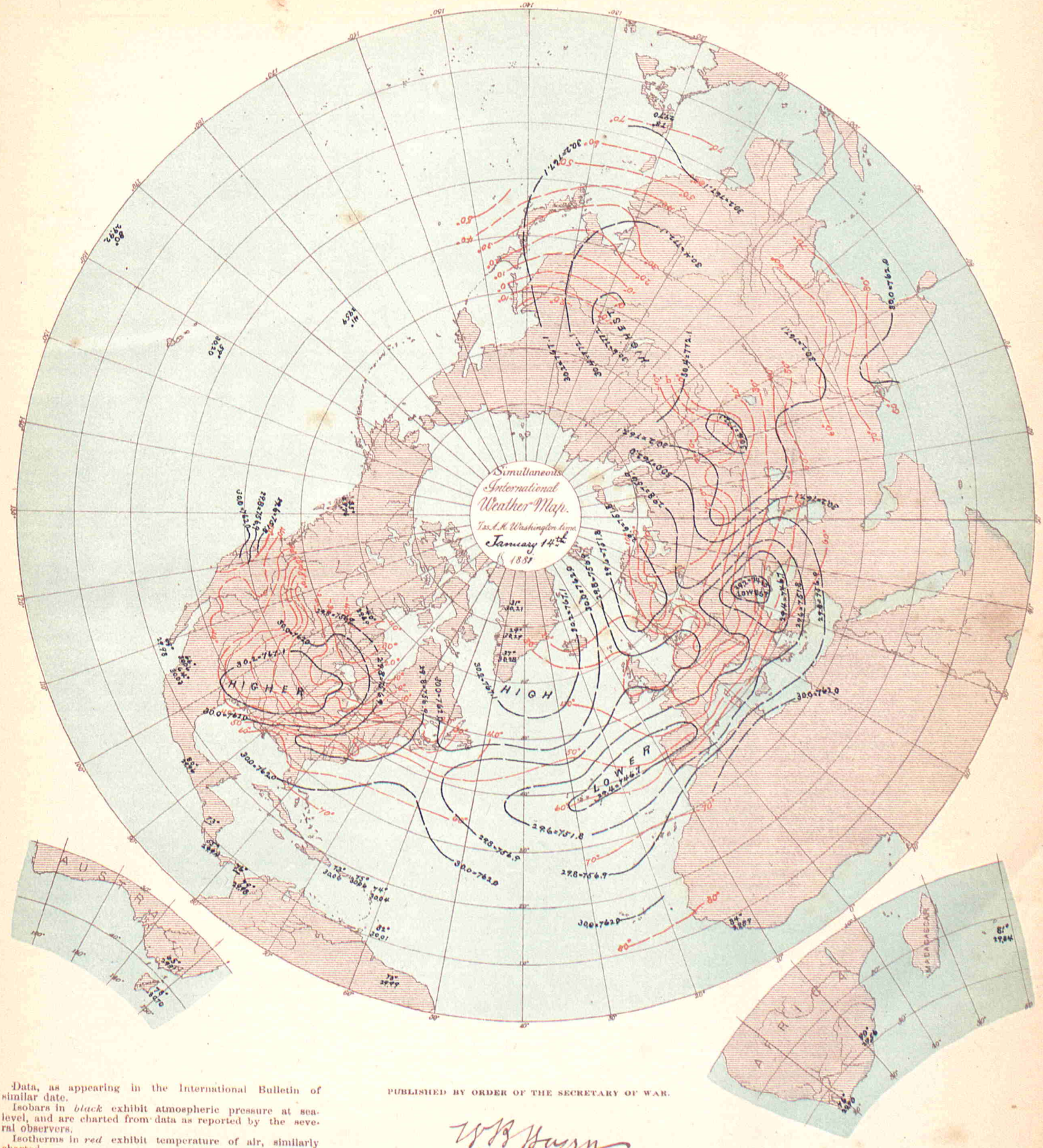
W. B. Hazen

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



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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 15, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a †.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower	Rain-fall or melted snow in the past 24 hours.		Weather	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.94	760.4	69.6	20.9	83	SW			6		6			0	0	Cloudy	Dr. Ollive.
Nemours			29.72	754.8	65.7	18.7	68	S			2		2			0.028	0.7	Fair	Reynard.
Algie s			29.67	753.5	69.1	20.6	54	W			6		9			Inap.	Inap.	Covered	Nicolas.
La Calle			29.89	759.3	75.6	24.2	41	WNW			4		7			0	0	Very cloudy	Fenfrède.
Tunis			29.72	754.8															Jacques.
Sfax			29.86	758.4															Gau.
Said.a			29.87	758.8	64.9	18.3	93	W			6		2			0	0	Fair	Dumas.
Tebessa			29.89	759.3	68.7	20.4	30	W			7		7			0	0	Very cloudy	Watrin.
Geryille																			Lonchamp.
Laghouat			30.00	762.1	70.2	21.2	55	NE			4		10			0	0	Covered	Herbin.
Biskra			29.92	760.0	73.4	23.0	59	NW			1		8			0	0	Very cloudy	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.59	751.6	29.68	753.9	75.9	24.9	49	SE	5	2.2			1			0	0	Very fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.70	754.4	75	23.9		SE			2		0			0	0	Clear	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.13	740.0	29.72	755.0	20.3	— 6.5	87	NW			2		10			0.094	2.4	Snowing	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.99	736.4	29.83	757.6	7.9	—13.4	88	W	0	0			0			0	0		Dr. Wiersbicki.
Eperies	28.83	732.2	29.78	756.4	13.6	—10.2	51	Calm			0		308			0	0		Julius Mikolik.
Gratz†	28.41	721.6	29.74	755.5	18.5	— 7.5	72	SE			2		10			0.039	1.0		Andreas Rospink.
Hermannstadt	28.20	716.2	29.74	755.3	14.0	—10.0	91	WNW			3		10			0.096	2.45	Snowing	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.25	717.5	29.71	754.6	9.1	—12.7	88	SE			1		4			0	0		The Staff.
Lemberg	28.71	729.1	29.77	756.1	15.4	— 9.2	84	NW			1		1			0	0		Dr. T. Stanecki.
Pola	29.35	745.5	29.47	748.5	34.5	1.4	55	NE			2		10			0	0		I. R. HydrographicOffice.
Szathmar	29.33	745.0	29.78	756.5	9.0	—12.8	76	N			2		10			0	0		Beicht Peter, S. J.
Szegedin	29.40	746.8	29.70	754.4	16.5	— 8.6		NW			3		10			0	0		Karl Stancel.
Trieste	29.42	747.2	29.52	749.8	27.0	— 2.8	79	ENE			5		10			0	0	Cloudy	P. Busin.
Vienna	29.04	737.5	29.82	757.3	10.2	—12.1	85	Calm			0		6			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 20, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.59	751.6	29.69	754.1	28.0	— 2.2	94	NW	25	11.2			9			0.130	3.30	Snowing	W. Boswell.
Armagh, Observatory	29.58	751.3	29.82	757.4	27.5	— 2.5	88	SW	3	1.3			8			Blank	Blank	Overcast	S. Call.
Bidston, Liverpool Obs'y			29.73	755.1	31.9	— 0.1	74	WSW	21	9.4			10					Overcast	John Hartnup.
Bolton, Sharples	29.17	740.9	29.72	754.9	19.2	— 7.1	100	NNE	6	2.7			10					Foggy	Thomas Mackereth.
Bradford, Yorkshire	29.34	745.2	29.74	755.4	25.9	— 3.4	70	NW			1		6			0	0	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	81.0	27.2	66	NE			2		3					Blue sky	Pvt. J. Surgenor, A. H. C.
Cardington			29.75	755.6	24.0	— 4.4	80	W			0.4		1					Blue sky	John McLaren.
Chatham, School M. E.	29.67	753.6	29.81	757.2	24.2	— 4.3	90	Calm			0		0?					Overcast?	Cpl. Gwinn, R. E.
Falmouth, Observatory	29.60	751.8	29.83	757.7	32.2	0.1	79	N			1		0					Foggy	The Staff.
Fort Napier, Natal	27.83	706.9	30.02	762.5	64.3	17.9	94	NE			2		10					Overcast	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	85	29.4	83	NW			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			29.78	756.4	26	— 3.3	88	SE			2		0					Foggy	J. O'Donaghadue.
Gibraltar, Mediterranean	29.85	758.2	29.90	759.4	63.6	17.6	93	SW			6		9					Raining	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.55	750.6	29.76	755.9	18.6	— 7.4	100	W										Blue sky	D. G. MacLean.
Greenwich, Royal Obs'y	29.64	752.8	29.82	757.4	20.6	— 6.3	92	SW			1		0					Misty	The Staff.
Guernsey	29.57	751.1	29.80	756.9	33.5	0.8	70	SE			2		3			Blank	Blank	D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.78	756.4	29.82	757.4	20.0	— 6.7	90	N	4	1.8			0					Blue sky	The Met'g'l Office.
Leicester, Museum	29.53	750.0	29.80	756.9	17.0	— 8.3	100	SW			1		10					Misty	J. E. Carryer.
Malta, Mediterranean	29.59	751.6	29.67	753.6	68.8	20.4	62	SW			2		1					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			29.98	761.5	73.0	22.8	91	SW			0		6					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.24	742.7	29.79	756.7	26.0	— 3.3	82	WSW			1		3					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	29.53	750.0	29.79	756.7	22	— 5.6	100	Calm			0		0					Misty	The Staff.
Plymouth	29.75	755.6	29.83	757.7	27.0	— 2.8	88	NNE			1		0					Misty	John Merrifield.
Sandwick Manse, Orkneys			29.73	755.1	26.8	— 2.9	100	N	18	8.0			10					Snowing	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.44	747.8	29.50	749.3	41.0	5.0	87	NE			2		10			Blank	Blank	Misty	Serg't W. H. Lyne.
Sheffield	29.44	747.8	29.74	755.4	30.9	— 0.6	100	SW			3		5			0	0	D. clouds	W. F. Cooper.*
Silloth Rectory	29.70	754.4	29.73	755.1	22.8	— 5.1	42	Calm			0		0			0	0	Blue sky	Rev. F. Redford, A. M.
Stonyhurst, Observatory			29.72	754.9	26.7	— 2.9	85	Calm	0	0			10					Snowing	Rev. S. J. Perry.
Strathfield Turgiss					26.2	— 3.2	91	NE			1		0					Blue sky	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	29.68	753.9	29.79	756.7	37	2.8	62	NE			1		0					Blue sky	W. Newcombe.
Valencia, Observatory	29.82	757.4	29.85	758.2	34.5	1.4	70	N	2	0.9			2					Misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	29.87	758.7	29.91	759.7	9.6	—12.4		NW	5	2.2			10n			Inap.	Inap.	Snowing	Hon. J. Ferguson.
Chatham, N. B.*	29.70	754.4	29.77	756.1	18	— 7.8	94	NW	6	2.7			10s		NW	0.48	12.2	Light snow	G. A. Blair.
Charlottetown, P. E. Island	29.60	751.8	29.65	753.1	37	2.8	92	SE	15	6.7			10n			0.168	4.26	Light rain	H. J. Cundall, C. E.
Chicontime, Quebec					—23.9	—31.1		NW			3	0	1s			0.20	5.1	Clear	Rev. V. A. Huart.
Cornwall, Ontario	30.08	764.0	30.30	769.6	—22.0	—30.0	100	W			1	0	0			0	0	Clear	James Smith, M. A.
Dalhousie, N. B	29.88	758.9	29.92	760.0	6.0	—14.4		W			4		10s			0.60	15.2	Cloudy	H. A. Johnson.
Father Point, Quebec*	30.12	765.0	30.15	765.8	— 6	—21.1	81	NW	4	1.8			10n			0.20	5.1	Cloudy	J. McWilliams.
Fredericton, N. B	29.78	756.4	29.85	758.2	9.4	—12.6	89	NW	14	6.3			10s			0.900	22.86	Cloudy	Prof. Harrison.
Fort Garry, Manitoba*	29.09	738.9	30.09	764.3	—34	—36.7	100	W	2	0.9		0	0			0	0	Clear	James Stewart.
Granton, Ontario	28.98	736.1	30.22	767.6	— 1.8	—18.8	76	NW			1		10n			0	0	Cloudy	James Grant.
Halifax, N. S.*	29.51	749.5	29.65	753.1	38	3.3	98	SE	10	4.5			Fog			0.552	14.02	Heavy rain	A. Allison.
Hamilton, Ontario	29.84	757.9	30.28	769.1	0.4	—17.6	82	SW			1	rock	0			0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.89	759.2	30.26	768.6	—13	—25.0	92	NE	3	1.3		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S	29.85	758.2	29.89	759.2	33.2	0.7	98	SE	2	0.9			10n			Inap.	Inap.	Foggy & driz.	C. H. Rigby.
Montreal, Quebec*	30.07	763.8	30.30	769.6	—12	—24.4	75	W	5	2.2		0	Sm'e		N	0.03	0.8	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A.
Parry Sound, Ontario*	29.42	747.3	30.20	767.1	1	—17.2	71	E	7	3.1			10n		E	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.47	748.5	30.34	770.6	— 9.3	—22.9	78	NW			1	0	0			0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.47	748.5	30.26	768.6	— 2	—18.9	100	N	4	1.8		8ck	0	SE		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.49	749.0	30.20	767.1	7	—13.9	82	SE	10	4.5			10n		E	0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.81	757.2	30.18	766.6	—12	—24.4	90	W			3	0	0			0.25	6.3	Clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.74	755.4	30.28	769.1	—17	—27.2	76	SE	4	1.8			10n			Inap.	Inap.	Light snow	W. H. McIntyre.
St. Andrews	29.76	755.9	29.81	757.2	14	—10.0	63	NW	12	5.4			10n			0.48	12.2	Cloudy	
St. John's, N. B	29.56	750.8	29.74	755.4	17.0	— 8.3	100	NW	17	7.6			10n			1.72	43.7	Snowing	G. Murdock, C. E.
Saugeen, Ontario*	29.37	746.0	30.17	766.3	0	—17.8	76	SW	16	7.2			10ks			0	0	Cloudy	K. Stewart.
Stratford, Ontario	28.81	731.8	30.26	768.6	— 4.6	—15.2	96	SE	5	2.2			10s			0	0	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.85	758.2	29.90	759.4	34	1.1	97	SE	4	1.8			Fog			0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.86	758.4	30.29	769.4	3	—16.1	81	N	3	1.3			10s			0	0	Cloudy	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario	29.05	737.9	30.27	768.8	— 5.7	—20.9	85	SW	2	0.9			10s			0	0	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*	29.57	751.1	29.63	752.6	26	— 3.3	89	N	32	14.3			10s		N	0.41	10.4	Hailing	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	30.21	767.3	30.38	771.6	36	2.2	100	S	1	0.4		10k	10s			0	0	Cloudy	John Delany.
St. Pierre, N. F			29.98	761.5	33.8	1.0		SE			1					0	0		N. F. Land, Comdt.
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.94	760.5	29.98	761.5	91.7	33.2	38	SSE				ck	0			0	0		The Staff, for D. Gill.
Cape St. Francis Lt. House	30.13	765.3			68.8	20.4	75	E	20.1	9.0			10n			0.143	3.61	Light rain	John Duthie.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.45	773.4	30.47	774.0	36.5	2.5	85	NNE	3.8	1.7			0			0	0	Clear	M. Marc Dechevrens, S. J.

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

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.21	665.7	29.93	760.2	62.6	17.0	80	SE			1					0	0	Clear	Federico Maison.

DANISH SERIES.

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

Copenhagen	29.39	746.5	29.44	747.7	24.4	— 4.2	100	SW	29	13			10					Snowing	
Fanöe	29.41	746.9	29.43	747.4	29.8	— 1.2	98	W			2		10					Snowing	
Godthaab, Greenland	30.32	770.1	30.36	771.2	32.9	0.5	82	S			2		4						
Stykkisholm, Iceland	30.35	770.9	30.39	772.0	13.6	—10.2	90	E			2		0						
Thorshavn	29.87	758.6	29.90	759.5	21.7	— 5.7	67	N	18	8			6					Snowing	
Vestervig	29.33	744.9	29.42	747.3	18.3	— 7.6	100	Calm			0		2						

FRENCH SERIES.

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

Agen, Normal School	28.98	736.0	29.66	753.4	26.6	—3	82	N			2		8			0.12	3.	Al. covered	M. Labroue, Director.
Alençon	29.29	743.9	29.84	757.9	16.5	—8.6	94	NE			1		0			0	0	Clear	M. Nicot, Director.
Arras, Engineer School	29.53	750.1	29.81	757.2	11.5	—11.4	85	NNE					0					Clear	M. Klein, Commandant.
Avignon, Normal School	29.43	747.5	29.51	749.5	28.9	—1.7	96	N			2		10			0	0	Covered	M. Giraud, Director.
Bar-sur-Seine	29.14	740.2	29.74	755.3	20.5	—6.4	57	ENE			1		5		NE	0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.54	750.2	29.83	757.6	14.7	—9.6	94	N			1		0			0	0	Clear	M. Frère Eugene Marie.
Besançon, Normal School	28.80	731.4	29.69	754.2	23.2	—4.9	100	NE			4		2cu		NW	0.47	12.	Slightly cl'dy	M. Gobin, Director.
Bordeaux, Observatory	29.40	746.8	29.68	753.8	27.0	—2.8	96	NE			1		Mist			0.236	6.0	Misty	M. Rayet, Director.
Bourges, Normal School	29.13	739.9	29.71	754.7	23.0	—5	95	N			1		5k		W	0	0	Cloudy	M. Postel, Director.
Brest, Naval Observatory	29.63	752.6	29.87	758.8	34.5	1.4	70	SSE			1		4		SE	0	0		M. de Rermaree, Dir.
Caen, Normal School	29.69	754.2	29.77	756.1	42.1	5.6	95	E			1		0			0	0	Clear	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.41	746.9	29.74	755.5	24.8	—4.0		NNE			2		0			0	0	Clear	M. Jadot, Director.
Charleville, Normal School	29.22	742.2	29.76	756.0	24.8	—4	95	SSE			1		0			0.177	4.5	Clear	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.25	717.5	29.69	754.1	20.5	—6.4	79	N			1		10			0.004	0.1	Light snow	M. Alluard, Director.
Cluny, Normal School	28.74	730.0	29.61	752.1	25.2	—3.8		N			4		1	S	S	0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	28.82	731.9	29.74	755.3	19.0	—7.2		NE			4					0	0		Dr. Coulet, Director.
Gap, Normal School	26.89	683.1	29.49	749.0	29.5	—1.4	49	SW			1		10		SW	0.724	18.4	Snowing	M. Jeangirard, Director.
Gréasque, du. Rhone	28.30	718.7	29.44	747.7	34.2	1.2	92	NW			1		10		SW	0.657	16.7	Snowing	M. Kina, Director.
Grenoble, Normal School	28.79	731.3	29.60	751.9	23.4	—4.8		WNW			3		10n			0.31	8.	Snowing	M. Ablard, Director.
Guéret, Normal School	28.01	711.5	29.70	754.4	17.6	—8	89	NE			3		10		SW	0	0	Covered	M. Rivoir, Director.
Lamballe, Normal School	29.54	750.2	29.82	757.5	31.5	—0.3	64	NNE			2		1		NNE	0	0	Light haze	M. Ollitrault, Director.
Lescar, Normal School	29.05	737.8	29.74	755.4	31.3	—0.4		E					10			0.94	24.	Covered	M. Chauvin, Director.
Lorient, Naval Observatory	29.77	756.1	29.87	758.7	36.3	2.4	75	NE			2		2		NE	0	0	¼ covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.56	725.3	29.63	752.7	22.8	—5.1	69	NNW			4		8sn		NNW	0	0	Almost cov'd	M. André, Director.
Mans, Normal School	29.49	749.1	29.82	757.4	18.9	—7.3	76	NNE			1		2		NW	0	0	Slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.15	740.4	29.42	747 3	38.1	3.4	79	NW			1		10		NW	0.469	11.90	Raining	M. Stephan, Director.
Montlouis l'instituteur	24.19	614.4	29.43	747.4	34.7	1.5	84	SW	24.2	10.8			10	SSW		0.339	8.6		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.40	746.8	29.51	749.6	36.3	2.4	76	N			3		10					Snowing	M. Galzin, Director.
Nancy, Normal School	29.10	739.1	29.92	759.9	19.4	—7.0	73	N			1		0			0	0	Clear	M. Hasse.
Nantes, Observatory	29.70	754.4	29.85	758.5	27.7	—2.4	52	N			2		0			0	0	Clear	M. Larocque, Dir.
Nice	29.35	745.4	29.38	746.3	42.4	5.8	88	NE			2		10	SE	SE	0.835	21.2	Covered	Capt. Boissière, Director.
Perpignan, Observatory	29.43	747.4	29.53	750.1	37.6	3.1	62	NW	15.0	6.7			10	NW	NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	21.89	556.2			31.8	—0.1							10		SW	0.469	11.9	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.46	722.9	29.58	751.2	25.6	—3.0					3		10			0	0	Covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.54	623.2			9.9	—12.3	94	ENE			4	8ck				0.287	7.3		M. Alluard, Director
Rochefort, Naval Obs'y	29.69	754.2	29.72	755.0	29.8	—1.2	88	ENE			2		5	ENE		0	0	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.56	750.9	29.79	756.7	24.4	—4.2	73	NNW			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.35	694.7	29.59	751.5	27.5	—2.5	90	W			1		Fog			0	0	Foggy	M. Richard, Director.
Rouen, Normal School	29.73	755.1	29.82	757.3	17.8	—7.9	63	SE			1		0			0	0	Clear	M. Platrier, Director.
Saint Lô, Normal School	29.69	754.0	29.84	758.0	23.4	—4.8	67	E			1		Haze			0	0	Hazy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.63	752.6	29.80	756.8	15.3	—9.3	88	NE			1		7		N				M. Renou, Director.
Toulouse, Observatory	28.91	734.4	29.63	752.5	28.0	—2.2	98	W			2		10			0	0	Covered	M. Baillard, Director.
Tours	29.58	751.2	29.67	756.2				NE			1		1	Calm	E	0	0	Almost clear	M. de Tastes.
Versailles, Observatory	29.28	743.8	29.78	755.4	15.8	—9.0	81	NE			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	28.82	732.0	29.67	753.7	11.8	—11.2	68	NE			5		28			0	0		Prof. Dr. Hoh.
Berlin	29.60	751.8	29.79	756.6	12.4	—10.9	73	SW			1		0			0	0		Prof. Dr. Arndt.
Breslau	29.27	743.5	29.80	756.9	13.3	—10.4	77	SW			1		0			0	0		Royal University Obs'y.
Carlsruhe	29.32	744.7	29.78	756.3	15.1	— 9.4	100	NE			1		10	NE		0	0		Albert Senz.
Cassel	29.11	739.3	29.71	754.6	3.9	—15.6	81	N			0		0			0	0		Dr. H. Möhl.
Frankfort on the Main	29.52	749.7	29.91	759.8	10.0	—12.2		NE			2		4			0	0		Physical Society.
Friedrichshafen	28.15	714.9	29.64	752.8	18.7	— 7.4	64	NNE			7		10					Light snow	Chief Telegrapher Wilhelm.
Hamburg	29.63	752.5	29.70	754.3	14.2	— 9.9	67	SW			5		4			0	0		Dr. R. Kleeman.
Kiel	29.62	752.4	29.64	752.8	18.3	— 7.6	70	SSW			4		8			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.37	746.0	29.84	757.8	2.8	—16.2	100	SE			1		7			0	0	Hazy	Prof. Dr. Bruhns.
Magdeburg	29.55	750.5	29.79	756.7	3.2	—16.0	71	Calm			0		0			0	0		Dr. Assmams.
Memel	29.54	750.3	29.59	751.5	10.4	—12.0	100	S			1		10n					Foggy	Reinbrecht & Issermann.
Munich	27.75	704.8	29.58	751.4	11.1	—11.6	79	NW			1		10			0.012	0.3	Snowing	Central Station.
Neufahrwasser	29.63	752.7	29.65	753.1	21.6	— 5.8	55	WSW			4		2			0.031	0.8		A Lothes.
Neustadt, Palatinate	29.11	739.5	29.63	752 7	15.3	— 9.3		NE			1		0			0	0		Dicknether.
Stuttgart	28.71	729.3	29.67	753.6	14.9	— 9.5	39	NW			1		3	N		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.12	714.3	29.64	752.8	10.8	—11.8	83	Calm			0		10			0	0		Prof. Kemlein.
Wustrow	29.60	751.7	29.62	752.3	19.0	— 7.2	95	SW			6		5s			0	0		Prof. S. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.24	742.8	29.63	752.7	66.0	18.9		SW			1.5		5					½ clear	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.07	763.8	30.12	765.1	77.9	25.5	39	NE	20.0	8.9			0			0	0	Blue sky	
Deesa	29.59	751.6	30.07	763.7	82.7	28.2	35	SE	14.2	6.4			8	SE		0	0	D. clouds	
Bombay	30.00	761.9	30.03	762.8	82.2	27.9	61	WNW	9.0	4.0			0			0	0	Blue sky	
Poona, Yarrowda	28.18	715.7	30.04	763.0	80.8	27.1	22	ENE	8.0	3.6			3		E	0	0	D. clouds	
Belgaum	27.47	697.7	30.02	762.4	77.1	25.1	28	ENE	7.0	3.1			1	NE		0	0	D. clouds	
Lahore	29.44	747.7	30.22	767.5	62.6	17.0	33	Calm	0.4	0.2			0			0	0	Blue sky	
Roorkee	29.25	742.9	30.18	766.7	64.8	18.2	44	Calm	1.6	0.7			0			0	0		
Agra	29.62	752.4	30.21	767.3	68.3	20.2	39	N	2.3	1.0			0			0	0		
Nagpur	29.04	737.6	30.10	764.4	79.7	26.5	26	E	1.3	0.6			0			0	0	Blue sky	
Jubbulpore	28.75	730.3	30.17	766.3	64.8	18.2	55	Calm	1.4	0.6			0			0	0	Blue sky	
Lucknow	29.71	754.6	30.10	764.6	67.5	19.7	31	Calm	0.8	0.4			0			0	0	Blue sky	
Allahabad	29.86	758.3	30.19	766.7	61.8	16.6	67	Calm	0.8	0.4			0			0	0	Blue sky	
Patna	29.98	761.4	30.17	766.2	63.1	17.3	60	W	1.1	0.5			0			0	0	Blue sky	
Hazaribagh	28.08	713.4	30.19	766.8	59.8	15.4	41	NW	5.1	2.3			0			0	0	Blue sky	
Cuttack	30.06	763.6	30.15	765.7	71.9	22.2	53	Calm	1.1	0.5			0			0	0	Blue sky	
Calcutta, Alipore	30.11	764.8	30.13	765.3	64.5	18.1	60	NNW	1.0	0.4			0			0	0	Blue sky	
Goalpara	29.69	754.0	30.10	764.6	68.7	20.4	59	Calm	5.5	2.5			0			0	0	Blue sky	
Chittagong	30.02	762.4	30.11	764.8	68.3	20.2	58	NNW	2.8	1.2			0			0	0	Blue sky	
Sibsagar	29.80	757.0	30.16	766.0	60.4	15.8	81	NE	2.0	0.9			0			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.13	740.0	29.56	750.8	30.4	— 0.9	51	E	10.5	4.7			10			0.150	3.8		Prof. Giovanni Clodig.
Milan	29.43	747.4	29.54	750.2	32.5	0.3	65	ENE	8.7	3.9			10			0	0		Prof. Schiaparelli.
Padua	29.43	747.4	29.54	750.2	32.5	0.3	65	ENE	8.7	3.9			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.60	726.5	29.55	750.5	33.4	0.8	85	NE	1.3	0.6			10			0.138	3.5		Prof. P. F. Denza.
Genoa	29.27	743.5	29.47	748.5	34.3	1.3	64	N	11.2	5.0			10	NE		0.114	2.9		Prof. G. M. Garibaldi.
Mondovi	27.56	700.0	29.56	750.8	30.0	— 1.1	78	N			2		10			0	0		Prof. D. C. Bruno.
Pesaro	29.45	747.9	29.50	749.2	33.4	0.8	85	W	15.0	6.7			10			0.787	20.0		Prof. Luigi Guidi.
Florence	29.20	741.6	29.46	748.3	34.5	1.4	92	NNE			2		10			0.433	11.0		Cav. F. Meucci.
Leghorn	29.44	747.7	29.52	749.9	35.2	1.8	91	NW	14.3	6.4			10			0.248	6.3		Prof. P. Monte.
Rome	29.22	742.1	29.39	746.6	48.4	9.1	84	WNW	1.3	0.6			10			0.039	1.0		Prof. P. S. Ferrari.
Lecce	29.20	741.6	29.45	748.1	58.8	14.9	74	NNE	9.4	4.2			8			0.039	1.0		Prof. C. de Giorgi.
Cosenza	28.70	729.0	29.60	751.7	60.1	15.6	73	NNW	6.9	3.1			9	NW		0	0		Prof. D. Conti.
Cagliari	29.26	743.2	29.45	748.1	65.1	18.4	60	NW			6		7	WNW		0	0		Prof. A. Pacinotti.
Palermo	29.34	745.3	29.59	751.6	66.7	19.3	53	WSW	24.8	11.1			10	W		0	0		Prof. G. Cincciatore.
Syracuse	29.58	751.4	29.63	752.5	67.5	19.7	59	S	6.3	2.8			8	SW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R.	28.95	735.2	29.46	748.2	57.6	14.2	82	WSW	4.3	1.9		rock		SSW		0	0		Prof. F. Brioschi.
Stelvio	21.85	555 0			8.6	—13.0	73	SSW					4			0	0		P. F. Denza.
Valdobbia	21.44	544.5			11.8	—11.2	83	E					10			0	0		
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y	30.14	765.5	30.16	766.0	41.9	5.5	62	W	2.8	1.3			0			0	0	Clear	K. Sasaki.
Kioto	29.93	760.2	30.11	764.8	32.0	0.0	91						5ck;s		W	0	0	Fair	
Nagasaki, I. M. Obs'y	30.08	764.0	30.29	759.3	46.6	8.1	61	NW	6.0	2.7		ck	1k			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.89	759.2	29.96	761.0	34.2	1.2	78	NNW	4.0	1.8		0	0			0	0	Clear	The Staff.
Wakayama	30.08	764.0	30.13	765.3	40.3	4.6	79	NNE	1.5	0.7			4ck;ks		W	0	0	Fair	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.70	754.4	29.89	759.2	81.4	27.4	67	ENE	10.0	4.5		6	2	WNW	ENE	0.01	0.3	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.72	754.8	29.98	761.5	66.0	18.9	54	N			1	0	0			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.79	756.6	29.79	756.6	20.7	— 6.3		SW			2					0	0		
Groningen	29.64	752.8	29.69	754.2	14.4	— 9.8		SSW			4					0	0		
Helder	29.68	753.9	29.68	753.9	21.2	— 6.0		SSW			4					0.157	4.0		
Hellevoetsluis	29.77	756.1	29.77	756.1	20.3	— 6.5	94	SSW			2					0	0		
Utrecht	29.73	755.2	29.78	756.4	18.1	— 7.7	83	SSW			2		2			0	0	Lightly cl'dy	H. van der Brink

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.48	748.8	29.54	750.4	22.3	— 5.4	47	NNW	7.4	3.3			1			0	0		
Christiania	29.27	743.4	29.43	747.5	4.3	—15.4	86	E	2	1			8			0	0		
Gjæsvær	29.70	754.4	29.72	755.0	10.4	—12.0		Calm			0		8						
Lodingen	29.58	751.3	29.63	752.5	12.7	—10.7	66	ENE			6		5			0	0		
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.34	745.2	29.50	749.2	56.1	13.4	98	ESE	12.5	5.6			8			0.157	4.0		Dr. J. A. Sampaio.
Campo Major	28.89	728.2	29.58	751.3	58.3	14.6	79	W	11.9	5.3			10			0.240	6.1		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.73	755.2	29.82	757.4	67.8	19.9	92	WSW	5.6	2.5			10			0.365	9.3	Foggy	Capt. D. A. de Cunha.
Lisbon, Observatory	29.25	743.0	29.61	752.0	59.9	15.5	93	SW	24.8	11.1			10			0.138	3.5		The Staff.
Ponta Delgada, Azores	29.47	748.4	29.54	750.2	61.5	16.4	87	SW	1.3	0.6			3			0	0		
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.20	741.6	30.39	771.9	7.5	—13.6	100	NE	18	8			10					Light clouds	Capt. Lasarew.
Archangel	29.75	755.6	29.77	756.1	— 0.8	—18.2	80	NE	13	6			10						Capt. Sselliwerstow.
Astrakhan	29.88	759.0	29.80	756.9	30.0	— 1.1	63	W	18	8			7ks						Capt. Wisganow.
Barnaul	30.05	763.3	30.61	777.6	4.1	—15.5	90	Calm	0	0			5					Light clouds	Meteorological Obs'y.
Dorpat	29.18	741.2	29.45	747.9	1.4	—17.0	79	WNW	7	3			5k						Observatory.
Ekaterinburg	29.13	739.9	30.19	766.7	5.9	—14.5	92	SE	18	8			9ck						Meteorological Obs'y.
Kasan	28.91	734.2	29.19	741.3	18.9	— 7.3	91	SE	18	8			10					Snow-drift.	Observatory.
Kertch	29.75	755.6	29.77	756.1	24.6	— 4.1	73	NW	7	3			10						Lagorio.
Kieff	28.87	733.4	29.57	751.0	5.5	—14.7	78	W	18	8			0					Solar halo	Observatory.
Krotkowo, N. 58°47', E. 48°34'																			Cand. Fatjanow.
Lugan	29.36	745.7	29.58	751.3	12.7	—10.7	69	SW	18	8			4			Blank	Blank	Light clouds	Meteorological Obs'y.
Moscow	28.19	715.9	28.78	730.9	0.7	—17.4	78	S	13	6			10s					Snow-drift.	Meteorological Obs'y.
Nertchinsk	28.02	711.8	30.68	779.2	—11.2	—24.0	70						0						Meteorological Obs'y.
Nikolaiev	29.74	755.3	29.81	757.1	14.0	—10.1	64	NW	4	2			7cs					Light clouds	1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.85	758.2	29.94	760.4	— 7.6	—22.0	77	Calm	0	0			10n						Lieut. Iwanow.
Nukuss	29.78	756.5	30.02	762.5	55.8	13.2	66	Calm	0	0			1s						Dr. Dobrochotow.
Pekin, China	30.32	770.0	30.46	773.6	25.5	— 3.6	47	Calm	0	0			0						Physical Observatory.
St. Petersburg	29.17	740.8	29.18	741.2	8.1	—13.3	92	N	22	10			10n					Light snow.	Central Physical Obs'y.
Tashkend, Laboratory	28.47	723.0	30.05	763.2	51.4	10.8	40	NE	13	6			7						Teich, A. M.
Tiflis	28.45	722.6	29.88	759.0	47 7	8.7	69	NNW	22	10			4os						Physical Observatory.
Warsaw	29.31	744.4	29.76	756.0	10.9	—11.7	85	W	18	8		ck	9ks						Astronomical Obs'y.
Wilna	29.18	741.2	29.65	753.0	— 0.9	—18.3	75	W	2	1			1					Light clouds	Berg, Assistant.
Yeniseisk	30.10	764.6	30.43	773.0	— 8.5	—22.5	83	SE	7	3			10					Snowing	M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co- peration of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.79	756.7	25.2	— 3.8	96	W			2		0			0	0	Clear.	Andrew Gibb.
Monach Lt. House, Hebrides			29.86	758.4	32	0.0	100	NE			4								J. Youngclause.
North Unst, Shetland Isl'ds			29.71	754.6				N			6	4	7	Calm		Blank	Blank		Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.40	746.8	29.51	749.5	45.3	7.4	87	ENE	2.0	0.9			10			0.269	6.83	Covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.65	753.3	29.72	754.8	35.6	2.0	97	SW	0.6	0.28			10			0.614	15.6	Snowing	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.59	675.4			28.0	— 2.2	94	NE	21.1	9.44			10			0.512	13.0	Covered	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.59	693.2	29.50	749.2	53.2	11.8	83	SW	36.5	16.3		0	8			0.224	5.7	Very cloudy	The Staff.
Murcia, Met. Obs'y	29.41	746.9	29.56	750.7	69.8	21.0	59	WNW	1.1	0.5		5	5	NE		0	0	Covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.61	726.8	29.49	749.0	39.0	3.9	79	NE	18.6	8.3			10			0.248	6.3	Sprinkling	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.92	760.0	29.99	761.7	66.7	19.3	92	Calm	0	0		1ck	1s	N		0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	30.05	763.2	30.10	764.5	78.8	26.0	71	E	4.4	2.0			3ck		E	0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.66	753.4	29.76	755.9	62.2	16.8	100	S	11.9	5.3			10		WSW	2.500	63.5		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.97	761.3	30.06	763.6	71.2	21.8	95	SE	0	0			4c	2k	SE	SE	0	0	Clear	Enrique Gadea, Chief Engineer.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.70	754.4	29.74	755.4	6.8	—14.0	100	E			2		10			0.157	4.0	Snowing	
Umea	29.52	749.7	29.57	751.0	11.5	—11.4	100	SSE			4		10			0	0		
Hernosand	29.43	747.4	29.48	748.7	5.9	—14.5	87	Calm			0		8			0	0		
Stockholm	29.15	740.3	29.32	744.8	22.5	— 5.3	100	SW			4		10					Snowing	
Wisby	29.30	744.2	29.36	745.7	25.2	— 3.2	87	WSW			2		10					Snowing	
SUB-SERIES.																			
Upsala	29.25	743.0	29.34	745.2	15.6	— 9.1	100	ENE	9.4	4.2			10			0.210	5.32	Snowing	Nils Ekholm
SWISS SERIES.																			
Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.12	714.2	29.63	752.6	26.6	— 3.0	83	NE			4		10			0	0	Covered	The Observatory.
Zurich	27.94	709.6	29.70	754.3	20.1	— 6.6	80	E			2		10			0	0	Covered	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —13.4 mm.; Ther. —4°.4 cent.; Hum. +4 per cent.																			
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.56	750.8	40.6	4.8	87	N	8	3.5			10		NE	0.429	10.9		The Observatory.
Valona			29.51	749.6	64.0	17.8		S			3		10			0	0	Covered	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.01	752.3	66.9	19.4	80	SW			3		10n		SW	0.27	6.9		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.15	765.8	30.24	768.1	4	—15.6	74	N	8	3.6	.....	0	0	.....	.....	0.43	10.9	Clear	
Alpena, Michigan	29.35	745.5	30.06	763.5	5	—15.0	75	S	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
Atlanta, Georgia	28.84	732.5	30.04	763.0	28	— 2.2	67	E	13	5.8	.....	.....	10s	.....	Calm	0.13	3.3	Cloudy	
Atlantic City, New Jersey	30.12	765.0	30.14	765.5	10	—12.2	73	N	13	5.8	.....	0	0	.....	.....	0.30	7.6	Clear	
Augusta, Georgia	29.92	760.0	30.13	765.3	32	0.0	59	NE	5	2.2	.....	0	2s	.....	Calm	0.11	2.8	Fair	
Baltimore, Maryland	30.12	765.0	30.18	766.6	14	—10.0	64	N	6	2.7	.....	2c	Haze	W	Calm	0.27	6.9	Clear	
Barnegat, New Jersey	30.10	764.5	30.12	765.0	10	—12.2	58	NW	18	8.0	.....	0	0	.....	.....	0.25	6.3	Clear	
Benton, Montana	26.84	681.7	.....	.....	0	—17.8	70	Calm	0	0	.....	10k	0	Calm	.....	0.17	4.3	Cloudy	
Bismarck, Dakota	27.98	710 7	29.84	757.9	—15	—26.1	.....	NW	6	2.7	.....	10cs	0	Calm	.....	0	0	Cloudy	
Boise City, Idaho	26.77	680.0	29.73	755.1	26	— 3.3	88	NW	4	1.8	.....	.....	10s	.....	Calm	0.18	4.6	Cloudy	
Boston, Massachusetts	29.86	758.4	30.03	762.7	7	—13.9	54	NW	16	7.2	.....	0	0	.....	.....	0.13	3.3	Clear	
Brackettville, Texas	28.66	728.0	29.74	755.4	34	1.1	90	E	3	1.3	.....	10ck	0	N	.....	0	0	Cloudy	
Brownsville, Texas	29.87	758.7	29.92	760.0	43	6.1	83	Calm	0	0	.....	10ck	0	Calm!	.....	0	0	Cloudy	
Buffalo, New York	29.47	748.5	30.26	768.6	1	—17.2	71	NE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Burlington, Vermont	30.03	762.7	30.37	771.4	— 8	—22.2	58	NE	11	4.9	.....	0	0	.....	.....	0.09	2.3	Clear	
Cairo, Illinois	29.56	750.8	29.98	761.5	16	— 8.9	83	SE	3	1.3	.....	2c	5s	Calm	Calm	0	0	Fair	
Campo, California	27.41	696.2	29.98	761.5	43	6.1	92	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Camp Thomas, Arizona	27.16	689.8	.....	.....	31	— 0.6	69	Calm	.....	.....	0	0	8s	.....	Calm	0	0	Fair	
Cape Henry, Virginia	30.11	764.8	30.13	765.3	23	— 5.0	73	N	11	4.9	.....	0	0	.....	.....	0.60	15.2	Clear	
Cape May, New Jersey	30.14	765.5	30.17	766.3	13	—10.6	62	NW	28	12.5	.....	0	0	.....	.....	0.38	9.7	Clear	
Castroville, Texas	29.06	738.1	29.80	756.9	31	— 0.6	79	W	2	0.9	.....	5c	0	Calm	.....	0	0	Fair	
Cedar Keys, Florida	29.91	759.7	29.94	760.5	55	12.8	93	NE.	8	3.6	.....	.....	10s	.....	W	0	0	Cloudy	
Champaign, Illinois	29.05	737.9	29.91	759.7	15	— 9.4	65	SE	5	2.2	.....	.....	10n	.....	SE	Inap.	Inap.	Light snow.	
Charleston, S. Carolina	30.04	763.0	30.10	764.5	37	2.8	71	N	10	4.5	.....	0	2s	.....	.....	0.19	4.8	Clear	
Charlotte, N. Carolina	29.25	742.9	30.12	765.0	23	— 5.0	73	NE	6	2.7	.....	.....	10s	.....	W	0.47	11.9	Cloudy	
Chattanooga, Tennessee	29.25	742.9	30.11	764.8	21	— 6.1	71	E	3	1.3	.....	5cs	0	Calm	.....	0.01	0.3	Fair	
Cheyenne, Wyoming	23.55	598.2	29.49	749.0	35	1.7	53	W	20	8.9	.....	0	5s	.....	Calm	0.01	0.3	Fair	
Chicago, Illinois	29.23	742.4	29.97	761.2	14	—10.0	64	S	7	3.1	.....	.....	10n	.....	Calm	0.01	0.3	Light snow.	
Chincoteague, Virginia	30.12	765.0	30.14	765.5	14	—10.0	46	NW	18	8.0	.....	2k	0	Calm	.....	0.19	4.8	Clear	
Cincinnati, Ohio	29.35	745.5	30.05	763.3	18	— 7.8	68	SE	4	1.8	.....	.....	10s;sm	.....	Calm	Inap.	Inap.	Cloudy	
Cleveland, Ohio	29.40	746.7	30.20	767.1	4	—15.6	74	SE	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Coleman City, Texas	27.92	709.2	29.60	751.8	38	3.3	72	SW	20	8.9	.....	10ck	0	Calm	.....	0	0	Cloudy	
Columbus, Ohio	29.20	741.7	30.12	765.0	10	—12.2	79	SE	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Concho, Texas	27.80	706.1	29.48	748.8	40	4.4	39	SW	12	5.4	.....	8c	0	Calm	.....	0	0	Cloudy	
Corsicana, Texas	29.34	745.2	29.83	757.7	31	— 0.6	69	S	8	3.6	.....	.....	10ks	.....	Calm	0	0	Cloudy	
Davenport, Iowa	29.14	740.1	29.83	757.7	9	—12.8	89	S	13	5.8	.....	.....	10n	.....	Calm	0.10	2.5	Heavy snow	
Dayton, Washington T'y	28.06	712.7	29.80	756.9	22	— 5.6	100	SW	2	0.9	.....	.....	10s	.....	Calm	0.68	17.3	Cloudy	
Deadwood, Dakota	24.83	630.7	.....	.....	6	—14.4	76	NE	6	2.7	.....	.....	10s	.....	Calm	0.04	1.0	Cloudy	
Decatur, Texas	28.46	722.9	29.66	753.4	28	— 2.2	66	SE	13	5.8	.....	8c	2s	W	Calm	0	0	Cloudy	
Delaware Breakwater, Del.	30.13	765.3	30.15	765.8	17	— 8.3	83	N	30	13.4	.....	0	0	.....	.....	0.21	5.3	Clear	
Denison, Texas	28.86	733.0	29.68	753.9	28	— 2.2	88	S	12	5.4	.....	0	8s	.....	S	0	0	Fair	
Denver, Colorado	24.33	618.0	29.55	750.6	44	6.7	45	SW	7	3.1	.....	5c	0	NW	.....	0	0	Fair	
Des Moines, Iowa	28.78	731.0	29.71	754.6	13	—10.6	81	SE	2	0.9	.....	.....	10n	.....	Calm	0.18	4.6	Light snow.	
Detroit, Michigan	29.40	746.7	30.13	765.3	9	—12.8	78	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Dodge City, Kansas	26.88	682.7	29.17	740.9	28	— 2.2	77	NW	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Dubuque, Iowa	29.08	738.6	29.83	757.7	9	—12.8	78	SE	4	1.8	.....	.....	10n	.....	Calm	0.38	9.7	Light snow.	
Duluth, Minnesota	29.09	738.9	29.85	758.2	— 8	—22.2	79	NW	6	2.7	.....	7os	Haze	Calm	Calm	0.02	0.5	Clear	
Eagle Pass, Texas	29.08	738.6	29.84	757.9	34	1.1	70	SE	2	0.9	.....	2cs	0	Calm	.....	0	0	Fair	
Eagle Rock, Texas	24.70	627.4	29.35	745.5	28	— 2.2	88	SW	30	13.4	.....	.....	10s	.....	NW	0.32	8.1	Cloudy	
Eastport, Maine	29.72	754.9	29.79	756.7	17	— 8.3	67	NW	32	14.3	.....	.....	10s	.....	NW	0.62	15.7	Cloudy	
Edinburg, Texas	.....	.....	.....	.....	40	4.4	56	Calm	.....	.....	0	0	8ks	.....	Calm	0	0	Fair	
El Paso, Texas	26.09	662.7	.....	.....	47	8.3	15	NW	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Erie, Pennsylvania	29.42	747.3	30.22	767.6	6	—14.4	76	S	9	4.0	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Escanaba, Michigan	29.20	741.7	29.92	760.0	0	—17.8	85	SW	5	2.2	.....	.....	10s	.....	Calm	0.04	1.0	Cloudy	
Florence, Arizona	28.42	721.9	30.02	762.5	41	5.0	57	NE	1	0.4	.....	.....	10ks	.....	SW	0	0	Cloudy	
Fort Apache, New Mexico	24.94	633.5	30.38	771.6	28	— 2.2	54	N	2	0.9	.....	2c	2s	Calm	Calm	0	0	Fair	
Fort Assinniboine, Montana	26.80	680.7	.....	.....	0	—17.8	70	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Bennett, Dakota	28.19	716.0	.....	.....	— 4	—20.0	65	W	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Buford, Dakota	27.78	705.6	29.86	758.4	—12	—24.4	75	NE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Custer, Montana	26.43	671.3	.....	.....	1	—17.2	100	N	2	0.9	.....	.....	10n	.....	Calm	0.22	5.6	Light snow.	
Fort Davis, Texas	24.97	634.2	29.93	760.2	60	15.6	44	W	20	8.9	.....	0	5ks	.....	Calm	0	0	Fair	
Fort Elliott, Texas	26.80	629.9	29.06	738.1	38	3.3	72	W	4	1.8	.....	.....	10s	.....	W	0	0	Cloudy	
Fort Gibson, Indian T'y	29.16	740.7	29.72	754.9	23	— 5.0	73	SE	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Grant, Arizona	25.10	637.5	29.90	759.4	48	8.9	16	NW	7	3.1	.....	10cs	0	Calm	.....	0	0	Cloudy	
Fort Griffin, Texas	25.32	719.3	29.61	752.1	35	1.7	80	SE	2	0.9	.....	5cs	0	Calm	.....	0	0	Fair	
Fort Keogh, Montana	27.68	687.8	.....	.....	— 2	—18.9	67	Calm	0	0	.....	.....	10s	.....	Calm	0.07	1.8	Cloudy	
Fort Macon, North Carolina	30.03	762.7	30.15	765.8	26	— 3.3	52	N	14	6.3	.....	5c	2s	Calm	Calm	0.68	17.3	Fair	
Fort Missoula, Montana	26.30	668.0	.....	.....	2	—16.7	100	Calm	0	0	.....	.....	10s	.....	Calm	0.73	18.5	Cloudy	
Fort McKavett, Texas	27.50	698.5	29.45	748.0	36	2.2	45	SW	9	4.0	.....	.....	9ks	.....	SW	0	0	Cloudy	
Fort Shaw, Montana	25.93	658.6	.....	.....	—14	—25.6	100	Calm	0	0	.....	0	0	.....	.....	0.22	5.6	Clear	
Fort Sill, Indian Territory	28.38	720.8	29.52	749.8	25	— 3.9	75	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Stevenson, Dakota	27.86	707.6	.....	.....	26	— 3.3	100	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Verde, Arizona	.....	.....	.....	.....	32	0.0	79	S	.....	.....	1	.....	10s	.....	S	0	0	Cloudy	
Fredericksburg, Texas	28.03	711.9	29.69	754.1	37	2.8	81	Calm	0	0	.....	8cs	0	Calm	.....	0	0	Hazy	
Galveston, Texas	29.84	757.9	29.89	759.2	43	6.1	75	W	1	0.4	.....	10cs	0	Calm	.....	0	0	Cloudy	
Grand Haven, Michigan	29.27	743.4	29.97	761.2	11	—11.7	100	SE	8	3.6	.....	.....	10n	.....	Calm	0.05	1.3	Light snow.	
Hatteras, North Carolina	30.04	763.0	30.06	763.5	30	— 1.1	78	N	28	12.5	.....	5cs	2ks	Calm	N	1.10	27.9	Cloudy	
Helena, Montana	25.31	642.9	.....	.....	— 4	—20.0	100	Calm	0	0	.....	2ck	0	Calm	.....	0.45	11.4	Fair	
Henrietta, Texas	28.59	726.2	29.55	750.6	29	— 1.7	78	SE	12	5.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Indianapolis, Indiana	29.12	739.6	29.95	760.7	15	— 9.4	73	SE	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
Indianola, Texas	29.88	758.9	29.91	759.7	38	3.3	81	Calm	0	0	.....	0	2s	.....	Calm	0	0	Fair	
Jacksboro, Texas	28.47	723.1	29.63	752.6	30	— 1.1	.....	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Jacksonville, Florida	29.96	761.0	30.01	762.2	49	9.4	71	N	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
Keokuk, Iowa	29.13	739.9	29.82	757.4	14	—10.0	64	S	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Key West, Florida	29.96	761.0	30.00	762.0	73	22.8	85	W	5	2.2	.....	10k	0	W	.....	0.01	0.3	Clear	
Kittyhawk, North Carolina	30.07	763.8	30.10	764.5	27	— 2.8	76	NE	32	14 3	.....	2c	0	NW	.....	1.02	25.9	Clear	
Knoxville, Tennessee	29.03	737.3	30.10	764.5	20	— 6.7	85	NE	4	1.8	.....	10cs	0	Calm	.....	0.05	1.3	Cloudy	
La Crosse, Wisconsin	29.04	737.6	29.84	757.9	7	—13.9	77	S	5	2.2	.....	.....	10s	.....	Calm	0.00	1.5	Cloudy	
La Mesilla, New Mexico	25.98	659.9	30.13	765.3	47	8.3	8	SW	11	4.9	.....	2c	2s	Calm	Calm	0	0	Fair	
Laredo, Texas	29.41	747.0	29.76	755.9	37	2.8	81	S	2	0.9	.....	10cs	0	Calm	.....	0	0	Cloudy	
Leavenworth, Kansas	28.77	730.7	29.66	753.4	16	— 8.9	66	S	8	3.6	.....	.....	10s	.....	.....	0	0	Cloudy	
Lewiston, Idaho	29.04	737.6	29.71	754.6	25	— 3.3	100	E	1	0.4	.....	.....	10n	.....	Calm	0.73	18.5	Light snow.	
Little Rock, Arkansas	29.51	749.5	29.84	757.9	24	— 4.4	74	E	4	1.8	.....	.....	10ks	.....	Calm	0	0	Cloudy	
Los Angeles, California	29.67	753.6	30.01	762 2	53	11.7	88	E	4	1.8	.....	.....	10n	.....	Calm	0.04	1.0	Light rain	
Louisville, Kentucky	29.38	746.2	29.97	761.2	18	— 7.8	84	E	8	3.6	.....	.....	Sm'e	.....	Calm	0	0	Dense smoke	
Lynchburg, Virginia	29.48	748.8	30.22	767.6	21	— 6.1	71	Calm	0	0	.....	5c	0	Calm	.....	0.02	0.5	Fair	
Madison, Wisconsin	28.78	731.0	29.84	757.9	10	—12.2	79	S	10	4.5	.....	.....	10n	.....	Calm	0.08	2.0	Light snow.	
Marquette, Michigan	29.10	739.1	29.88	758.9	— 2	—18.9	83	E	4	1.8	.....	.....	10s	.....	Calm	0.07	1.8	Cloudy	
Mason, Texas	28.05	712.5	29.77	756.1	38	3.3	81	W	4	1.8	.....	8cs	0	SW	.....	0	0	Fair	
Memphis, Tennessee	29.37	746.0	29.93	760.2	21	— 6.1	86	SE	6	2.7	.....	8cs	Fog	Calm	Calm	0	0	Fair	
Milwaukee, Wisconsin	29.12	739.6	29.91	759.7	8	—13.3	78	S	10	4.5	.....	.....	10n	.....	Calm	0.09	2.3	Light snow.	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.89	759.2	29 97	761.2	37	2.8	81	E	3	1.3			10ks		SW	0	0	Cloudy	
Montgomery, Alabama	29.79	756.7	30.04	763.0	28	— 2.2	88	N	3	1.3		5c	0	Calm		0.03	0.8	Fair	
Morgantown, W. Virginia	28.10	713.7	30.19	766.8	8	—13.3	55	Calm	0	0			10s		Calm	0.05	1.3	Cloudy	
Moorhead, Minnesota	28.85	732.8	29.95	760.7	—18	—27.8	67	NW	11	4.9		5c	0	NW		0	0	Fair	
Mt. Washington, N. H.	23.30	593.3	29.72	754.9	6	—14.4	52	NW	32	14.3		0	2s		NW	0.35	8.9	Clear	
Nashville, Tennessee	29.39	746.5	29.96	761.0	15	— 9.4	82	E	6	2.7		10ck	0	SE		0.02	0.5	Cloudy	
New Haven, Connecticut	29.96	761.0	30.08	764.0	7	—13.9	54	N	12	5.4		0	0			0.25	6.3	Clear	
New London, Connecticut	29.98	761.5	30.04	763.0	12	—11.1	61	N	10	4.5		0	0			0.24	6.1	Clear	
New Orleans, Louisiana	29.88	758.9	29.94	760.5	47	8.3	77	SE	5	2.2			10s		SE	0	0	Cloudy	
Newport, Rhode Island	29.93	760.2	29.98	761.5	12	—11.1	80	NW	20	8.9		0	0			0.21	5.3	Clear	
New River, N. Carolina					25	— 3.9	77	N			4	8cs	2ks	Calm	Calm			Cloudy	
New Shoreham, Rhode I'd	29.98	761.5	30.02	762.5	15	— 9.4	65	N	25	11.2		0	0			0.08	2.0	Clear	
New York, New York	29.93	760.2	30.13	765 3	12	—11.1	80	NW	8	3.6		0	Fog		Calm	0.26	6.6	Clear	
Norfolk, Virginia	30.07	763.8	30.14	765.5	20	— 6.7	70	N	10	4.5		5k	0	N		0.36	9.1	Fair	
North Platte, Nebraska	26.62	676.1	29.30	744.2	12	—11.1	61	N	22	9.8			10s		N	0	0	Cloudy	
Olympia, Washington T'y	29.75	755.6	29.79	756.7	34.0	1.1	79	N	1	0.4		8ck	0	Calm		0.05	1.3	Cloudy	
Omaha, Nebraska	28.44	722.4	29.59	751.6	17	— 8.3	67	S	6	2.7			10s		Calm	0.03	0.8	Cloudy	
Oswego, New York	29.91	759.7	30.27	768.8	4	—15.6	74	SE	6	2.7		0	1s		Calm	0.05	1.3	Clear	
Pensacola, Florida	29.94	760.5	29.98	761 5	42	5.6	83	E	8	3.6			10s		W	0	0	Cloudy	
Philadelphia, Pa	30.10	764.5	30.16	766.1	9	—12.8	78	N	12	5.4		0	0			0.25	6.3	Clear	
Phœnix, Arizona	28.80	731.5	30.69	779.5	34	1.1	70	E	5	2.2		5c	0	S		0	0	Fair	
Pike's Peak, Colorado	17.34	440.4	29.55	750.6	6	—14.4	76	NW	4	1.8		0	8s		W	0	0	Cloudy	
Pilot Point, Texas	28.88	733.5	29.77	756.1	27	— 2.8	53	S	15	6.7		0	8s		S	0	0	Fair	
Ploche, Nevada	23.79	604.3	29.56	750.8	34	1.1	52	S	20	8.9			10ks		W	0	0	Cloudy	
Pittsburg, Pennsylvania	29.29	744.0	30.20	767.1	4	—15.6	74	NE	4	1.8		0	0			0.15	3.8	Clear	
Port Huron, Michigan	29.43	747.5	30.17	766.3	— 1	—18.3	68	SE	3	1.3			10s		Calm	0	0	Cloudy	
Portland, Maine	29.91	759.7	29.97	761.2	13	—10.6	44	NW	20	8.9		0	2s		Calm	0.12	3.0	Clear	
Portland, Oregon	29.71	754.6	29.78	756.4	35	1.7	85	NE	1	0.4			10s		NW	0.20	5.1	Cloudy	
Portsmouth, N. Carolina					30	— 1.1	89	N	20	8.9		10k	0	Calm		0.19	4.8	Cloudy	
Prescott, Arizona	24.62	625.3	29.98	761.5	41	5.0	57	S	1	0.4		5ck	2s	SW	S	0	0	Fair	
Punta Rassa, Florida	29.93	760.2	29.94	760.5	67	19.4	95	N	4	1.8			Fog		Calm	0	0	Dense fog	
Red Bluff, California	29.43	747.5	29.78	756.4	52	11.1	93	SE	11	4.9			10s		SE	0.39	9.9	Cloudy	
Rio Grande City, Texas	29.70	754.4	29.93	760.2	35	1.7	80	E	2	0.9		0	8s		Calm	0	0	Fair	
Rochester, New York	29.56	750.8	30.24	768.1	0	—14.4	75	SE	9	4.0			10n		Calm	0.09	2.3	Light snow	
Roseburg, Oregon	29.15	740.4	29.72	754.9	43.5	6.4	95	Calm	0				10n		Calm	2.26	57.4	Light rain	
Sacramento, California	29.80	756.9	29.88	758.9	52	11.1	93	S	8	3.6			10s		Calm	0.83	21.1	Cloudy	
St. Louis, Missouri	29.25	742.9	29.87	758.7	11	—11.7	80	SE	11	4.9		10cs	0	Calm		0	0	Cloudy	
St. Paul, Minnesota	28.84	732.5	29.73	755.1	2	—16.7	85	SE	4	1.8		2cs	2s	NW	SE	0.40	10.2	Fair	
Salt Lake City, Utah	25.32	643.1	29.65	753.1	41	5.0	57	Calm	0	0			10s		Calm	Inap.	Inap.	Cloudy	
San Antonio, Texas	29.17	740.9	29.90	759.4	32	0.0	79	SW	2	0.9		1cs	0	Calm		0	0	Clear	
San Diego, California	29.98	761.5	30.06	763.5	53	11.7	80	E	4	1.8			10ks		NW	0	0	Cloudy	
Sandusky, Ohio	29.44	747.8	30.17	766.3	13	—10.6	81	S	5	2.2			10s		Calm	0	0	Cloudy	
Sandy Hook, New Jersey	30.11	764.8	30.15	765.8	12	—11.1	61	NW	14	6.3		0	0			0.26	6.6	Clear	
San Francisco, California	29.81	757.2	29.87	758.7	56	13.3	90	W	1	0.4			10n		W	0.76	19.3	Light rain	
Santa Fé, New Mexico	23.04	585.2	29.58	751.3	30	— 1.1	68	Calm	0	0		8cs	0	Calm		0	0	Fair	
Savannah, Georgia	29.99	761.7	30.09	764.3	39	3.9	73	NE	7	3.1		5cs	0	Calm		0.03	0.8	Fair	
Shreveport, Louisiana	29.59	751.6	29.85	758.2	29	— 1.7	78	Calm	0	0			10s		Calm	0	0	Cloudy	
Silver City, New Mexico	24.15	613.4	30.46	773.7	35	1.7	45	Calm	0	0		5c	0	Calm		0	0	Fair	
Smithville, North Carolina	30.07	763.8	30.11	764.8	28	— 2.2	66	N	8	3.6		8c	1s	Calm	Calm	0.60	15.2	Cloudy	
Socorro, New Mexico	25.38	644.6	29.45	748.0	13	—10.6	62	SW	4	1.8		1k	0		S	0	0	Clear	
Springfield, Illinois	29.18	741.1	29.90	759.4	15	— 9.4	82	SE	8	3.6			10s			0	0	Cloudy	
Springfield, Massachusetts	29.96	761.0	30.10	764.5	4	—15.6	60	N	8	3.6		0	0			0.44	11.2	Clear	
Stockton, Texas	26.73	678.9	29.73	755.1	55	12.8	33	SW	12	5.4			10s		SW	0	0	Cloudy	
St. Vincent, Minnesota	29.03	737.3	29.97	761.2	—29	—33.9	100	S	2	0.9		0	0			0	0	Clear	
Thatcher's Island, Mass	29.97	761.2	30.03	762.7	14	—10.0	64	NW	19	8.5		0	0			0	0	Clear	
Toledo, Ohio	29.38	746.2	30.12	765.0	14	—10.0	65	S	6	2.7			10s		Calm	0	0	Cloudy	
Tucson, Arizona	27.47	697.7	30.02	762.5	42	5.6	34	W	3	1.3		8cs	0	Calm		0	0	Fair	
Umatilla, Oregon	29.54	750.3	30.06	763.5	23.5	— 4.7	86	S	2	0.9			10s		Calm	0.48	12.2	Cloudy	
Uvalde, Texas	28.99	736.3	29.86	758.4	30	— 1.1	78	Calm	0	0		2k	0	N		0	0	Clear	
Vicksburg, Mississippi	29.66	753.4	29 93	760.2	32	0.0	79	SE	6	2.7			10s		Calm	0	0	Cloudy	
Visalia, California	29.52	749.8	29.89	759.2	51.5	10.8	93	SE	2	0.9			10n		SE	0.48	12.2	Light rain	
Washington, D. C.	30.06	763.5	30.19	766.8	9	—12.8	78	N	4	1.8		5c	0	W		0.25	6.3	Fair	
Wickenburg, Arizona					35	1.7	80	W			1		10s		Calm	0	0	Cloudy	
Wilmington, N. Carolina	30.07	763.8	30.13	765.3	29	— 1.7	45	NE	7	3.1			10s		Calm	0.34	8.6	Cloudy	
Winnemucca, Nevada	25.32	643.1	29.68	753.9	41	5.0	57	SW	14	6.3			10ks		SW	0	0	Cloudy	
Wood's Holl, Mass	29.92	760.0	29.96	761.0	14	—10.0	82	NW	22	9.8		0	0			0.13	3.3	Clear	
Yankton, Dakota	28.33	719.6	29.69	754.1	13	—10.6	81	N	4	1.8			10s		Calm	0	0	Cloudy	
Yuma, Arizona	29.77	756.1	29.92	760.0	44	6.7	76	SW	1	0.4		5c	0	Calm		0	0	Fair	
Sub-Series.																			
Bogota, U. S. Columbia	21.99	558.5			51.2	10.6	73	Calm	0	0		2c;ck	0			0	0	Fair	Thomas Herran.
Havana, Cuba, W. I.	29.97	761.2	30.02	762.5	70	21.1	79	SE	1.2	0.5		2cs	0	Calm		0.03	0.8	Fair	Charles Hasselbrink.
Jakobshavn, Greenland	30.24	768.0	30.30	769.6	33.8	1.0		SW			7		5			0	0		
Kingston, Jamaica, W. I.	30.00	762.0	30.01	762.2	67.7	19.8	83	Calm	0	0		0	0			0	0	Fine	Maxwell Hall.
Navassa, W. I.	29.92	760.0	30.00	762.0	75.5	24.2	66	NE	6	2.7		2k	5s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	74	23.3	86	E			2	4ck	5k	Calm		0.540	13 72	½ Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.42	747.3	30.00	762.0	79	26.1	89	Calm			0		10ks		N	0	0	Threatening	Francesco J. Cisneros.
Rivas, Nicaragua					73	23		SE			1	0	3cs		SE	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.02	762.5	30.04	763.0	70	21.1	75	Calm	0	0		Haze	0			0	0		Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	30.19	766.8	30.25	768.3	39.6	4.2		SE			2		0			0	0		
York Factory, B. A.	29.50	749.3	29.56	750.8	—30.0	—34.4		S	24	10.7		1c	Haze	S		0.01	0.3	Hazy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
M.H. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandra, N. 35° 51′, E. 14° 31′	29.70	754.4	67	19.4	74	NW			1		10							Overcast	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.90	759.4	67	19.4		SSW			2-4		9	S						Gloomy	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J.Garforth
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.99	761.7	82	27.8	67	NW			3		5							D. clouds	Capt. R. D. King.
H. M. S. Falcon,																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Callao Bay, Peru	29.97	761.2	65	18.3	94	Calm			0		10							Misty	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	29.54	750.3	63.2	17.3	79	S			3		10	SW				2	SE	Overcast	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P.Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 26° 08′, E. 119° 41′	30.41	772.4	54.4	12.4	58	N			1		8							Misty	Capt. R. H. Napier.
H. M. S. Malabar, Bombay, India	30.02	762.5	80	26.7	82	NW			2		4	NNW				2	NE	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 38° 42′, W. 9° 06′	29.57	751.1	61.5	16.4	91	WSW			6		7	W						Squally	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, St. John's, Antigua, W. I.	30.04	763.0	74	23.3	81	Calm			0		5	E				1	NNW	D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 45° 56′	29.68	753.9	77	25.0	86	ESE			1		0							Blue sky	Comm. M. Byles.
H. M. S. Seraphis, Suez Canal	29.96	761.0	75	23.9	64	SW			3-4		7	SW						D. clouds	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb, N. 37° 03′, E. 15° 18′	29.67	753.6	68.5	20.3	60	WNW			3		7	W						Squally	Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	30.16	766.1	66.5	19.2	64	S			1		2	S						D. clouds	Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	29.98	761.4	77.4	25.2	82	NE			3		1			0	0	.1	SE	Blue sky	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando	29.97	761.2	79.5	26.5	78	WNW			3		9			10 minutes		1	W	Gloomy	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, N. 34° 41′, E. 28° 21′	29.95	761.0	67.3	19.6	81	SSW			4		2							Misty	

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.03	762.7	55	12.8	80	NE	4	1.8			10		NW	0	0			Cloudy	
N. Yard, Portsmouth, N. H.	29.98	761.5	9	—12.8	78	NW	12	5.4			0?			0.2	5.1			Cloudy?	
Naval Hospital, Yokohama, Japan	29.85	758.2	36.5	2.5	76	NW			1		0			0	0			Clear.	
Adams, Ancon, Peru	29.94	760.5	68	20.0	95	SSE			1		10		SE			Sm'h		Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	29.81	757.2	53	11.7	100	S			1		10		S	0.255	6.48			Rainy	
Alert, Hong-Kong, China *.	30.16	766.1	64	17.8	73	E			3		10		E	0	0	Sm'h		Hazy	
Alliance, Pensacola, Fla	29.96	761.0	42	5.6	91	NE			2		10		S	0	0	Sm'h		Cloudy	
Ashuelot, Tientsin, China	30.49	774.4	29	— 1.7	100	SSW			1		0							Clear	
Colorado, New York, N. Y	30.12	765.0	10	—12.2	100	NNW	8	3.6			0			0.18	4.6			Clear.	
Constitution, N. Yard, League I'd., Pa			9	—12.8		NW	1	0.4			0							Clear	
Franklin, Off N. Yard, Norfolk, Va	30.10	764.5	21	— 6.1		N	10	4.5			2		N	0.35	8.9			Fair	
Galena, Gibraltar, Mediterranean	29.77	756.1	61	16.1	94	WSW			4		10					R'gh	SW	Rainy	
Independence, N. Yard, Mare I'd, Cal	29.87	758.7	55	12.8	93	S	4.8	2.1			10		E	0.56	14.2			Overcast	
Jamestown, Sitka, Alaska *	29.73	755.1	35	1.7	90	Calm			0		10			0.23	5.8			Misty	
Kearsarge, Port Royal, Jamaica, W.I.	30.03	762.7	73	22.8	81	N			2		2					Sm'h		Fair	
Lackawanna, Ancon, Peru †.	30.10	764.5	67	19.4	95	Calm			0		10			0	0			Cloudy	
Marion, S. 53° 10′, W. 70° 53′	30.14	765.5	49	9.4	71	Calm			0		10		S			Sm'h		Cloudy.	
Michigan, Erie, Pennsylvania	30.17	766.3	6	—14.4		S			2		8		S					Cloudy	
Minnesota, New York, N. Y	30.14	765.5	14	—10.0		NNW			1		0							Hazy	
Monocacy, Shanghai, China	30.47	773.9	39	3.9	82	NE			2		0							Clear	
New Hampshire, Port Royal, S. C	30.07	763.8	39	3.9	73	NNE	12	5.4			2		Calm	0	0			Clear	
Nipsic, Villafranca, France	29.37	746.0	48	8.9	78	SE			2		10					Long	SSW	Overcast	
Onward, Chimbote Bay, Péru †	29.91	759.7	71	21.7	85	S			1		8		NNW			Long	N;W	Cloudy	
Palos, Shanghai, China	30.52	775.2	36	2.2	90	NE			1		0							Clear.	
Passaic, Washington, D. C	30.24	768.1	10	—12.2	79	NW			1		8		NW					Cloudy	
Pensacola, Pichilinque, Mexico	29.98	761.5	63	17.2	78	S			4-6		2		S					Clear	
Portsmouth, Washington, D. C	30.22	767.6	10	—12.2	100	NW			1		2							Clear.	
Powhatan, New York, N. Y	30.09	764.3	11	—11.7		NNW			3		0							Clear	
Quinnebang, Alexandria, Egypt	30.02	762.5	71	21.7	57	SW			3		5		Calm			Sm'h		Fair	
Richmond, Pagoda Anchorage, China	30.40	772.1	57	13.9	47	NNE			3		8		NE	0	0			Cloudy.	
Saratoga, Baltimore, Md	30.14	765.5	12	—11.1	100	NW			3		0			Moderate				Clear	
Shenandoah, Montevideo, Uruguay *	30.23	767.8	62	16.7	61	SSW			4		8		SW			Mod.	SW	Fair.	
St. Louis, League Island, Pa	30.21	767.3	8	—13.3	78	NW	5	2.2			0			0.28	7.1			Clear.	
Swatara, Kobe, Japan †.	30.03	762.7	46	7.8	69	WSW			1		2		W			Sm'h		D. clouds	
Tennessee, St. Croix, W. I	30.05	753.5	78	25.6	82	ENE	3	1.3			2		Calm	0	0	Sm'h		Fair.	
Trenton, Villafranca, France *	29.35	745.5	43	6.1	75	E			1		10			19 h'rs	h'vy			Rainy	
Vandalia, N. 27° 25′, W. 57° 10′	30.07	763.8	67	19.4	95	NNE			3		8		N			Long	N	Fair	
Wabash, Boston, Massachusetts	30.04	763.0	8	—13.3	55	NW	12	5.4			10?		NW	0.19	4.8			Clear?	
Wachusetts, Panama, Panama *	29.60	751.8	76	24.4	95	WNW			3		2		N	0	0	Sm'h		Fair	
Wyoming, Naples, Italy	29.46	748.3	61	16.1	82	SSW			2		10		SW			Sm'h		Raining	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic, N. 49° 10′, W. 21° 55′	29.93	760.2	47	8.3	100	N			4		4					4	NE	Showery	Capt. H. Parsell.
Ship Baroda, ‡ S. 31° 24′, E. 30° 55′	30.19	766.8	74	23.3	72	SE			5		7							D. clouds	Capt. C. J. Russell.
British Merchant, ‡ S. 44° 29′, E. 121° 50′	29.67	753.6	50.5	10.3	89	SW			6-8		5							Showery	Capt. E. J. Molony.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡ N. 32° 58′, W. 19° 14′	29.73	755.1	67	19.4	88	SW			4		10							Overcast	Capt. H. Youlden.
S. S. Cipero, N. 40° 45′, W. 30° 40′	29.58	751.3	56	13.3		ENE			6		8					5	E	D. clouds	W. N. Lailey.
City of Agra, ‡ S. 56° 27′, W. 87° 00′	29.89	759.2	44.5	6.9	76	N			4		10							Raining	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Coppename, N. 30° 13′, W. 18° 55′	29.87	758.7	68.0	20.0	92	WSW			4		7							Misty	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡ S. 28° 44′, E. 44° 32′	29.88	758.9	75	23.9	72	ESE			2		6							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ N. 19° 08′, E. 87° 30′	30.12	765.0	72.5	22.5	76	NNE			3		0							Misty	Capt. J. Rasburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, N. 40° 00′, W. 20° 15′	29.57	751.1	56.5	13.1	100	ENE			5		8							D. clouds	Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 35° 10′, E. 18° 44′	29.69	754.1	64.5	18.1	84	SW			5		10							Overcast	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia, N. 41° 44′, W. 55° 57′	29.84	757.9	53	11.7	100	ESE			3		10			0	0	Long	E	Misty	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, Off Orme's Head, Wales †	29.90	759.4	34	1.1		NNW			4		10		N			Sm'h	N	Misty	Capt. J. W. Jennings.
S. S. Britanic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, New York, N. Y. †	30.13	765.3	12	—11.1		N			3		0			0	0			Clear	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Köln, N. 45° 50′, W. 48° 03′	30.20	767.1	47.3	8.5		ENE			4		0			8 hours		Long	E	Clear	
S. S. Leipzig, ‡ N. 42° 58′, W. 57° 30′	30.02	752.5	41.5	5.3	96	SSE			1		10			0	0	Sm'h	E	Foggy	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡ S. 20° 33′, W. 29° 37′ *†	30.16	766.0	78.8	26.	80	NE			3		3							Blue sky	Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 43° 00′, W. 53° 42′	30.05	763.3	42	5.6	91	ENE			2		2		E			Sm'h	ENE	Misty	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 45° 23′, W. 57° 26′ †	29.85	758.2	50	10.0	93	SSW			4		8		SW	o	o	L'ge	E	Cloudy	Capt. R. W. Sargent.
S. S. Ohio, ‡ Liverpool, England †*	29.77	756.1	31	— 0.6	89	WSW			1		10		W	Sn	ow			Heavy snow	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, ‡ N. 49° 25′, W. 27° 22′ †	30.10	764.5	46	7.8		E			4		8		E	o	o	R'gh	E	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 26° 19′, W. 110° 42′ †	29.14?	740.1?	64	17.8	83	NNW			2		2		NNW	o	o	Sm'h		Clear.	Capt W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 35° 30′, E. 143° 10′ †	29.96	761.0	58	14.4	48	WNW			4		2		W	o	o	Mod.	WNW	Clear.	Capt. H. Davison.
S. S. Gaelic, San Francisco, Cal. †*	30.22?	767.6?	53	11.7	80	SW			3		2		SW					Clear	Capt. W. H. Kidley.
S. S. Oceanic, N. 44° 50′, W. 173° 49′	28.89	733.8	44	6.7	100	ESE			2		5		S	0.05	1.3	Mod.	SE	Cloudy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			Capt. J. M. Lachlan.
S. S. Geo. W. Elder																			Capt. Fred. Bolles
S. S. Columbia																			
S. S. Oregon, Portland, Oregon †	29.67	753.6	35.5	1.9	95	NE			1		2		WSW					Fair	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal. †	29.85	758.2	56	13.3	94	S			1		10		S					Rainy	Capt. J. N. Ingalls, C. E. Lyons, 1st Officer.
S. S. Idaho																			
S. S. Orizaba																			
S. S. Senator, N. 34° 10′, W. 119° 20′ †	30.02	762.5	55	12.8	93	SW			3		8		SW			Sm'h		Drizzling	Thos. Wallace.
S. S. State of California, N. 42° 38′, W. 124° 46′ †	29.71	754.6	48	8.9	92	SW			5		10		S			R'gh	wsw	Squally	Capt. G. Debney.
S. S. Victoria, N. 39° 10′, W. 124° 00′ †	29.85	758.2	55	12.8	100	S			1		0					Mod.	SW	Hazy	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			A. Bannerman, 1st Officer.
S. S. Australia																			
S. S. City of New York, S. 35° —′, E. 175° —′ †	30.05	763.3	69	20.6	80	NNE			2		1		E	o	o	Light	E	Clear	Wm. H. Hawes, 2d Officer, Capt. D. S. Austin.
S. S. City of Panama																			
S. S. City of Peking, N. 29° 41′, W. 162° 23′ †	30.15	765.8	62	16.7	83	SSW			4		10		W	Mod	erate	Light	W	Rainy	Capt. G. G. Berry.
S. S. City of Sidney, N. 5° 28, W. 164° 19′ †	29.87	758.7	83	28.3	66	NNE			5		5		NE	o	o	H'vy	NNE	Cloudy	Capt. H. C. Dearborn
S. S. City of Tokio, N. 26° 13′, E. 121° 41′ †	30.48	774.2	63	17.2	67	NE			4		10			o	o	Sm'h		Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 22° 57′, W. 109° 16′ †	29.97	761.2	71	21.7	71	WSW			3		0			o	o	Sm'h	NW	Clear	Capt. R. R. Searle. Capt. D. E. Griffiths.
S. S. Dakota																			
S. S. Granada, San José, de Guatemala †	29.86	758.4	75	23.9	95	Calm			0		0			o	o	Sm'll	SSE	Clear	
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			Capt. Sam'l Jackson.
S. S. Belgenland ‡																			Capt. S. Stokes.
S. S. Nederland																			Capt. W. Geo. Randle,
S. S. Rhynland †																			Capt. J. C. Jamison.
S. S. Vaderland ‡																			
MISCELLANEOUS.																			Capt. A. Mehaffey.
Sch'r Abby K. Bentley																			
Sch'r Addie Fuller, Brunswick, Ga.	29.99	761.7	58	14.4	82	NNE	3	1.3		5c				o	o			Fair	Capt. J. Jorgensen. Capt. S. S. Lewis.
Sch'r Annie R. Lewis																			Capt B. F. Woodbury.
Bark Carrie Heckle																			
Brigantine George, ‡ Arroyo, P. R. †	30.32	770.1	78	25.6		ENE			5		2		E	o	o			Fair	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	30.09	764.3	21	— 6.1		NNW	3	1.3		2s	2cs			o	o			Clear	Capt. J. L. Randall.
Sch'r Hattie V. Kelsey,																			Capt. James S. Gawin
Ship Jumna																			
Bark Sunbeam, ‡ Lisbon, Portugal †	29.52	749.8	62	16.7	100	SW			6		10		WNW	Mod	erate			Cloudy	Capt. Jos. Hand.

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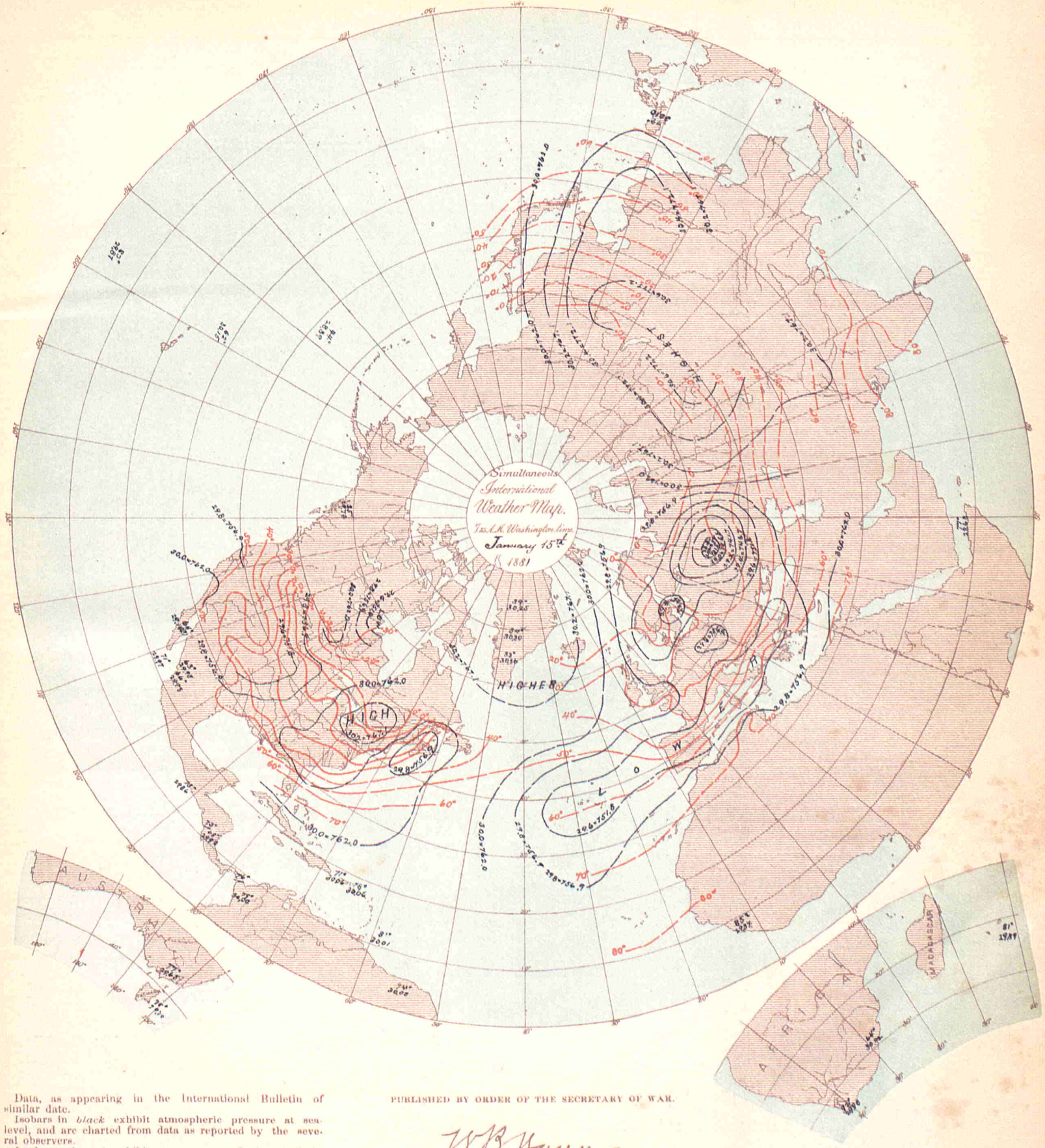
Chief Signal Officer, U. S. A.



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 16, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.01	762.2	70.0	21.1	80	SW			5		5			0	0	Cloudy	Dr. Ollive.
Nemours			29.82	757.4	60.8	16.0	96	S			0		4			0.587	14.9	Cloudy	Raynard.
Algie s			29.71	754.7	63.7	17.6	72	WNW			6		9			0.567	14.4	Covered	Nicolas.
La Calle			29.89	759.3	63.7	17.6	82	NNW			3		8			0	0	Very cloudy	Fonfréde.
Tunis			29.70	754.4															Jacques.
Sfax			29.83	757.7															Gau.
Said.a			29.87	758.7	63.0	17.2	93	W			3		4			0	0	Cloudy	Dumas.
Tebessa			29.85	758.1	70.9	21.6	35	W			6		8			0	0	Very cloudy	Watrin.
Geryille																			Lonchamp.
Laghouat			29.98	761.4	73.4	23.0	54	W			1		10			0	0	Covered	Herbin.
Biskra			29.87	758.7	77.7	25.4	60	NW			5		10			0	0	Covered	Baudassé.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.89	759.2	29.98	761.5	62.2	16.8	65	S	14	6.3			9			0	0	Dull	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania			29.80	756.9	80	26.7		W			2		10k			0	0	Sultry	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.26	743.2	29.85	758.3	16.7	— 8.5	94	NW			2		10			0.087	2.2	Snowing	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.94	735.0	29.77	756.1	12.9	—10.6	83	W	6.9	3.1			4			0	0		Dr. Wiersbicki.
Eperies	28.78	731.0	29.72	755.0	16.2	— 8.8	71	Calm			0		10s			0	0		Julius Mikolik.
Gratz‡	28.49	723.6	29.83	757.7	18.0	— 7.8	66	S			2		3			0.055	1.4		Andreas Rospini.
Hermannstadt	28.19	716.1	29.70	754.4	23.0	— 5.0	100	W			2		10			0.472	12.00	Snowing	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.47	723.2	29.93	760.2	13.6	—10.2	90	NW			1		5			0	0		The Staff.
Lemberg	28.63	727.1	29.69	754.2	13.5	—10.3	80	SW			1		3			0	0		Dr. T. Stanecki.
Pola	29.49	749.0	29.61	752.0	30.6	— 0.8	85	ENE			1		10			0	0		I. R. Hydrographic Office.
Szathmar	29.26	743.2	29.71	754.6	20.1	— 6.6	89	S			2		10					Light snow.	Beicht Peter, S. J.
Szegedin	29.46	748.3	29.76	755.9	16.9	— 8.4	94	N			2		10			0.171	4.35		Karl Stancel.
Trieste	29.54	750.4	29.65	753.0	27.7	— 2.4	79	ENE			4		10			Inap.	Inap.	Snowing	P. Busin.
Vienna	29.07	738.4	29.84	758.0	18.0	— 7.8	83	W			4		1			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory
Furnes																			M. E. de Cae.
Maesoyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 21, 1882.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.58	751.3	29.68	753.9	24.6	— 4.1	74	WNW	6	2.7			2			0	0	Blue sky	W. Boswell.
Armagh, Observatory	29.59	751.6	29.85	758.2	19.0	— 7.2	84	SW	3	1.3									S. Call.
Bidston, Liverpool Obs'y			29.80	756.9	26.3	— 3.2	83	SW	15	6.7			1					Blue sky	John Hartnup.
Bolton, Sharples	29.23	742.4	29.79	756.7	13.0	—10.6	100	ENE	6	2.7			10					Foggy	Thomas Mackereth.
Bradford, Yorkshire																			J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.00	762.0	30.03	762.7	81	27.2	69	NE			2		3			0	0		D. clouds. Pvt. J. Surgenor, A. H. C.
Cardington			29.80	756.9	23.2	— 4.9	83	W			0.6		1					Blue sky	John McLaren.
Chatham, School M. E.	29.70	754.4	29.84	757.9	23.2	— 4.9	90	Calm			0		0?					Gloomy?	Cpl. Gwinn, R. E.
Falmouth, Observatory	29.66	753.4	29.89	759.2	33.5	0.8	79	N			1		1					D. clouds	The Staff.
Fort Napier, Natal	27.72	704.1	29.94	760.5	70.3	21.3	61	NE			1		8					Overcast	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.88	758.9	85	29.4	83	SW			2		3					D. clouds	C. E. Keane.
Galway, Queen's College			29.74	755.4	27	— 2.8	88	N			2		0					Foggy	J. O'Donaghadue.
Gibraltar, Mediterranean	29.84	757.9	29.90	759.4	59.4	15.2	94	SW			4		9					Raining	2nd Opl. C. Baldwin.
Glasgow, Observatory	29.53	750.0	29.74	755.4	17.9	— 7.8	76	W			1							Foggy	D. G. MacLean.
Greenwich, Royal Obs'y	29.65	753.1	29.84	757.9	22.2	— 5.4	93	SW			1		0					Foggy	The Staff.
Guernsey	29.61	752.1	29.84	757.9	36.5	2.5	80	NW			1		3					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.82	757.4	29.86	758.4	25.0	— 3.9	83	WSW	6	2.7			0					Blue sky	The Met'g'l Office.
Leicester, Museum	29.55	750.6	29.82	757.4	20.0	— 6.7	100	NE			1		2					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.68	753.9	29.76	755.9	68.8	20.4	66	NW			3		4					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.05	763.3	70.0	21.1	100	SW			0		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.28	743.7	29.83	757.7	30.1	— 1.1	78	WSW			1		1					Misty	Robert Pate.
Oxford, Radcliffe Obs'y	29.60	751.8	29.85	758.2	26	— 3.3	100	WSW			1		0					Misty	The Staff.
Plymouth	29.79	756.7	29.87	758.7	28.2	— 2.1	88	NW			2		0					Misty	John Merrifield.
Sandwick Manse, Orkneys			29.67	753.6	24.8	— 4.0	100	NNE	1	0.4			3					Snowing	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.53	750.0	29.60	751.8	56.2	13.4	82	SW			2		10			Blank		Misty	Serg't W. H. Lyne.
Sheffield	29.50	749.3	29.80	756.9	30.2	— 1.0	100	NW			2		0			0.01	0.3	Blue sky	W. F. Cooper.
Silloth Rectory	29.64	752.8	29.66	753.4	17.8	— 7.9	49	Calm			0		0			0	0	Blue sky	Rev. F. Redford, A. M.
Stonyhurst, Observatory			29.79	756.7	18.6	— 7.4	62	WNW	1	0.4			0					Blue sky	Rev. S. J. Perry.
Strathfield Turgiss					29.1	— 1.6	90	W			2		0					Blue sky	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	29.76	755.9	29.86	758.4	38	3.3	63	NE			2		3					D. clouds	W. Newcombe.
Valencia, Observatory	29.82	757.4	29.84	757.9	32.5	0.3	80	NNE	4	1.8			5			Blank		D. clouds	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			
Chatham, N. B.*	30.05	763.3	30.11	764.8	11	—11.7	86	NW	1	0.4			10s		NW	0.05	1.3	Cloudy	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.96	761.0	30.01	762.2	18	— 7.8	100	N	11	4.9			10n			1.815	46.10	Sleeting	G. A. Blair.
Chicontime, Quebec					—17.3	—27.4		N			2		10s			0	0	Cloudy	H. J. Cundall, C. E.
Cornwall, Ontario	29.92?	760.0?	30.24	768.1	— 2.5	—19.2	100	E			1		10s			0	0	Cloudy	Rev. V. A. Huart.
Dalhousie, N. B.	29.98	761.5	30.02	762.5	0.0	—17.8		W			2	0	0			0	0	Cloudy	James Smith, M. A.
Father Point, Quebec*	30.26	768.6	30.28	769.1	—13	—25.0	75	SW	2	0.9		0	2ks		Calm	0	0	Clear	H. A. Johnson.
Fredericton, N. B.	30.08	764.0	30.16	766.1	— 1.9	—18.8	97	W	8	3.6			10s			0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.09	738.9	30.05	763.5	—19	—28.3	100	SW	10	4.5		0	0			0	0	Cloudy	Prof. Harrison.
Granton, Ontario	28.86	733.0	30.06	763.5	12.5	—10.8	90	Calm			0		10n			0	0	Clear	James Stewart.
Halifax, N. S.*	29.82	757.4	29.96	761.0	19	— 7.2	97	N	14	6.3			10n			0.250	6.35	Cloudy	James Grant.
Hamilton, Ontario	29.64	752.8	30.07	763.8	16.1	— 8.8	85	SW			1	10k				0.11	2.8	Cloudy	A. Allison.
Kingston, Ontario*	29.76	755.9	30.14	765.5	0	—17.8	82	N	7	3.1			10s		W	0.04	1.0	Cloudy	Geo. Dickson, B. A.
Little Glace Bay, N. S.					35.0	1.7	97	S	4	1.8			10n			Inap.	Inap.	Fog & driz'g	S. Woods, M. A.
Montreal, Quebec*	29.97	761.2	30.20	767.1	— 5	—20.6	78	NE	12	5.4		2k	8s;hz	NW		0	0	Cloudy	C. H. Rigby.
Moose Factory, Ontario																			C. H. McLeod, C. E.
Norwood, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.33	745.0	30.09	764.3	7	—13.9	84	E	1	0.4		5k	5ks	NE	NE	0.05	1.3	Cloudy	Rev. T. F. Fotheringham M. A.
Peterboro, Ontario																			Rev. R. Moseley.
Port Dover, Ontario	29.29	744.0	30.03	762.7	18	— 7.8	98	N	3	1.3			10n			0.10	2.5	Threatening	J. F. Jeffers, M. A.
Port Stanley, Ontario	29.34	745.2	30.04	763.0	15	— 9.4	85	E	3	1.3			10n		E	0.17	4.3	Cloudy	H. Morgan.
Quebec, Quebec*	29.89	759.2	30.26	768.6	— 4	—20.0	100	E			1		Fog			0	0	Foggy	M. Payne.
Rockliffe, Ontario*	29.66	753.4	30.18	766.6	— 8	—22.2	80	Calm	0	0		0	2s		SW	0.04	1.0	Fair	Capt. Ashe, R. N.
St. Andrews	30.08	764.0	30.13	765.3	3	—16.1	76	W	2	0.9		0	0			0	0	Clear	W. H. McIntyre.
St. John's, N. B.	29.91	759.7	30.09	764.3	6.0	—14.4	100	NW	7	3.1			10ks			0.20	5.1	Cloudy	
Saugeen, Ontario*	29.29	744.0	30.07	763.8	8	[illegible]	93	SW	6	2.7			10ks			0.05	1.3	Cloudy	G. Murdock, C. E.
Stratford, Ontario	28.74	730.0	30.12	765.0	14.0	[illegible]	91	Calm	0	0			10s			0.10	2.5	Cloudy	K. Stewart.
Sydney, C. B*	29.91	759.7	29.95	760.7	40	4.4	98	SE	17	7.6			10n			0	0	Cloudy	C. J. Macgregor, M. A.
Toronto, Ontario*	29.65	753.1	30.07	763.8	14	—10.0	84	N	4	1.8			10n			0.06	1.5	Cloudy	T. C. Hill, C. E.
Windsor, N. S.																			Magnetic Observatory.
Woodstock, Ontario	28.89	733.8	30.03	762.7	15.7	— 9.1	97	NE	6	2.7			10s			0	0	Cloudy	
Yarmouth, N. S.*	29.96	761.0	30.03	762.7	22	— 5.6	76	N	5	2.2			10s		N	0	0	Cloudy	Prof. Wolverton.
SUB-SERIES.																			Lt. F. E. Wilmot, R. N
St. John's, Newfoundland	30.37	771.4	30.54	775.7	37	2.8	100	S	1	0.4		2k	2s			0	0	Fog & mist	John Delany.
St. Pierre, N. F.			30.09	764.3	33.8	1.0		SE			2					0	0		N. F. Land, Comd't.
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y.																			The Staff, for D. Gill.
Cape St. Francis Lt. House																			John Duthie.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	30.39	771.9	30.41	772.5	34.9	1.6	89	ENE	4.5	2.0			7c;cs			0	0	Very cloudy	M. Marc Dechevrens, S. J.

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

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.21	665.7	29.93	760.2	59.0	15.0	78	NE			1					0	0	Misty	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.51	749.6	29.56	750.8	20.1	— 6.6	81	NW	11	5			7						
Fanöe	29.61	752.0	29.63	752.5	24.1	— 4.4	88	W			2		8						
Godthaab, Greenland	30.36	771.2	30.41	772.3	37.0	2.8	64	S			6		9						
Stykkisholm, Iceland	30.50	774.6	30.54	775.7	9.7	—12.4	92	NE			6		0						
Thorshavn	29.72	754.9	29.76	755.8	25.5	— 3.6	76	N	7	3			7					Snowing	
Vestervig	29.53	750.1	29.63	752.5	18.0	— 7.8	97	NE			2		10						
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.40	746.7	30.11	764.7	8.2	—13.2	73	SE			1		Fog		E	0	0	Foggy	M. Labroue, Director.
Alençon	29.50	749.3	30.05	763.3	23.0	— 5	85	SW			1		5kn		NE			Snowing	M. Nicot, Director.
Arras, Engineer School	29.56	750.8	29.84	757.8	21.7	— 5.7	92	SW	2.9	1.3			s						M. Klein, Commandant.
Avignon, Normal School	29.81	757.2	29.89	759.2	25.6	— 3	87	N			4		0			0.098	2.5	Very clear	M. Giraud, Director.
Bar-sur-Seine‖	29.41	747.0	30.01	762.2	20.5	— 6.4	80	SSE			1		10			0	0	Covered	M. Saillard, Director.
Beauvais, Normal School	29.61	752.2	29.90	759.4	25.1	— 3.3	84	W			1		8		NNW	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.07	738.3	30.03	762.7	18.7	— 7.4	100	SSW			1		0			0	0	Clear	M. Gobin, Director.
Bordeaux, Observatory	29.78	756.5	30.06	763.5	19.6	— 6.9	77	SSE			1		0			0	0	Hazy	M. Rayet, Director.
Bourges, Normal School	29.36	745.7	29.95	760.8	21.2	— 6	82	S			1		1		S	0	0	Clear	M. Postel, Director.
Brest, Naval Observatory	29.66	753.4	29.91	759.6	39.6	4.2	90	Calm			0		10			0.118	3.00	Misty	M. de Rermaree, Dir.
Caen, Normal School	29.76	755.9	29.84	758.0	34.0	1.1	96	SW			1		2			0	0	Slightly cl'dy	M. Bietrix, Director.
Châlons-sur-Marne, N.Sch'l	29.58	751.4	29.92	760.0	18.7	— 7.4		NE			2		5			0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.36	745.8	29.91	759.7	20.1	— 6.6	94	S			1		10			0	0	Covered	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.59	726.2	30.05	763.2	20.5	— 6.4	66	SSW			1		0			0.008	0.2		M. Alluard, Director.
Cluny, Normal School	29.12	739.7	30.02	762.5	22.6	— 5.2		SW			1		1		SW	0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	29.05	737.8	29.97	761.1	20.5	— 6.4		SW			4		n		SW	0	0		Dr. Coulet, Director.
Gap, Normal School	27.17	690.1	29.82	757.8	23.4	— 4.8	95	W			3					0.122	3.1		M. Jeangirard, Director.
Gréasque, du. Rhone	28.67	728.1	29.81	757.1	23.0	— 5	100	NW			4		0			0.12	3.		M. Kina, Director.
Grenoble, Normal School	29.14	740.1	29.96	761.0	22.3	— 5.4		WNW			4		ckn			0.31	8.		M. Ablard, Director.
Guéret, Normal School	28.33	719.6	30.01	762.3	24.4	— 4.2	74	SE			1		0			0	0	Clear	M. Rivoir, Director.
Lamballe, Normal School	29.58	751.2	29.85	758.5	28.2	— 2.1	98	SW			1		5		SW	0.08	1.	Cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.43	747.4	30.15	765.7	23.0	— 5		E					0			0	0	Clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.79	756.6	29.89	759.2	38.5	8.6	73	NNW			1		10	E	NW	0.197	5.0	Covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.92	734.5	30.01	762.2	22.3	— 5.4	61	NW			2		0			0	0	Hazy	M. André, Director.
Mans, Normal School	29.66	753.4	29.99	761.7	26.2	— 3.2	74	W			3		8		NW	0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.51	749.6	29.79	756.7	26.4	— 3.1	73	NW			3		0			0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.55	623.6	29.79	756.6	35.6	2.0	38	NW	9.4	4.2			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.82	757.4	29.93	760.2	31.6	— 0.2	94	W			1		0					Snowy	M. Galzin, Director.
Nancy, Normal School	29.15	740.3	29.97	761.1	19.4	— 7.0	73	SW			1		10			0	0	Foggy	M. Hasse.
Nantes, Observatory	29.87	758.6	30.03	762.7	29.5	— 1.4	78	SE			1		10			0	0	Gloomy	M. Larocque, Dir.
Nice	29.56	750.9	29.60	751.8	44.2	6.8	71	E			4		10	E	E	0.606	15.4	Covered	Capt. Boissière, Director.
Perpignan, Observatory	29.84	757.9	29.95	760.6	33.8	1.0	23	N	11.2	5.0			1	W		0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.19	563.6			14.4	— 9.8							1		N	0	0	Clear	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.89	733.9	30.03	762.8	23.9	— 4.5					3		10			0	0	Gloomy	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.85	631.2			10.9	—11.7	14	NNE			3		0			0.004	0.1		M. Alluard, Director.
Rochefort, Naval Obs'y	30.00	762.0	30.01	762.2	29.7	— 1.3	88	E			1		0			0	0	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.78	756.4	30.01	762.2	28.8	— 1.8	78	SE			1		5		NNE	0	0	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.74	704.7	30.11	764.7	7.7	—13.5	83	E			3		Fog			0	0	Foggy	M. Richard, Director.
Rouen, Normal School	29.78	756.5	29.87	758.7	25.9	— 3.4	98	S			1		10		S	0	0	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.74	755.4	29.90	759.4	32.0	0.0	89	SW			1		8		NW	0	0	Very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.77	756.1	29.93	760.3	23.0	— 5.0	73	S			1		10	WNW	WNW				M. Renou, Director.
Toulouse, Observatory	29.35	745.6	30.08	764.0	16.5	— 8.6	100	NW			1		0			0	0	Clear	M. Baillaud, Director.
Tours	29.78	750.4	29.98	761.4				SSE			1		10		SW	0	0	Covered	M. de Tastes.
Versailles, Observatory Sun-Series.	29.42	747.3	29.91	759.8	25.5	— 3.6	61	SW			1		10			0	0	Covered	Dr. A. Bérigny, Director.
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.98	736.0	29.84	757.8	10.9	—11.7	96	N			4		8ks					Light snow	Prof. Dr. Hoh.
Berlin	29.53	750.0	29.71	754.7	16.9	— 8.4	88	SW			1		4			0.004	0.1		Prof. Dr. Arndt.
Breslau	29.19	741.3	29.71	754.6	13.1	—10.5	63	SSW			2		0			0	0		Royal University Obs'y.
Carlsruhe	29.51	749.6	29.97	761.1	21.9	— 5.6	70	SW			4		5	NW		0.012	0.3		Albert Senz.
Cassel	29.16	740.6	29.76	755.8	12.9	—10.6	83	S			4		10	SW		0.033	0.84	Snowing	Dr. H. Möhl.
Frankfort on the Main	29.62	752.3	30.02	762.4	14.0	—10.0	77	SW			1		9					Snowing	Physical Society.
Friedrichshafen	28.45	722.7	29.98	761.5	20.8	— 6.2	82	SW			5		8	SW		0	0		Chief Telegrapher Wilhelm:
Hamburg	29.95	753.1	29.72	754.9	16.7	— 8.5	82	WSW			3		1			0.079	2.0		Dr. R. Kleeman.
Kiel	29.64	752.8	29.65	753.2	21.4	— 5.9	76	SW			1		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Ästrom'l Obs'y	29.34	745.3	29.80	756.8	14.0	—10.0	84	SW			2		10			0	0		Prof. Dr. Bruhns.
Magdeburg	29.49	749.0	29.72	755.0	20.8	— 6.2	82	W			3		5ks	W		0.012	0.3		Dr. Assmanns.
Memel	29.43	747.6	29.48	748.7	21.6	— 5.8	100	SW			5		10n					Snowing	Reinbrecht & Issermann.
Munich	28.02	711.6	29.87	758.6	15.3	— 9.3	71	W			1		10			0.004	0.1	Snowing	Central Station.
Neufahrwasser	29.53	750.1	29.55	750.5	17.4	— 8.1	77	SW			4		10			0.004	0.1	Light snow	A Lothes.
Neustadt, Palatinate	29.27	743.5	29.80	756.8	14.0	—10		Calm			0		0			0	0		Dicknether.
Stuttgart	28.92	734.5	29.87	758.7	20.8	— 6.2	66	SW			2		2	NW		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.29	718.5	29.81	757.2	16.7	— 8.8	74	W			4		5	W		0	0		Prof. Kemleln.
Wustrow	29.61	752.0	29.63	752.6	25.5	— 3.6	98	WNW			5		5ks			0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Tempera-ture of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direc-tion. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.31	744.5	29.69	754.2	69.1	20.6		SW			1.5		5					½ clear	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.02	762.5	30.07	763.8	78.7	25.9	56	SW	20.0	8.9			0			0	0	Blue sky	
Deesa	29.51	749.5	29.99	761.6	81.8	27.7	38	SSW	10.1	4.5			9	SSW		0	0	D. clouds	
Bombay	29.94	760.5	29.98	761.5	81.7	27.6	61	WNW	14.0	6.3			0			0	0	Blue sky	
Poona, Yarrowda	28.12	714.3	29.98	761.6	79.3	26.3	19	ESE	5.0	2.2			0			0	0	Blue sky	
Belgaum	27 43	696.8	29.99	761.7	74.8	23.8	36	E	7.0	3.1			1		NE	0	0	D. clouds	
Lahore	29.30	744.1	30.07	763.8	62.6	17.0	38	Calm	1.3	0.6			4			0	0	Blue sky	
Roorkee	29.14	740.0	30.07	763.8	63.2	17.3	43	NW	2.2	1.0			0			0	0		
Agra	29.62	752.2	30.20	767.1	69.8	21.0	35	W	2.2	1.0			0			0	0		
Nagpur	28.99	736.3	30.06	763.5	78.7	25.9	23	SE	2.4	1.1			0			0	0	Blue sky	
Jubbulpore	28.69	728.8	30.10	764.7	66.7	19.3	47	Calm	1.3	0.6			0			0	0	Blue sky	
Lucknow	29.66	753.2	30.05	763.3	61.3	16.3	38	NNW	1.5	0.7			0			0	0	Blue sky	
Allahabad	29.76	756.0	30.09	764.3	61.3	16.3	57	Calm	1.0	0.7			0			0	0	Blue sky	
Patna	29.93	760.2	30.12	765.0	62.9	17.2	54	W	0.7	0.3			0			0	0	Blue sky	
Hazaribagh	28.01	711.4	30.10	764.4	62.8	17.1	37	N	5.7	2.6			0			0	0	Blue sky	
Cuttack	29.99	761.7	30.07	763.8	71.7	22.1	56	Calm	0.5	0.2			0			0	0	Blue sky	
Calcutta, Alipore	30.03	762.8	30.06	763.4	64.5	18.1	63	WNW	4.0	1.8			0			0	0	Blue sky	
Goalpara	29.61	752.1	30.03	762.7	68.8	20.4	57	Calm	1.5	0.7			0			0	0	Blue sky	
Chittagong	29.96	760.9	30.05	763.3	67.8	19.9	66	W	2.8	1.2			0			0	0	Blue sky	
Sibsagar	29.72	754.8	30.07	763.7	61.5	16.4	75	NE	2.6	1.2			0			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.26	743.2	29.69	754.0	28.8	— 1.8	54	E	4.9	2.2			10			0	0		Prof. Giovanni Clodig.
Milan	29.13	739.8	29.67	753.6	32.4	0.2	83	W	4.9	2.2			0			0	0		Prof. Schiaparelli.
Padua	29.58	751.3	29.69	754.1	31.6	— 0.2	79	NNW	4.9	2.2			6	WNW		0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.73	729.7	29.67	753.7	27.0	— 2.8	76	ENE	1.8	0.8			0			0	0		Prof. P. F. Denza.
Genoa	29.43	747.4	29.62	752.4	35.4	1.9	44	NE	13.6	6.1			0			0	0		Prof. G. M. Garibaldi.
Mondovi	27.71	703.9	29.71	754.7	27.3	— 2.6	87	W			2		0			0	0		Prof. D. C. Bruno.
Pesaro	29.60	751.8	29.65	753.1	29.1	— 1.6	88	W	23.7	10.6			10			0	0		Prof. Luigi Guidi.
Florence	29.32	744.6	29.58	751.3	35.6	2.0	67	NNE			6		10	W		0.024	0.6		Cav. F. Meucci.
Leghorn	29.47	748.6	29.56	750.8	41.2	5.1	84	ENE	9.4	4.2			8			0.024	0.6		Prof. P. Monte.
Rome	29.34	745.2	29.52	749.7	54.0	12.2	75	WSW	11.2	5.0			10			0.654	16.6		Prof. P. S. Ferrari.
Lecce	29.28	743.7	29.54	750.2	57.7	14.3	88	WSW	9.8	4.4			10	SW		0.118	3.0		Prof. C. de Giorgi.
Cosenza	28.78	730.9	29.67	753.6	56.5	13.6	76	SW	6.3	2.8			10	W		1.953	49.6		Prof. D. Conti.
Cagliari	29.50	749.2	29.69	754.1	50.4	10.2	78	N			4		10			0.039	1.0		Prof. A. Pacinotti.
Palermo	29.45	747.9	29.69	754.2	65.3	18.5	58	WSW	19.9	8.9			9			0.480	12.2		Prof. G. Ciaccíatore.
Syracuse	29.65	753.2	29.70	754.3	68.0	20.0	64	S	15.0	6.7			6	W		0	0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.06	738.0	29.57	751.1	56.7	13.7	72	SW	6.3	2.8			10k	SW		0.480	12.2		Prof. F. Brioschi.
Stelvio	21.87	555.5			— 4.5	—20.3	61	NE					0			0	0		P. F. Denza.
Valdobbia	21.59	548.2			3.6	—15.8	81	NE					0			0	0		
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y†	30.32	770.1	30.34	770.6	31.0	— 0.6	81	NNE	1.0	0.4			0			0	0	Clear	K. Sasaki.
Kioto	30.07	763.8	30.26	768.6	35.5	1.9	71						10s;ck			0	0	Cloudy	
Nagasaki, I. M. Obs'y	30.15	765.8	30.37	771.4	34.0	1.1	87	Calm	0	0			0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	30.02	762.5	30.09	764.3	33.3	0.7	52	N	7.7	3.4		ck	9s		SW	0	0	Cloudy	The Staff.
Wakayama	30.22	767.6	30.27	768.8	35.8	2.7	64	NW	3.1	1.4			0			0	0	Clear	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.70	754.4	29.89	759.2	82.8	28.2	62	ENE	15.5	6.9		0	4		NE	0.02	0.5	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.71	754.6	29.97	761.3	65.5	18.6	84	NE			1	1cs	1ks			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascallentes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.75	755.7	29.75	755.7	33.3	0.7		W			4					0.016	0.3		
Groningen	29.66	753.3	29.71	754.7	19.8	— 6.8		SE			2					0.240	6.1		
Helder	29.70	754.4	29.70	754.4	26.8	— 2.9		E			1					0.083	2.1		
Hellevoetsluis	29.69	754.0	29.69	754.0	32.4	0.2	94	W			2					0	0		
Utrecht	29.65	753.2	29.70	754.4	28.8	— 1.8	94	S			1		Haze			0.134	3.4	Hazy	H. van der Brink

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.56	750.7	29.62	752.3	15.1	— 9.4	50	SSE	1.1	0.5			0						
Christiania	29.53	750.0	29.69	754.0	13.3	—10.4	74	Calm	0	0			4			0.012	0.3		
Gjæsvær	29.85	758.1	29.87	758.7	19.0	— 7.2		NE			7		10						
Lodingen	29.77	756.1	29.82	757.3	14.0	—10.0	64	NE			4		1			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.14	740.2	29.30	744.2	54.7	12.6	93	SE	29.8	13.3			10			1.378	35.0	Raining	Dr. J. A. Sampaio.
Campo Major	28.80	731.5	29.80	756.9	55.8	13.2	82	SSE	1.3	0.6			9			0.236	6.0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.74	755.4	29.83	757.6	67.1	19.5	94	SW	8.0	3.6			10			0.299	7.6		Capt. D. A. de Cunha.
Lisbon, Observatory	29.44	747.8	29.80	756.9	54.5	12.5	87	NNE	7.4	3.3			5		WSW	0.031	0.8		The Staff.
Ponta Delgada, Azores	29.20	741.7	29.27	743.5	59.0	15.0	91	S	12.5	5.6			10			1.634	41.5	Raining	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.96	735.6	30.10	764.5	24.1	— 4.4	100	SSW	9	4			8						Capt. Lasarew.
Archangel	28.91	734.3	28.93	734.8	6.4	—14.2	85	NNE	13	6			10					Snowing	Capt. Sselliwerstow.
Astrakhan	30.13	765.4	30.05	763.3	29.1	— 1.6	78	ENE	11	5			10cp			Blank		Heavy cl'ds.	Capt. Wisganow.
Barnaul	29.90	759.4	30.46	773.6	5.5	—14.7	85	NE	9	4			5						Meteorological Obs'y.
Dorpat	29.13	740.0	29.40	746.8	0.3	—17.6	84	WSW	4	2			0						Observatory.
Ekaterinburg	28.66	727.9	29.69	754.2	9.1	—12.7	61	SW	22	10			6n					Snow-drift.	Meteorological Obs'y.
Kasan	29.36	745.7	29.65	753.2	5.7	—14.6	73	SSW	13	6			1						Observatory.
Kertch	29.67	753.5	29.69	754.0	27.5	— 2.6	89	ESE	7	3			9						Lagorio.
Kieff	29.11	739.3	29.80	756.9	8.6	—13.0	76	ESE	4	2			10cks						Observatory.
Krotkowo, N. 58°47', E. 48°34'																			Cand. Fatjanow.
Lugan	29.70	754.4	29.92	760.0	19.0	— 7.2	72	E	9	4			9			Blank		Light clouds	Meteorological Obs'y.
Moscow	28.89	733.7	29.47	748.6	14.5	— 9.7	64	S	13	6			1c						Meteorological Obs'y.
Nertchinsk	27.97	710.5	30.63	777.9	—15.3	—26.3	74						0						Meteorological Obs'y.
Nikolaiev	29.73	755.1	29.80	756.9	22.1	— 5.5	93	ENE	13	6			10n					Snowing	1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.84	757.8	29.92	760.0	2.1	—16.6	75	W	4	2			10n						Lieut. Iwanow.
Nukuss	29.93	760.3	30.17	766.3	47.1	8.4	81	SW	4	2			5n						Dr. Dobrochotow.
Pekin, China	30.15	765.7	30.29	769.3	25.5	— 3.6	52	Calm	0	0			0						Physical Observatory.
St. Petersburg	29.18	741.1	29.19	741.5	5.2	—14.9	87	WNW	18	8			10n					Light snow.	Central Physical Obs'y.
Tashkend, Laboratory																			Teich, A. M.
Tiflis	28.48	723.4	29.92	759.9	50.4	10.2	73	Calm	0	0			9ks						Physical Observatory.
Warsaw	29.26	743.2	29.72	754.9	6.4	—14.2	79	SSW	4	2			0						Astronomical Obs'y.
Wilna	29.20	741.7	29.65	753.1	13.3	—10.4	74	SW	7	3			1						Berg, Assistant.
Yeniseisk	30.44	773.2	30.78	781.7	—14.8	—26.0	77	Calm	0	0			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.75	755.9	24.0	— 4.4	99	W			2		2			0	0	Hazy	Andrew Gibb.
Monach Lt. House, Hebrides			29.74	755.4	32	0.0	90	NE			4	3	3	NE					J. Youngclause.
North Unst, Shetland Isl'ds			29.68	753.9				N			6	3	5	NW		Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.76	755.9	29.87	758.7	43.5	6.4	74	NE	2.2	1.0		0	4cs			0.165	4.19		Antonio Rave, Director.
Bilbao, Met. Obs'y	29.97	761.3	30.03	762.8	36.0	2.2	66	SE	0.5	0.23		0	0			0	0	Clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.93	684.0			26.2	— 3.2	82	NE	3.8	1.72			0			0.335	8.5	Clear	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.64	702.1	29.90	759.4	43.5	6.4	50	NE	13.6	6.1		0	9			0.075	1.9	Almost cov'd	The Staff.
Murcia, Met. Obs'y ‡	29.69	754.1	29.92	760.0	56.8	13.8	93	SE	7.6	3.4		5	5	SW		0.161	4.1	Raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.86	733.1	29.76	756.0	48.4	9.1	68	SE	0	0			6			0	0	Cloudy	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.97	761.1	30.03	762.8	67.3	19.6	89	ESE	1.8	0.8		0	0			0	0	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.97	761.2	30.03	762.8	79.5	26.4	76	E	0	0			8ck		E	0	0	Very cloudy	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.77	756.3	29.87	758.8	61.9	16.6	100	SW	13.1	5.9			10		SW	2.475	62.9	Raining	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.00	762.0	30.09	764.3	73.4	23.0	89	S	0	0		2s	3k	S	S	0	0	Clear	Enrique Gadea, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.40	746.7	29.44	747.7	6.4	—14.2		N			6		10			0	0		
Umea	29.52	749.9	29.58	751.2	2.8	—16.2	71	N			7		10			0	0		
Hernosand	29.59	751.6	29.64	752.9	3.7	—15.7	67	Calm			0		10			0.110	2.8		
Stockholm	29.46	748.3	29.52	749.8	11.1	—11.6	82	N			6		5			0.193	4.9		
Wisby	29.32	744.6	29.37	746.1	18.3	— 7.6	89	NW			4		10					Snowing	
SUB-SERIES.																			
Upsala	29.46	748.3	29.55	750.5	7.7	—13.5	100	NNW	14.5	6.5			3	NW		0.085	2.16		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.47	723.1	29.99	761.8	23.4	— 4.8	73	NNE			2		4			0	0	Cloudy	The Observatory.
Zurich	28.25	717.6	30.01	762.3	20.1	— 6.6	63	W			1		1			0	0	Clear	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —4.5 mm.; Ther. —5°.2 cent.; Hum. —5 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.66	753.4	60.8	16.0	73	SW	8	3.5			9		SW	0.232	5.9		The Observatory.
Valona			29.55	750.6	62.8	17.1		S			3		10			0	0	Covered	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.09	764.3	73.0	22.8	56	SW			4	7c				0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.15	765.8	30.24	768.1	12	—11.1	70	NE	2	0.9			10s		Calm	0	0	Cloudy	
Alpena, Michigan	29.35	745.5	30.06	763.5	2	—16.7	72	W	2	0.9			8s		Calm	0.01	0.3	Cloudy	
Atlanta, Georgia	28.84	732.5	30.02	762.5	34	1.1	90	E	8	3.6			10s		Calm	Inap.	Inap.	Cloudy	
Atlantic City, New Jersey	30.18	766.6	30.19	766.8	22	— 5.6	86	N	4	1.8		10k	0	W		0	0	Cloudy	
Augusta, Georgia	29.90	759.4	30.10	764.5	41	5.0	65	NE	2	0.9			10s		NE	0	0	Threatening	
Barnegat, New Jersey	30.14	765.5	30.20	767.1	23	— 5.0	86	E	2	0.9		5cs	5s	Calm	Calm	0	0	Cloudy	
Benton, Montana	30.16	766.1	30.18	766.6	20	— 6.7	85	N	13	5.8			10s		Calm	0	0	Cloudy	
Bismarck, Dakota	27.04	686.8			—18	—27.8	67	Calm	0	0		5cs	0	Calm		0.05	1.3	Fair	
Boise City, Idaho	28.16	715.3	30.02	762.5	— 7	—21.7		Calm	0	0		0	0			Inap.	Inap.	Clear	
Boston, Massachusetts	27.06	687.3	30.02	762.5	24	— 4.4	93	NW	2	0.9			10s		Calm	0	0	Cloudy	
Brackettville, Texas	30.03	762.7	30.20	767.1	16	— 8.9	66	W	6	2.7			10s		W	0	0	Cloudy	
Brownsville, Texas	28.62	726.9	29.70	754.4	35	1.7	90	E	2	0.9		0	0			0	0	Clear	
Buffalo, New York	29.74	755.4	29.79	756.7	59	15.0	100	Calm	0	0			10ks		S	0	0	Cloudy	
Burlington, Vermont	29.27	743.4	30.00	762.0	23	— 5.0	73	SW	2	0.9			10s		Calm	0.11	2.8	Cloudy	
Cairo, Illinois	29.94	760.5	30.27	768.8	3	—16.1	73	E	5	2.2			10s		S	0	0	Cloudy	
Campo, California	29.54	750.3	29.95	760.7	30	— 1.1	89	Calm	0	0			10s		Calm	0	0	Cloudy	
Camp Thomas, Arizona	27.37	695.2	29.94	760.5	44	6.7	92	SW	8	3.6			10n		Calm	0.58	14.7	Light rain	
Cape Henry, Virginia	27.18	690.4			36	2.2	71	NE			1	2ck	0	Calm		0	0	Clear	
Cape May, New Jersey	30.12	765.0	30.14	765.5	30	— 1.1	78	NW	16	7.2			10s		Calm	0	0	Cloudy	
Castroville, Texas	30.14	765.5	30.18	766.6	25	— 3.9	87	NE	4	1.8			10n		Calm	Inap.	Inap.	Light snow	
Cedar Keys, Florida	29.01	736.8	29.74	755.4	34	1.1	79	Calm	0	0		0	0			0	0	Clear	
Champaign, Illinois	29.99	761.7	30.02	762.5	59	15.0	94	E	8	3.6			Fog		Calm	0.04	1.0	Dense fog	
Charleston, S. Carolina	29.12	739.6	29.97	761.2	19	— 7.2	69	SE	1	0.4			10s		SE	0.01	0.3	Cloudy	
Charlotte, N. Carolina	30.01	762.2	30.07	763.8	42	5.6	83	N	6	2.7		0	8s		N	0	0	Cloudy	
Chattanooga, Tennessee	29.21	741.9	30.06	763.5	32	0.0	69	NE	4	1.8			10s		Calm	0	0	Cloudy	
Cheyenne, Wyoming	29.18	741.1	30.01	762.2	36	2.2	90	S	5	2.2			10s		Calm	0.01	0.3	Cloudy	
Chicago, Illinois	23.84	605.5	29.78	756.4	17	— 8.3	83	NE	2	0.9			10s		Calm	0	0	Cloudy	
Chincoteague, Virginia	29.25	742.9	30.00	762.0	13	—10.6	81	Calm	0	0		0	8s		Calm	0.23	5.8	Fair	
Cincinnati, Ohio	30.15	765.8	30.17	766.3	25	— 3.9	100	NW	7	3.1			10n		SW	0.01	0.3	Light snow	
Cleveland, Ohio	29.35	745.5	30.03	762.7	29	— 1.7	78	S	3	1.3			10s		Calm	0	0	Cloudy	
Coleman City, Texas	29.28	743.7	30.06	763.5	17	— 8.3	92	SW	9	4.0		5cs	0	Calm		0.03	0.8	Fair	
Columbus, Ohio	27.94	709.7	29.62	752.3	41	5.0	65	SW	10	4.5		0	0			0	0	Clear	
Concho, Texas	29.13	739.9	30.02	762.5	20	— 6.7	85	S	2	0.9			10s		Calm	Inap.	Inap.	Cloudy	
Corsicana, Texas	27.83	706.9	29.53	750.0	38	3.3	54	SW	4	1.8		0	0			0	0	Clear	
Davenport, Iowa	29.27	743.4	29.75	755.6	38	3.3	72	S	4	1.8		0	0			0	0	Clear	
Dayton, Washington T'y	29.31	744.5	30.01	762.2	4	—15.6	74	NE	2	0.9			10s		Calm	0.72	18.3	Cloudy	
Deadwood, Dakota	28.31	719.1	30.12	765.0	13	—10.6	100	SW	2	0.9			10s		Calm	0	0	Cloudy	
Decatur, Texas	25.18	639.6			1	—17.2	71	SW	1	0.4		0	0			0.03	0.8	Clear	
Delaware Breakwater, Del.	28.48	723.4	29.64	752.8	46	7.8	62	W	10	4.5		0	0			0	0	Clear	
Denison, Texas	30.15	765.8	30.18	766.6	25	— 3.9	87	NW	9	4.0			10n		NW	Inap.	Inap.	Light snow	
Denver, Colorado	28.90	734.0	29.71	754.6	33	0 6	89	E	4	1.8		0	0			0	0	Clear	
Des Moines, Iowa	24.65	626.1	29.87	758.7	26	— 3.3	67	N	4	1.8		8ck	2s	W	Calm	0.01	0.3	Cloudy	
Detroit, Michigan	29.14	740.1	30.10	764.5	12	—11.1	80	Calm	0	0			10s		Calm	0.37	9.4	Cloudy	
Dodge City, Kansas	29.32	744.7	30.05	763.3	15	— 9.4	82	Calm	0	0			10s		Calm	0.40	10.2	Cloudy	
Dubuque, Iowa	27.24	691.9	29.66	753.4	16	— 8.9	66	N	28	12.5			10s		Calm	0	0	Cloudy	
Duluth, Minnesota	29.31	744.5	30.08	764.0	5	—15.0	75	Calm	0	0			10s		Calm	0.23	5.8	Cloudy	
Eagle Pass, Texas	29.41	747.0	30.19	766.8	8	—13.3	79	NW	1	0.4			10s		NW	0	0	Cloudy	
Eagle Rock, Texas	29.04	737.6	29.79	756.7	35	1.7	80	Calm	0	0		0	0			0	0	Clear	
Eastport, Maine	25.02	635.5	29.68	753.9	18	— 7.8	84	N	12	5.4		0	8ks		NW	0	0	Fair	
Edinburg, Texas	30.04	763.0	30.11	764.8	7	—13.9	54	N	16	7.2			10s		NW	0	0	Cloudy	
El Paso, Texas					59	15.0	88	Calm			0	0	10s		Calm	0	0	Cloudy	
Erie, Pennsylvania	26.08	662.4			45	7.2	39	W	3	1.3		0	2s		Calm	0	0	Clear	
Escanaba, Michigan	29.23	742.4	29.98	761.5	26	— 3.3	88	S	7	3.1			10s		Calm	0.05	1.3	Cloudy	
Florence, Arizona	29.42	747.3	30.15	765.8	— 1	—18.3	85	NW	6	2.7			10s		Calm	Inap.	Inap.	Cloudy	
Fort Apache, New Mexico	28.39	721.1	29.99	761.7	45	7.2	76	W	1	0.4			10ks		SW	0	0	Threatening	
Fort Assiniboine, Montana	24.87	631.7	30.32	770.1	40	4.4	73	W	1	0.4			10s		W	0	0	Cloudy	
Fort Bennett, Dakota	26.97	685.0			—10	—23.3	54	SW	24	10.7		0	0			0	0	Clear	
Fort Buford, Dakota	28.48	723.4			—12	—24.4	74	Calm	0	0		0	0			0.06	1.5	Clear	
Fort Custer, Montana	27.94	709.7	30.06	763.5	—15	—26.1	72	S	8	3.6		0	0			0.08	2.0	Clear	
Fort Davis, Texas	26.75	679.4			—19	—28.3		S	4	1.8		0	0			0.06	1.5	Clear	
Fort Elliott, Texas	25.03	635.8	29.99	761.7	37	2.8	81	N	4	1.8		0	0			0	0	Clear	
Fort Gibson, Indian T'y	26.90	683.2	29.17	740.9	39	3.9	64	NW	20	8.9		2c	0	NW		0	0	Clear	
Fort Grant, Arizona	29.16	740.7	29.71	754.6	31	— 0.6	79	E	8	3.6		0	0			0	0	Clear	
Fort Griffin, Texas	25.06	636.5	29.86	758.4	43	6.1	30	NE	6	2.7		8k	0	W		0	0	Cloudy	
Fort Keogh, Montana	28.30	618.8	29.54	750.3	52	11.1	66	W	12	5.4		0	0			0	0	Clear	
Fort Macon, North Carolina	27.44	697.0			—25	—31.7		S	1	0.4		0	0			0	0	Clear	
Fort Missoula, Montana	30.04	763.0	30.06	763.5	35	1.7	90	N	24	10.7			10n		NW	0.02	0.5	Light rain	
Fort McKavett, Texas	26.65	676.9			—18	—27.8	100	Calm	0	0		0	0			0	0	Clear	
Fort Shaw, Montana	27.57	700.3	29.53	750.0	35	1.7	61	SW	5	2.2		0	0			0	0	Clear	
Fort Sill, Indian Territory	26.13	663.7			14	—10.0	82	W	25	11.2		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.41	721.6	29.53	750.0	35	1.7	80	SE	4	1.8		0	0			0	0	Clear	
Fort Verde, Arizona	28.09	713.5			—15	—26.1	71	N	4	1.8		0	0			0	0	Clear	
Fredericksburg, Texas					42	5.6	83	S			2		10n		S	0.03	0.8	Clear	
Galveston, Texas	28.03	711.9	29.61	752.1	40	4.4	73	NW	4	1.8		0	0			0.02	0.5	Light rain	
Grand Haven, Michigan	29.77	756.1	29.82	757.4	59	15.0	100	S	6	2.7			Fog		S	0	0	Clear	
Hatteras, North Carolina	29.34	745.2	30.04	763.0	11	—11.7	80	E	5	2.2			10s		Calm	0.14	3.6	Dense fog	
Helena, Montana	30.04	763.0	30.06	763.5	38	3.3	81	N	16	7.2			10s		Calm	0	0	Cloudy	
Henrietta, Texas	25.66	651.8			— 9	—22.8	100	SW	1	0.4		5c	0	Calm		0	0	Cloudy	
Indianapolis, Indiana	28.64	727.4	29.57	751.1	40	4.4	73	Calm	0	0		0	0			0	0	Fair	
Indianola, Texas	29.16	740.7	29.98	761.5	21	— 6.1	78	Calm	0	0			10s		Calm	0	0	Clear	
Jacksboro, Texas	29.80	756.9	29.82	757.4	51	10.6	93	S	2	0.9			10s;fg		Calm	0	0	Cloudy	
Jacksonville, Florida	28.51	724.1	29.63	752.6	44	6.7		Calm	0	0		0	0			0	0	Cloudy	
Keokuk, Iowa	30.01	762.2	30.06	763.5	51	10.6	93	NE	1	0.4			Fog			0	0	Clear	
Key West, Florida	29.28	743.7	29.99	761.7	14	—10.0	93	NE	3	1.3			10s		Calm	0.03	0.8	Dense fog	
Kittyhawk, North Carolina	30.03	762.7	30.06	763.5	72	22.2	85	SW	3	1.3		0	0			0	0	Cloudy	
Knoxville, Tennessee	30.08	764.0	30.10	764.5	33	0.6	100	N	39	17.4			10n		Calm	0.22	5.6	Clear	
La Crosse, Wisconsin	29.00	736.6	30.04	763.0	32	0.0	79	E	4	1.8			10s		Calm	0	0	Light rain	
La Mesilla, New Mexico	29.28	743.7	30.09	764.3	7	—13.9	77	E	2	0.9			10n		Calm	0.01	0.3	Cloudy	
Laredo, Texas	25.97	659.6	30.12	765.0	31	— 0.6	48	Calm	0	0		5c	0	Calm		0	0	Light snow	
Leavenworth, Kansas	29.35	745.5	29.69	754.1	44	6.7	84	Calm	0	0		10cs	0	Calm		0	0	Fair	
Lewiston, Idaho	29.08	738.6	29.97	761.2	20	— 6.7	70	N	7	3.1			10s			0	0	Cloudy	
Little Rock, Arkansas	29.35	745.5	30.06	763.5	13	—10.6	61	E	2	0.9		0	5s		Calm	0.01	0.3	Cloudy	
Los Angeles, California	29.50	749.3	29.83	757.7	33	0.6	89	E	4	1.8			Fog		Calm	0	0	Fair	
Louisville, Kentucky	29.62	752.3	29.96	761.0	50	10.0	86	SW	2	0.9		0	0			1.23	31.2	Dense fog	
Lynchburg, Virginia	29.40	746.7	29.98	761.5	28	— 2.2	77	N	4	1.8			10s		Calm	0	0	Clear	
Madison, Wisconsin	29.40	746.7	30.13	765.3	25	— 3.9	87	SE	2	0.9		10k	0	Calm		0	0	Cloudy	
Marquette, Michigan	29.95	760.7	30.03	762.7	5	—15.0	75	NW	5	2.2			10s		Calm	0.09	2.3	Cloudy	
Mason, Texas	29.31	744.5	30.10	764.5	— 3	—19.4	66	NW	8	3.6			10s		NW	0.05	1.3	Cloudy	
Memphis, Tennessee	28.12	714.2	29.88	758.9	44	6.7	84	N	4	1.8		0	0			0	0	Clear	
Milwaukee, Wisconsin	29.50	749.3	29.85	758.2	36	2.2	80	E	2	0.9		10cs	Fog	Calm	Calm	0	0	Cloudy	
	29.22	742.2	30.01	762.2	10	—12.2	79	NW	6	2.7			10s		Calm	0.04	1.0	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.86	758.4	29.94	760.5	55	12.8	87	S	4	1.8			10ks		SW	0	0	Cloudy	
Montgomery, Alabama	29.77	756.1	30.01	762.2	45	7.2	92	E	5	2 2			10ks		W	0	0	Cloudy	
Morgantown, W. Virginia	29.00	736.6	30.03	762.7	35	1.7	80	Calm	0	0			10s		Calm	0	0	Cloudy	
Moorhead, Minnesota	29.03	737.3	30.14	765.5	—15	—26.1	71	S	8	3.6		0	0			Inap.	Inap.	Clear	
Mt. Washington, N. H.	23.64	600.4	30.00	762.0	13	—10.6	62	S	5	2.2		8c	0	Calm		0	0	Cloudy	
Nashville, Tennessee	29.42	747.3	29.97	761.2	37	2.8	81	SE	1	0.4			10ks;fg		Calm	Inap.	Inap.	Cloudy	
New Haven, Connecticut	30.07	763.8	30.20	767.1	12	—11.1	61	NE	5	2.2		0	1s		Calm	0	0	Clear	
New London, Connecticut	30.16	766.1	30.21	767.3	21	— 6.1	57	NW	1	0.4		70k	0	Calm		0	0	Fair	
New Orleans, Louisiana	29.84	757.9	29.90	759.4	58	14.4	88	S	6	2.7			10s		S	0	0	Cloudy	
Newport, Rhode Island	30.10	764.5	30.16	766.1	23	— 5.0	86	N	5	2.2			10s		Calm	0	0	Cloudy	
New River, N. Carolina					32	0.0	100	N			4		10n		Calm			Sleeting	
New Shoreham, Rhode I'd	30.16	766.1	30.19	766.8	27	— 2.8	76	NW	4	1.8		8cs	0	NW		0	0	Fair	
New York, New York	30.00	762.0	30.20	767.1	18	— 7.8	84	N	2	0.9			10s		Calm	0	0	Cloudy	
Norfolk, Virginia	30.09	764.3	30.15	765.8	28	— 2.2	88	N	6	2.7			10s;fg		Calm	0.03	0.8	Cloudy	
North Platte, Nebraska	27.03	686.6	29.82	757.4	8	—13.3	78	N	6	2.7		10c	0	W		0.04	1.0	Cloudy	
Olympia, Washington T'y	29.95	760.7	29.99	761.7	34	1.1	79	NW	2	0.9			10s		Calm	0	0	Cloudy	
Omaha, Nebraska	28.36	720.3	30.07	763.8	5	—15.0	100	N	14	6.3			10n		Calm	0.10	2.5	Light snow	
Oswego, New York	29.75	755.6	30.10	764.5	18	— 7.8	68	S	8	3.6		2ck	5s	W	SW	0.01	0.3	Fair	
Pensacola, Florida	29.96	761.0	29.99	761.7	54	12.2	87	E	4	1.8			10ks		W	0	0	Cloudy	
Philadelphia, Pa	30.14	765.5	30.20	767.1	18	— 7.8	68	E	8	3.6		10cs	0	Calm		0	0	Cloudy	
Phœnix, Arizona	28.74	730.0	30.60	777.2	40	4.4	73	E	5	2.2			10s		Calm	0	0	Cloudy	
Pike's Peak, Colorado	17.39	441.7	29.60	751.8	13	—10.6	62	N	8	3.6		1cs	0	Calm		0.11	2.8	Clear	
Pilot Point, Texas	28.86	733.0	29.73	755.1	34	1.1	79	SE	14	6.3		0	0			0	0	Clear	
Pioche, Nevada	23.79	604.3	29.50	750.8	27	— 2.8	94	SW	2	0.9			10n		Calm	0.08	2.0	Light snow	
Pittsburg, Pennsylvania	29.18	741.1	30.02	762.5	29	— 1.7	89	NW	3	1.3			10s		Calm	0.14	3.6	Cloudy	
Port Huron, Michigan	29.31	744.5	30.03	762.7	13	—10.6	81	S	2	0.9			10s		Calm	0.13	3.3	Cloudy	
Portland, Maine	30.11	764.8	30.10	766.1	17	— 8.3	67	NW	3	1.3			10s		Calm	0	0	Cloudy	
Portland, Oregon	29.95	760.7	30.03	762.7	31	— 0.6	69	NE	3	1.3			10s		W	0	0	Cloudy	
Portsmouth, N. Carolina					34	1.1	100	NE	24	10.7			10n		Calm	0.10	2.5	Light rain	
Prescott, Arizona	24.56	623.8	29.92	760.0	41	5.0	82	SW	6	2.7			10s		SW	0	0	Cloudy	
Punta Rassa, Florida	29.99	761.7	30.01	762.2	68	20.0	95	SE	7	3.1		2c	Fog	Calm	SE	0	0	Fair	
Red Bluff, California	29.57	751.1	29.92	760.0	47.0	8.3	92	Calm	0	0			10n		Calm	Inap.	Inap.	Light rain	
Rio Grande City, Texas	29.60	751.8	29.82	757.4	58	14.4	94	E	3	1.3			10s		Calm	0	0	Cloudy	
Rochester, New York	29.39	746.5	30.05	763.3	20	— 6.7	70	SW	4	1.8		4c	1s	W	Calm	0.06	1.5	Fair	
Roseburg, Oregon	29.36	745.7	29.94	760.5	40	4.4	95	Calm	0	0		10ck	0	W		0.32	8.1	Cloudy	
Sacramento, California	29.87	758.7	29.95	760.7	49	9.4	93	S	8	3.6			10n		Calm	0.12	3.0	Light rain	
St. Louis, Missouri	29.32	744.7	29.93	760.2	23	— 5.0	79	E	7	3.1		10cs	0	Calm		0	0	Cloudy	
St. Paul, Minnesota	29.16	740.7	30.07	763.8	6	—14.4	87	NW	1	0.4			10n		NW	0.18	4.6	Light snow	
Salt Lake City, Utah	25.44	646.2	29.77	756.1	32	0.0	61	SE	1	0.4		5k;cs	0	NW;C		0.09	2.3	Fair	
San Antonio, Texas	29.09	738.9	29.81	757.2	38	3.3	81	Calm	0	0		0	0			0	0	Clear	
San Diego, California	29.96	761.0	30.03	762.7	55	12.8	81	W	8	3.6		0	5ks		NW	0.33	8.4	Fair	
Sandusky, Ohio	29.32	744.7	30.05	763.3	15	— 9.4	82	S	6	2.7		0	5s		Calm	0.07	1.8	Fair	
Sandy Hook, New Jersey	30.15	765.8	30.19	766.8	20	— 6.7	70	NW	3	1.3		5k	0	W		0	0	Fair	
San Francisco, California	29.86	758.4	29.93	760.2	51	10.6	82	SW	5	2.2			10s		W	0.16	4.1	Threatening	
Santa Fé, New Mexico	23.04	585.2	29.58	751 3	33	0.6	79	SW	2	0.9		5k	0	N		0	0	Fair	
Savannah, Georgia	29.99	761.7	30.09	764.3	47	8.3	77	N	3	1.3			10ks		SW	0	0	Cloudy	
Shreveport, Louisiana	29.54	750.3	29.78	756.4	48	8.9	93	SW	4	1.8			10s		Calm	Inap.	Inap.	Cloudy	
Silver City, New Mexico	24.10	612.4	30.46	773.7	31	— 0.6	48	NW	3	1.3		0	0			0	0	Clear	
Smithville, North Carolina	30.04	763.0	30.08	764.0	34	1.1	100	N	13	5.8			10s		Calm	0.26	6.6	Cloudy	
Socorro, New Mexico	25.29	642.4	29.35	745.5	37	2.8	55	N	1	0.4		0	0			0	0	Clear	
Springfield, Illinois	29.26	743.2	29.97	761.2	21	— 6.1	78	NE	3	1.3			10s			0	0	Cloudy	
Springfield, Massachusetts	30.09	764.3	30.23	767.8	15	— 9.4	74	N	2	0.9			10s		Calm	0	0	Cloudy	
Stockton, Texas	26.77	680.0	29.77	756.1	48	8.9	29	SW	12	5.4		0	0			0	0	Clear	
St. Vincent, Minnesota	29.05	737.9	29.95	760.7	— 8	22.2	100	S	12	5.4			10s		Calm	0	0	Cloudy	
Thatcher's Island, Mass	30.14	765.5	30.20	767.1	22	— 5.6	72	NW	19	8.5		10cs	0	N		0	0	Cloudy	
Toledo, Ohio	29.32	744.7	30.06	763.5	15	— 9.4	83	NE	2	0.9			10s;fg		Calm	0.13	3 3	Cloudy	
Tucson, Arizona	27.41	696.2	29.96	761.0	38	3.3	54	S	3	1.3		0	0			0	0	Clear	
Umatilla, Oregon	29.83	757.7	30.37	771.4	14	—10.0	82	SE	7	3.1			10s		SW	0	0	Cloudy	
Uvalde, Texas	28.68	728.5	29.54	750.3	31	— 0.6	79	Calm	0	0		0	0			0	0	Clear	
Vicksburg, Mississippi	29.59	751.6	29.85	758.2	55	12.8	93	S	12	5.4			10s		SW	0	0	Cloudy	
Visalia, California	29.62	752.3	30.00	762.0	48	8.9	88	NW	3	1.3			10ks		NW	1.20	31.6	Cloudy	
Washington, D. C.	30.06	763.5	30.18	766.6	18	7.8	84	SE	1	0.4		10cs	Fog	W	Calm	0	0	Cloudy	
Wickenburg, Arizona					48	8.9	78	S			1		10s		Calm	0	0	Cloudy	
Wilmington, N. Carolina	30.00	762.0	30.06	763.5	35	1.7	90	N	8	3.6			10s		Calm	0.14	3.6	Threatening	
Winnemucca, Nevada	25.40	645.2	29.76	755.9	34	1.1	79	SE	12	5.4			10s		Calm	0.03	0.8	Cloudy	
Woods Holl, Mass	30.13	765.3	30.17	766.3	24	— 4.4	67	N	10	4.5			10s		Calm	0	0	Cloudy	
Yankton, Dakota	28.77	730.7	30.23	767.8	— 2	—18.9	67	NW	7	3.1		0	0			0	0	Clear	
Yuma, Arizona	29.73	755.1	29.88	758.9	49	9.4	85	SW	3	1.3		2ck	0	SW		0	0	Fair	
Sub-Series.																			
Bogota, U. S. Columbia	21.99	558.5			52.5	11.4	75	Calm	0	0		10cs	0			0.13	3.3	Cloudy	Thomas Herran.
Havana, Cuba, W. I.	30.01	762.2	30.00	763.5	70	21.1	84	SE	2.4	1.1		0	0			0	0	Clear	Charles Hasselbrink.
Jakobshavn, Greenland	30.30	769.5	30.36	771.1	30.6	— 0.8		SW			6		1			0	0		
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	68.3	20.2	90	N	2	0.9		0	0			0	0	Fine	Maxwell Hall.
Navassa, W. I.	29.95	760.7	30.03	762.7	75	23.9	70	NE	5	2.2			10s		NE	0	0	Cloudy	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	78	25.6	86	E			3	5ck	5k	E		1.220	30.99	½ cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.35	745.5	29.91	759.7	80	26.7	85	Calm			0	2c	2s	NE	Calm	0	0	Clear	Francesco J. Cisneros.
Rivas, Nicaragua					73	23		SE			2	0	1ks			0	0		Earl Flint.
Santiago de Cuba, W. I.	30.03	762.7	30.06	763.5	73	22.8	81	Calm	0	0		0	0			0	0		Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	30.10	764.4	30.10	766.1	36.3	2 4		W			4		0			0	0		
York Factory, B. A.	29.51	749.5	29.50	750.8	—18.0	—27.8	68	S	14	6.3		0	2s		S	0	0	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	o— 10	o—10	o—10	From.	From.	Inch.	Mill.				
H. M. S. Albatros																			Capt. J. P. Maclean
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandra, N. 35° 51′, E. 14° 31′	29.78	756.4	67	19.4	71	W			1		6	W				2		D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. S. Hope.
H. M. S Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. J. F. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.97	761.2	64.5	18.1		NW			1		1	NW						Blue sky	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.88	758.9	82	27.8	67	NW			3		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo																			Capt. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Callao Bay, Peru	29.92	760.0	66	18.9	89	Calm			0		10	NE						Misty	Comm. E. E. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	29.67	753.6	62	16.7	94	SSW			2		8	SE				2	ESE	Raining	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 26° 08′, E. 119° 41′	30.32	770.1	52.0	11.1	83	NNE			3		10							Drizzling	Capt. R. H. Napier.
H. M. S. Malabar, Bombay, India	29.89	759.2	81	27.2	83	WNW			2		4	NW				2	NE	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 38° 42′, W. 9° 06′	29.76	755.9	57	13.9	87	NE			2		4	W						D. clouds	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S Northampton, St. John's, Antigua, W.I	30.05	763.3	75.5	24.2	77	NE			1		8	NE						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20', E. 48° 56'	29.78	756.4	79	26.1	78	ESE			1		0							Blue sky	Comm. M. Byles.
H. M. S. Seraphis, Suez Canal	29.92	760.0	76	24.4	64	S			4		7	S						D. clouds	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb, N. 37° 03', E. 15° 18'	29.74	755.4	71	21.7	66	NW			2		5	W						Misty	Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane,
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J.C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, India	30.25	768.3	67.5	19.7	60	Calm			0		0							Blue sky	Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	30.01	762.2	78.4	25.8	80	NE			3		1			0	0			Blue sky	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando	29.95	760.7	82.4	28.0	71	W			2		2			0	0	1		Blue sky	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, N. 23° 21', E. 26° 16'	29.94	760.5	66.0	18.9	79	SSW			4		0?							Overcast?	

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	Up'er 0—10	Lo'er 0—10	Upper From.	Lower. From.	Inch.	Mill.				
N. Yard, Portsmouth, N. H.	30.14	765.5	14	—10.0	?	NW	3	1.3	.....	8c	.....	NW	.....	0	0	.....	.....	Fair	
Naval Hospital, Yokohama, Japan	29.91	759.7	35	1.7	54	NNW	.....	.....	2	.....	2	.....	WSW	0	0	.....	.....	Clear	
Adams, Ancon, Peru	29.95	760.7	69	20.6	90	W	.....	.....	0-1	.....	10	.....	W	.....	.....	Sm'h	.....	Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	29.87	758.7	49	9.4	85	WSW	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	Rainy	
Alert, Hong-Kong, China *.	30.07	763.8	63	17.2	72	ENE	.....	.....	3	.....	10	.....	N	0	0	Sm'h	.....	Hazy	
Alliance, Pensacola, Fla	29.98	761.5	55	12.8	100	NE	.....	.....	1	.....	10	.....	.....	0	0	Sm'h	.....	Cloudy	
Ashuelot, Tientsin, China	30.33	770.4	26	— 3.3	100	NE	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	Fair	
Colorado, New York, N. Y.	30.18	766.6	18	— 7.8	100	NW	2	0.9	.....	.....	8	.....	W	0	0	.....	.....	Cloudy	
Constitution, N. Yard, League I'd., Pa	.....	.....	19	— 7.2	.....	E	2	0.9	.....	.....	8	.....	.....	.....	.....	.....	.....	Cloudy	
Franklin, Off N. Yard, Norfolk, Va	30.06	763.5	29	— 1.7	.....	NE	5	2.2	.....	.....	10	.....	WSW	.....	.....	.....	.....	Cloudy	
Galena, Gibraltar, Mediterranean	29.86	758.4	64	17.8	100	WSW	.....	.....	2	.....	10	.....	.....	.....	.....	Mod.	SSW	Rainy	
Independence, N. Yard, Mare I'd, Cal.	29.91	759.7	50	10.0	86	SW	14.4	6.4	.....	.....	5	.....	SW	0.09	2.3	.....	.....	Fair	
Jamestown, Sitka, Alaska *	29.72	754.9	38	3.3	72	E	.....	.....	2	.....	10	.....	.....	0.27	6.9	Sm'h	.....	Cloudy	
Kearsarge, Port Royal, Jamaica, W.I.	30.03	762.7	74	23.3	81	NE	.....	.....	1	.....	0	.....	.....	.....	.....	Sm'h	.....	Clear	
Lackawanna, Ancon, Peru †	30.04	763.0	69	20.6	95	Var.	.....	.....	0-1	.....	2	.....	SW	0	0	.....	.....	Cloudy	
Marion, Sand Point, Patagonia, S.A	29.54	750.3	50	10.0	86	NNW	.....	.....	2	.....	10	.....	.....	.....	.....	Sm'h	.....	Cloudy	
Michigan, Erie, Pennsylvania	29.96	761.0	25	— 3.9	.....	N	.....	.....	2	.....	10	.....	N	.....	.....	.....	.....	Cloudy	
Minnesota, New York, N. Y.	30.21	767.3	18	— 7.8	.....	NE	.....	.....	1	.....	9	.....	W	.....	.....	.....	.....	Misty	
Monocacy, Shanghai, China	30.43	772.9	38	3.3	81	E	.....	.....	2	.....	8	.....	.....	.....	.....	.....	.....	Cloudy	
New Hampshire, Port Royal, S. C.	30.04	763.0	46	7.8	77	N	7	3.1	.....	.....	10	.....	W	0	0	.....	.....	Cloudy	
Nipsic, Villafranca, France	29.57	751.1	49	9.4	64	E	.....	.....	2	.....	8	.....	.....	.....	.....	Long	SSW	D. clouds	
Onward, Chimbote Bay, Peru †	29.94	760.5	70	21.1	90	S	.....	.....	3	.....	8	.....	NW	.....	.....	Long	N;W	Cloudy	
Palos, Shanghai, China	30.39	771.9	36	2.2	80	ENE	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	Clear	
Passaic, Washington, D. C.	30.20	767.1	19	— 7.2	85	E	.....	.....	2	.....	8	.....	NE	.....	.....	.....	.....	Cloudy	
Pensacola, N. 23° 57′, W. 108° 40′	29.95	760.7	69	20.6	75	E	.....	.....	1-2	.....	2	.....	E	0	0	.....	.....	Clear	
Portsmouth, Washington, D. C.	30.18	766.6	18	— 7.8	100	NE	.....	.....	1	.....	10	.....	SW	.....	.....	.....	.....	Cloudy	
Powhatan, New York, N. Y.	30.18	766.6	17	— 8.3	83	NNE	.....	.....	2	.....	8	.....	.....	.....	.....	.....	.....	Cloudy	
Quinnebaug, N. 31° 20′, E. 29° 08′	30.08	764.0	69	20.6	85	SW	.....	.....	2	.....	8	.....	Calm	.....	.....	Mod.	SW	.....	
Richmond, N. 25° 00′, E. 119° 30′	30.27	768.8	55	12.8	87	NNE	.....	.....	6	.....	.....	.....	.....	0	0	Sm'h	.....	Overcast	
Saratoga, Baltimore, Md.	30.16	766.1	21	— 6.1	100	NE	.....	.....	2	.....	5	.....	Calm	0	0	.....	.....	Fair	
Shenandoah, Montevideo, Uruguay *	30.19	766.8	63	17.2	67	NNE	.....	.....	3	.....	8	.....	.....	.....	.....	Sm'h	.....	Fair	
St. Louis, League Island, Pa.	30.19	766.8	19	— 7.2	85	NE	3	1.3	.....	.....	8	.....	NE	0	0	.....	.....	Cloudy	
Swatara, Kobe, Japan †.	30.14	765.5	41	5.0	57	NW	.....	.....	2	.....	2	.....	.....	.....	.....	Sm'h	.....	D. clouds	
Tennessee, St. Croix, W. I.	30.10	764.5	77	25.0	77	E	3	1.3	.....	.....	2	.....	ENE	0	0	Sm'h	.....	Clear	
Trenton, Villafranca, France *	29.54	750.3	47	8.3	62	SE	.....	.....	3-4	.....	10	.....	.....	6 h'rs	h'vy	.....	.....	Cloudy	
Vandalia, N. 25° 13′, W. 56° 46′	30.12	765.0	72	22.2	67	SSE	.....	.....	2	.....	2	.....	Calm	.....	.....	Long	NE	Fair	
Wabash, Boston, Massachusetts	30.21	767.3	16	— 8.9	66	NW	5	2.2	.....	.....	10	.....	Calm	0	0	.....	.....	Cloudy	
Wachusetts, Panama, Panama *,	29.57	751.1	76	24.4	91	NNW	.....	.....	2	.....	5	.....	N	0	0	Sm'h	.....	Fair	
Wyoming, Naples, Italy	29.51	749.5	59	15.0	88	SW	.....	.....	2	.....	10	.....	SW	.....	.....	Sm'h	.....	Raining	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic, N 50° 55′, W. 13° 50′	29.81	757.2	44	6.7	100	NE			1		4	SSW				4	NE	D. clouds	Capt. H. Parsell.
Ship Baroda, ‡ S. 33° —′, E. 27° 14′	29.92	760.0	73.5	23.1	87	NE			6		4							D. clouds	Capt. C. J. Russell.
British Merchant, ‡ S. 43° 43′, E. 128° 27′	29.91	759.7	53.5	11.9	84	SW			5		10							Showery	Capt. E. J. Molony.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡ N. 31° 59, W. 17° 55′	29.80	756.9	68.2	20.1	84	SW			6		4							D. clouds	Capt. N. Youlden.
S. S. Clpero, N. 37° 40′, W. 33° 55′	29.72	754.9	58	14.4		ENE			5		7					5	ENE	D. clouds	Capt. W. N. Lailey.
City of Agra, ‡ S. 56° 30′, W. 81° 32′	29.68	753.9	42.0	5.6	87	S			6		10							Squally	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Coppename, N. 30° 03′, W. 20° 06′	29.89	759.2	69.3	20.7	91	SW			5		3							Showery	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra, ‡ S. 29° 16′, E. 42° 41′	30.04	763.0	74	23.3	70	SE			6		10							Overcast	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 19° 40′, E. 89° 00′	30.05	763.3	71.7	22.1	65	N			3		0							Misty	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 38° 15′, W. 21° 40′	29.35	745.5	63.5	17.5	100	SSW			6		8							Showery	Capt. H. W. Dyke.
Barque Meriola																			Capt E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 34° 53′, E. 14° 34′	29.73	755.1	64.5	18.1	84	W			4		5							Misty	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
Moravian																			
S. S. Peruvian																			Capt. W. H. Smith, R.N.R.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia, N. 42° 32′, W. 49° 43′	29.99	761.7	48	8.9	100	ENE			4		0			0	0	H'vy Long	E	Fine	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, Off Skellig Rock, Ireland †	30.04	763.0	45	7.2		W			1		2		N			Sm'h	NW	Clear	Capt. J. W. Jennings.
S. S. Britanic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, Sandy Hook, N. J. †	30.17	766.3	23	— 5.0		ENE			2		5?		E	0	0	Sm'h		Clear	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT--MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Undütsch.
S. S. Hermann																			Capt. H. Maur.
S. S. Köln, N. 46° 57′, W. 43° 37′	30.39	771.9	46.4	8.0		NE			3-4		0			0	0	R'gh	NE	Clear	
S. S. Leipzig, ‡ N. 44° 16′, W. 62° 52′	29.92	760.0	36.0	2.2	90	N.			5		10					Mod.		Sprinkling	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT--MARINE SERIES.																			
Barque Adolph Fredholm, ‡ S. 19° 35′, W. 31° 16′ *†	30.20	767.0	78.8	26	84	N			4		3							Blue sky	Capt Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Sköterbrand

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 42° 13′, W. 60° 33′.....	29.78	756.4	39	3.9	91	WNW	.....	.....	5	.....	10	.....	WNW	.....	.....	Long	SW	Foggy	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 44° 33′, W. 52° 25′.....†	30.17	766.3	41	5.0	91	ESE	.....	.....	4	.....	5	.....	SE	0	0	H'vy	SE	.....	Capt. R. W. Sargent.
S. S. Ohio, ‡ Liverpool, England..†*.	29.82	757.4	23	— 5.0	86	N	.....	.....	2	.....	5	.....	N	Light	snow	.....	.....	Fair.....	Wm. Shakford, 1st Off'r.
S. S. Pennsylvania, ‡ N. 50° 33′, W. 20° 38′.....†	29.87	758.7	45	7.2	.....	ENE	.....	.....	4	.....	5?	.....	E	0.25	6.3	Sm'h	E	Cloudy?	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, Guaymas, Mexico.....†	29.96	761.0	60	15.6	88	NNE	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	Foggy.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 34° 50′, E. 139° 38′ ....†	30.04	763.0	47	8.3	62	NE	.....	.....	5	.....	5?	.....	N	0	0	Mod.	N	Clear?.....	Capt. H. Davison.
S. S. Gaelic, San Francisco, Cal....*†..	30.02	762.5	52	11.1	86	SW	.....	.....	3	.....	10	.....	SW	.....	.....	.....	.....	Cloudy	Capt. W. H. Kidley.
S. S. Oceanic, N. 44° 36′, W. 167° 15′.....	28.99	736.3	43	6.1	92	W	.....	.....	6	.....	8	.....	W	0.16	4.1	High	SW; WSW	Squally.....	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. J. M. Lachlan.
S. S. Columbia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon.....†	29.91	759.7	32.0	0.0	84	ENE	.....	.....	1	.....	2	.....	SW	.....	.....	.....	.....	Fair.....	Capt. E. Polomann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal.....†	29.87	758.7	59	15.0	88	SW	.....	.....	2	.....	10	.....	SW	.....	.....	.....	.....	Rainy	Capt. J. N. Ingalls.
S. S. Idaho, San Francisco, Cal..... †	29.90	759.4	49	9.4	85	SW	.....	.....	2	.....	8	.....	SW	.....	.....	.....	.....	Stormy.....	C. E. Lyons, 1st Officer.
S. S. Orizaba.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Senator, N. 32° 45′, W. 117° 15′...†	30.04	763.0	58	14.4	76	WSW	.....	.....	4	.....	8	.....	SW	.....	.....	Sm'h	.....	Cloudy.....	Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	29.93	760.2	50	10.0	93	SW	.....	.....	4	.....	8	.....	S	.....	.....	.....	.....	Clearing... .	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal.....†	29.93	760 2	50	10.0	93	SW	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	Cloudy.....	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Bannerman, 1st Officer.
S. S. City of New York, S. 34° 34′, E. 167°—/.....†	29.56	750.8	68	20.0	100	SSW	.....	.....	2	.....	8	.....	SW	Light	rain	.....	SW	Cloudy.....	Wm. H. Hawes, 2d Officer.
S. S. City of Panama.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. D. S. Austin.
S. S. City of Peking, N. 29° 43′, W. 167° 03′....†	29.93	760.2	58	14.4	76	SSW	.....	.....	3	.....	10	.....	W	0	0	Mod.	W	Cloudy.....	Capt. G. G. Berry.
S. S. City of Sidney, N. 8° 23′, W. 162° 55′.....†	29.88	758.9	78	25.6	73	NNE	.....	.....	4	.....	8	.....	NE	0	0	H'vy	NNE	Hazy.....	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 28° 20′, .E 125° 20′.....†	30.45	773.4	57	13.9	63	ENE	.....	.....	4	.....	10	.....	.....	0	0	Sm'h	.....	Cloudy.....	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 24° 58′, W. 112° 24′....†	29.99	761.7	64	17.8	73	NW	.....	.....	6	.....	10	.....	NW	0	0	R'gh	NW	Cloudy.....	Capt. R. R. Searle.
S. S. Dakota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. D. E. Griffiths.
S. S. Granada, N. 13° 25′, W. 89° 39′....†	29.90	759.4	78	25.6	91	ENE	.....	.....	2	.....	8s?	.....	Calm	0	0	Sm'll	SSE	Clear?.....	.....
S. S. Zealandia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
RED STAR LINE. *Jas. A. Wright. President.*																			
S. S. Belgeland, ‡ N. 48° 01′, W. 32° 31′.....†	30.05	763.3	49	9.4	64	NNW	.....	.....	6	.....	5	.....	N	.....	.....	Cross	NNE	Fair.....	Capt. Sam'l Jackson.
S. S. Nederland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. S. Stokes.
S. S. Rhynland, ‡ Reedy Island, Delaware	30.15	765.8	20	— 6.7	.....	NNE	.....	.....	2	.....	2	.....	W	0	0	.....	.....	Fair.....	Capt. W. Geo. Randle.
S. S. Vaderland..... ‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby Bentley, New London, Conn.....†	30.14	765.5	12	—11.1	.....	NW	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	Fine.....	Capt. A. Mehaffey.
Sch'r Addie Fuller, Brunswick, Ga.....	30.03	762.7	54	12.2	61	ESE	2	0.9	.....	.....	Fog	.....	.....	0	0	.....	.....	Foggy	Capt J. Jorgensen.
Sch'r Annie R. Lewis.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. S. S. Lewis.
Bark Carrie Heckle.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. B. F. Woodbury.
Brigantine George..... ‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va.†	30.14	765.5	31	— 0.6	.....	NNE	2	0.9	.....	5cs	2cs	.....	.....	0.02	0.5	.....	.....	Cloudy.....	.....
Sch'r Hattie V. Kelsey,...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. J. L. Randall.
Ship Jumna.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Spain.....†..	29.67	753.6	66	18.9	?	SE	.....	.....	5	.....	10	.....	W	0	0	.....	.....	Cloudy.....	Capt. Jos. Hand.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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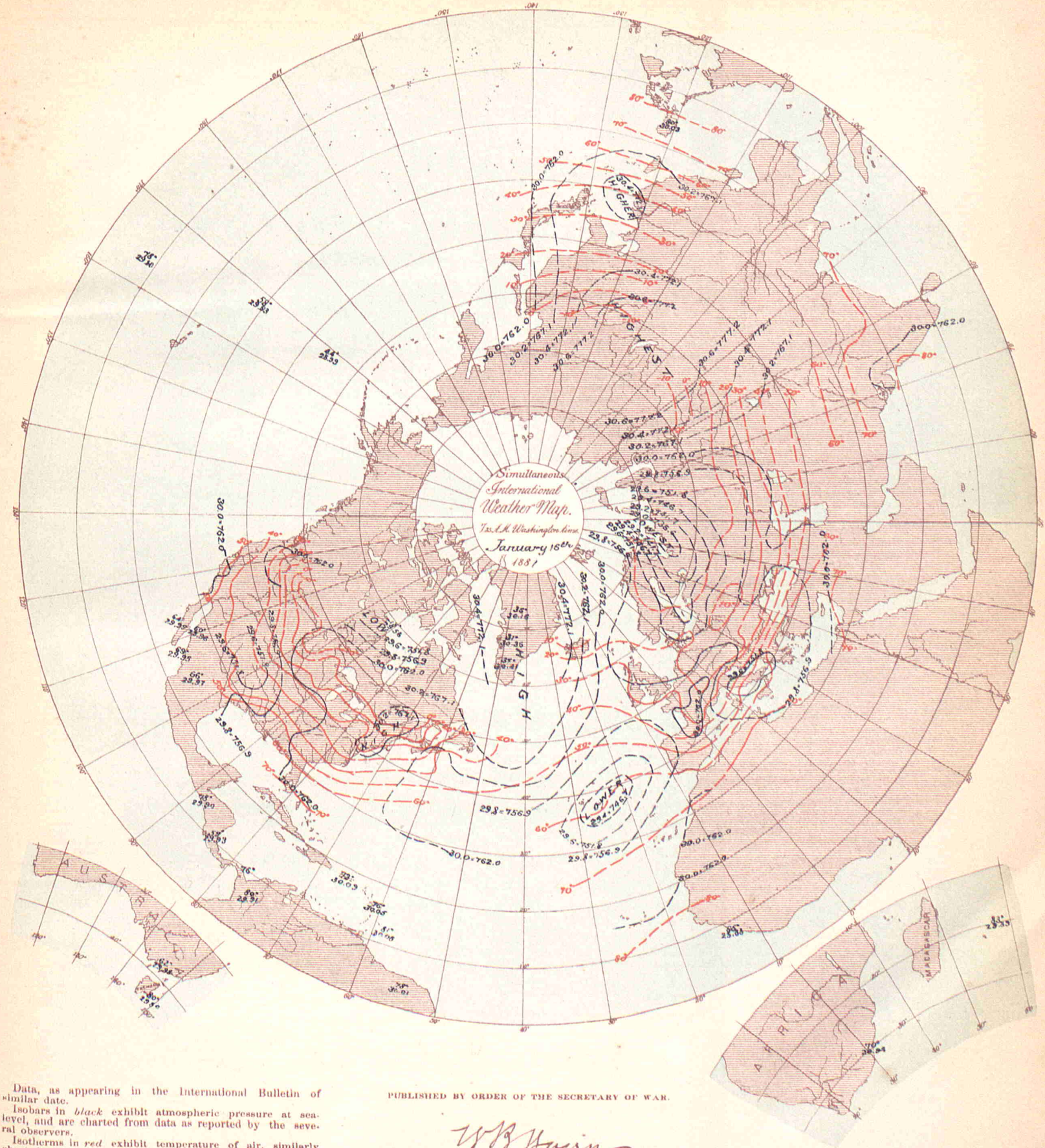
PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 17, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

ALGERIAN SERIES.

Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.

Mogador, Morocco			30.02	762.5	67.6	19.8	83	SW			8		8			0	0	Very cloudy	Dr. Ollive.
Nemours			29.82	757.5	74.7	23.7	67	N			1		1			0	0	Very fair	Raynard.
Algie s			29.81	757.2	61.9	16.6	81	W			2		2			0.354	9.0	Fair	Nicolas.
La Calle			29.87	758.8	60.8	16.0	87	E			6		6			0	0	Cloudy	Fonfrède.
Tunis			29.88	759.0															Jacques.
Sfax			30.00	762.1															Gau.
Said a			29.92	760.0	70.3	21.3	96	S			2		0			0	0	Clear	Dumas.
Tebessa			29.94	760.4	68.0	20.0	38	SSW			4		0			0	0	Clear	Watrin.
Gerville																			Lonchamp.
Laghouat			30.04	763.0	71.2	21.8	54	NNW			1		0			0	0	Clear	Herbin.
Biskra			29.97	761.2	72.7	22.6	60	E			1		3			0	0	Pretty fair	Baudassé.

AUSTRALIAN SERIES.

Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.

Melbourne, Victoria	29.99	761.7	30.08	764.0	58.0	14.4	66	SE	5	2.2			3			0	0	Very fine	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania			29.90	759.4	75	23.9		N			3		5k			0	0		Francis Abbott, F.R.A.S.

AUSTRO-HUNGARIAN SERIES.

Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.

Agram	29.57	751.0	30.17	766.4	12.6	—10 8	94	Calm			0		0			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.11	739.5	29.94	760.5	15.8	— 9.0	81	WNW	4.9	2.2			3			0	0		Dr. Wiersbicki.
Eperies	28.99	736.3	29.94	760.4	18.1	— 7.7	69	Calm			0		0			0	0		Julius Mikolik.
Gratz‡	28.72	729.5	30.06	763.6	20.8	— 6.2	57	S			2		0			0	0		Andreas Rospini.
Hermannstadt	28.52	724.5	30.07	763.8	16.7	— 8.5	100	NW			2		0			0.035	0.90	Snowy	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.59	726.1	30.02	762.5	22.6	— 5.2	92	Ca'm			0		4			0	0		The Staff.
Lemberg	28.84	732.5	29.90	759.4	18.3	— 7.6	81	NW			1		0			0	0		Dr. T. Stanecki.
Pola	29.98	761.5	30.10	764.5	36.7	2.6	55	ENE			1		10			0	0		I. R. HydrographicOffice
Szathmar	29.89	751.6	30.05	763.2	10.8	—11.8	85	SW			2		0			0	0		Beicht Petár, S. J.
Szegedin	29.81	757.2	30.11	764.9	16.5	— 8.6	82	Calm			0		0			0.039	1.0		Karl Stancel.
Trieste	29.98	761.4	30.08	764.0	37.8	3.2	49	Calm			0		0			0	0		P. Busin.
Vienna	29.28	743.6	30.04	762.9	26.2	— 3.2	57	W			2		8			0	0	Almost cl'dy	I. R. Central Met. Obs'y
													3			0	0		

BELGIAN SERIES.

Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.

Brussels	29.70	754.3	29.91	759.7	26.2	— 3.2	83	Calm			0	1		NW		0	0		Royal Observatory
Furnes																			M. E. de Cae.
Maeseyck	29.80	757.0	29.93	760.2	26.2	— 3.2	91	SW			2		1			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 24, 1882.

BRITISH SERIES.

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

STATIONS.	Barometer: Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer: Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
Aberdeen	29.67	753.6	29.78	756.4	9.5	—12.5	89	W	7	3.1			2			0	0	Misty	W. Boswell.
Armagh, Observatory	29.41	747.0	29.66	753.4	16.5	— 8.6	88	SSW	0	0			10					Snowy	S. Call.
Bidston, Liverpool Obs'y			29.72	754.9	22.8	— 5.1	86	ESE	18	8.0			5					Misty	John Hartnup.
Bolton, Sharples	29.20	741.7	29.75	755.6	22.6	— 5.2	93	SSE	6	2.7			0					Blue sky	Thomas Mackereth.
Bradford, Yorkshire	29.36	745.6	29.76	755.9	22.7	— 5.2	63	SE					2			0	0	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.03	762.7	30.06	763.5	80	26.7	70	NE					2					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			29.77	756.1	24.6	— 4.1	71	N			0.6		3					D. clouds	John McLaren.
Chatham, School M. E.	29.69	754.1	29.82	757.4	29.2	— 1.6	80	Calm			0		0					Misty	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.30	744.2	29.54	750.3	41.2	5.1	72	SE			6		10					Overcast	The Staff.
Fort Napier, Natal	27.51	698.7	29.73	755.1	80.1	26.7	100	SE			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.88	758.9	84	28.9	83	SE			1		5					D. clouds	C. E. Keane.
Galway, Queen's College			29.50	749.3	24	— 4.4	87	N			3		10					Overcast	J. O'Donaghadue.
Gibraltar, Mediterranean	29.81	757.2	29.86	758.4	63.8	17.7	93	WSW			5		10					Raining	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.53	750.0	29.73	755.1	19.0	— 7.2	73	NE			1							Foggy	D. G. MacLean.
Greenwich, Royal Obs'y	29.63	752.6	29.81	757.2	30.0	— 1.1	57	FSE			1		3					D. clouds	The Staff.
Guernsey	29.39	746.5	29.62	752.3	36	2.2	85	ESE			4		8					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.76	755.9	29.80	756.9	23.0	— 5.0	86	WSW	9	4.0								Foggy	The Met'g'l Office.
Leicester, Museum	29.52	749.8	29.80	756.9	20.2	— 6.6	98	E			1		2					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.93	760.2	30.00	762.0	60.0	15.6	60	NW			1		8					Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas			30.16	766.1	71.0	21.7	95	SW			0		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.22	742.2	29.78	756.4	25.5	— 3.6	75	ENE			2		9					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	29.51	749.5	29.77	756.1	27.3	— 2.6	88	Calm			0		7					Foggy	The Staff.
Plymouth	29.51	749.5	29.58	751.3	37.0	2.8	87	SE			4		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.74	755.4	23	— 5.0	100	SW	3	1.3			0					Blue sky	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.84	757.9	29.91	759.7	31.4	— 0.3	95	N			2		10					Snowing	Serg't W. H. Lyne.
Sheffield	29.42	747.3	29.72	754.9	20.4	— 6.4	98	Calm			0		8			0.01	0.3	Foggy	W. F. Cooper.
Silloth Rectory	29.69	754.1	29.72	754.9	18.8	— 7.3	52	E			2		7			0	0	D. clouds	Rev. F. Redford, A. M.
Stonyhurst, Observatory			29.76	755.9	21.8	— 5.7	86	WNW	1	0.4			0					Blue sky	Rev. S. J. Perry.
Strathfield Turgiss	29.56	750.8	29.79	756.7	23.7	— 4.6	89	NE			2		7					D. clouds	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution			29.52	749.8	41	5.0	74	SE			6		10					Gloomy	W. Newcombe.
Valencia, Observatory	29.47	748.5	29.49	749.0	34.9	1.6	87	ENE	14	6.3			10					D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B	30.29	769.4	30.33	770.4	5.5	—14.7		Calm	0	0		1c	0			0	0	Clear	Hon. J. Ferguson.
Chatham, N. B.*	30.14	765.5	30.21	767.3	9	—12.8	92	Calm	0	0			10s		Calm	0	0	Cloudy	G. A. Blair.
Charlottetown, P. E. Island	30.09	764.3	30.13	765.3	28	— 2.2	96	N	8	3.6			10n			1.570	39.88	Sleeting	H. J. Cundall, C. E.
Chicontime, Quebec					— 2.1	—18.9		NW				2	10s			0	0	Cloudy	Rev. V. A. Huart.
Cornwall, Ontario	30.02	762.5	30.24	768.1	8.0	—13.3	93	E			1	3cs	6s			0.10	2.5	Cloudy	James Smith, M. A.
Dalhousie, N. B	30.16	766.1	30.20	767.1	— 1.5	—18.6		E			1	0	0			0	0	Clear	H. A. Johnson.
Father Point, Quebec*	30.22	767.6	30.24	768.1	— 4	—20.0	82	SW	2	0.9		2cs	5ks	Calm	Calm	0	0	Fair	J. McWilliams.
Fredericton, N. B	30.16	766.1	30.23	767.8	— 7.9	—22.2	100	W	1	0.4		0	0			0	0	Clear	Prof. Harrison.
Fort Garry, Manitoba*	29.25	742.9	30.17	766.3	— 2	—18.9	97	SW	10	4.5		0	0			0	0	Clear	James Stewart.
Granton, Ontario	29.26	743.2	30.46	773.7	15.4	— 7.6	94	Calm			0		10n			0.20	5.1	Cloudy	James Grant.
Halifax, N. S.*	29.97	761.2	30.10	764.5	25	— 3.9	99	N	9	4.0			Fog			Inap.	Inap.	Foggy	A. Allison.
Hamilton, Ontario	29.97	761.2	30.40	772.1	20.1	— 6.6	87	SW			1	0	8ks			0.05	1.3	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.92	760.0	30.36	769.6	10	—12.2	84	NW	1	0.4		8cs	0	Calm		0.06	1.5	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	30.07	763.8	30.11	764.8	33.5	0.8	99	S	4	1.8			10n			0	0	Fog & driz'g	C. H. Rigby.
Montreal, Quebec*	30.01	762.2	30.23	767.8	11	—11.7	90	Calm	0	0			10s			0.07	1.8	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A.
Parry Sound, Ontario*	29.65	753.1	30.44	773.2	— 2	—18.9	68	Calm	0	0			10n			0.19	4.8	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.54	750.3	30.36	771.1	15.8	— 9.0	56	Calm			0	0	0			0.30	7.6	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.64	752.8	30.38	771.6	22	— 5.6	86	W	7	3.1			10n			0.09	2.3	Cloudy	H. Morgan.
Port Stanley, Ontario	29.71	754.6	30.41	772.4	17	— 8.3	97	W	11	4.9			10n	W		0.12	3.0	Cloudy	M. Payne.
Quebec, Quebec*	29.84	757.9	30.20	767.1	13	—10.6	81	NE			3		5n	NE		0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.82	757.4	30.34	770.6	— 7	—21.7	80	NW	2	0.9		0	0			0.16	4.1	Clear	W. H. McIntyre.
St. Andrews	30.13	765.3	30.18	766.6	11	—11.7	86	NW	3	1.3		0	0			0	0	Clear	
St. John's, N. B	30.00	762.0	30.19	766.8	12.0	—11.1	100	NW	7	3.1		7ck	0			0	0	Clearing	G. Murdock, C. E.
Saugeen, Ontario*	29.63	752.6	30.40	772.1	20	— 6.7	82	SW	20	8.9			10ks			0.07	1.8	Cloudy	K. Stewart.
Stratford, Ontario	29.04	737.6	30.42	772.7	19.0	— 7.2	95	NW	5	2.2			10s			0.15	3.8	Cloudy	G. J. Macgregor, M. A.
Sydney, C. B*	30.14	765.5	30.18	766.6	38	3.3	92	SE	14	6.3		5c	5s		SE	0.05	1.3	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.97	761.2	30.39	771.9	21	— 6.1	94	NW	6	2.7		2ck	8ks	N	N	0.13	3.3	Cloudy	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario	29.24	742.7	30.40	772.1	18.8	— 7.3	97	W	18	8.0			10s			0.30	7.6	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*	30.08	764.0	30.14	765.5	25	— 3.9	79	N	3	1.3		8k	0	W		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	30.48	774.2	30.65	778.5	34	1.1	100	S	1	0.4		10k	10s			0	0	Hazy	John Delany.
St. Pierre, N. F			30.24	768.1	32.0	0.0		SE			3					0	0		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.80	756.9	29.84	757.9	77.0	25.0	71	S	23.6	10.5		1	2ck			0	0		The Staff, for D. Gill.
Cape St. Francis Lt. House	29.80	756.9			71.5	21.9	89	SW					4s			0	0	Fine	John Duthie.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.12	765.0	30.14	765.6	40.5	4.7	89	W	2.0	0.9			10k		SW	0.004	0.1	Covered	M. Marc Dechevrens, S. J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.23	666.2	29.95	760.7	60.8	16.0	86	SE			2	1d				0	0	Misty	Federico Maison.

DANISH SERIES.

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

Copenhagen	29.69	754.0	29.73	755.2	15.4	— 9.2	72	N	11	5	0								
Fanöe	29.84	758.0	29.86	758.5	10.0	—12.2	74	Calm			0								
Godthaab, Greenland	30.39	771.9	30.43	773.0	34.9	1.6	75	S			6	9							
Stykkisholm, Iceland	30.49	774.5	30.54	775.6	— 1.1	—18.4	89	Calm			0								
Thorshavn	29.74	755.4	29.78	756.3	31.8	— 0.1	56	NE	18	8		7						Snowing	
Vestervig	29.72	755.0	29.82	757.4	25.3	— 3.7	82	NNW			2	8							

FRENCH SERIES.

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

Agen, Normal School	29.04	737.5	29.63	752.5	38.1	3.4	93	SE			3		8			0	0	Al. covered.	M. Labroue, Director.
Alençon	29.24	742.7	29.79	756.7	23.4	—4.8	86	NE			1		10			0.047	1.2	Misty	M. Nicot, Director.
Arras, Engineer School	29.62	752.3	29.89	759.3	22.1	—5.5	95	WSW	3.8	1.7			0					Clear	M. Klein, Commandant.
Avignon, Normal School	29.89	759.3	29.97	761 3	25.5	—3.6	77	N			1		10					Snowy	M. Giraud, Director.
Bar-sur-Seine ‖	29.29	744.0	29.88	759.0	26.8	—2.9	75	SE			1	2c				0.055	1.4	Slightly cl'dy	M. Salllard, Director.
Beauvais, Normal School	29.58	751.4	29.87	758.6	24.3	—4.3	88	SSE			1		2			0.08	2.	Slightly cl'dy	M. Frère Eugene Marie.
Besançon, Normal School	29.01	736 9	29.96	760.9	25.0	—3.9	100	ESE			1	c			ESE	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.30	744.2	29.57	751.1	34.5	1.4	69	SE			4		10			0	0	Covered	M. Rayet, Director.
Bourges, Normal School	29.12	739.6	29.70	754.3	28.4	—2	96	SE			3		5sn		SE	0.283	7.2	Rain and sleet	M. Postel, Director.
Brest, Naval Observatory	29.30	744.2	29.54	750.4	32.4	0.2	84	E			2		4		E	0.020	0.50		M. de Rermaree, Dir.
Caen, Normal School	29.57	751.1	29.65	753.0	34.9	1.6	96	SW			1		0			0	0	Clear	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.59	751.6	29.93	760.1	28.6	—1.9		SSE			1		2			0.031	0.8	Slightlycl'dy	M. Jadot, Director.
Charleville, Normal School	29.39	746.4	29.93	760.3	27.3	—2.6	96	SSE			1		0			0.020	0.5	Clear	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.36	720.4	29.76	756.0	34.5	1.4	49	SE			1		10			0	0		M. Alluard, Director.
Cluny, Normal School	28.96	735.6	29.82	757.4	32.4	0.2		S			3		1	S	S	0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	29.04	737.6	29.95	760.7	23.5	—4.7	95	SE			4					0	0		Dr. Coulet, Director.
Gap, Normal School	27.22	691.4	29.92	760.0	21.2	—.6	74	N			1		n		NE	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.87	733.4	30.02	762.4	34.5	1.4	76	E			1		10		E	0	0		M. Kina, Director.
Grenoble, Normal School	29.15	740.3	29.98	761.4	17.6	—8		N			1		ck			0	0		M. Ablard, Director.
Guéret, Normal School	28.07	713.0	29.71	754.6	33.8	1	89	SE			1		Fog			0	0	Foggy	M. Rivoir, Director.
Lamballe, Normal School	29.30	744.1	29.58	751.4	28.4	—2	98	W			4		10		W	0	0	Foggy	M. Ollitrault, Director.
Lescar, Normal School	28.96	735.6	29.65	753.1	36.7	2.6	89	E					10			0	0	Covered	M Chauvin, Director.
Lorient, Naval Observatory	29.47	748.6	29.58	751.2	30.9	—0.6	70	E			3		10		E	0	0	Covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.80	731.5	29.87	758.8	27.1	—2.7	43	S			1		cn		SW	0	0		M. André, Director.
Mans, Normal School	29.42	747.2	29.74	755.5	27.1	—2.7	94	E			4		10			0.028	0.7	Covered	M. Piboen, Director.
Marseille, Observatory	29.65	753.1	29.93	760.1	41.2	5.1	40	ESE			1		10		SSW	0.110	2.80		M. Stephan, Director.
Montlouis l'Instituteur	24.42	620.3	29.66	753.3	23.9	—4.5	94	W	26.2	11.7			8	SW		0.256	6.5		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.80	757.0	29.91	759.8	28.0	—2.2	85	N			1		10					Snowing	M. Galzin, Director.
Nancy, Normal School	29.12	739.7	29.93	760.3	26.6	—3.0	61	NW			1		0			0	0	Clear	M. Hasse.
Nantes, Observatory	29.45	748.0	29.61	752.1	29.5	—1.4	73	NE			2		10			0.349	8.6	Gloomy	M. Larocque, Dir.
Nice	29.96	761.0	29.99	761.8	39.6	4.2	54	NNW			4		10	N	NNW	0	0	Covered	Capt. Boissière, Director.
Perpignan, Observatory	29.66	753.4	29.77	756.1	40.6	4.8	74	SW	13.0	5.8			7		SW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	21.99	558.7			21.2	—6.0							10		W	0.105	2.7	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.91	734.2	30.04	763.0	26.6	—3.0		Calm			0		10			0	0	Covered	M. Tallieu.
Puy de Dôme O. s'y, Summit	24.69	627.2			19.4	—7.0	62	SSE			8		10			0	0	Hazy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.59	751.5	29.62	752.3	35.6	2.0	93	SE			3		10			1.46	3.7	Covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.36	745.8	29.58	751.4	37.4	3	83	E			2		10			0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	27.50	698.5	29.76	755.8	22.3	—5.4	90	E			4		Fog		E	0	0	Foggy	M. Richard, Director.
Rouen, Normal School	29.69	754.2	29.78	756.4	28.8	—1.8	70	SE			1		0			0	0	Clear	M. Platrier, Director.
Saint Lô, Normal School	29.54	750.3	29.70	754.3	30.2	—1	84	E			1		5		W	0.098	2.5	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.67	753.7	29.84	757.9	26.8	—2.9	63	NE			1		3						M. Renou, Director.
Toulouse, Observatory	28.94	735.1	29.65	753.2	38.1	3.4	69	SSE			1		10			0	0	Covered	M. Baillaud, Director.
Tours	29.46	748.2	29.65	753.2				SE			1		8		W	0.102	2.6	¾ covered	M. de Tastes.
Versailles, Observatory	29.32	744.8	29.81	757 2	25.9	—3.4	47	SE			2					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	29.08	738.6	29.94	760.4	23.2	—4.9	89	NW			3		28			0.043	1.1		Prof. Dr. Hoh.
Berlin	29.57	751.0	29.75	755.6	25.7	—3.5	82	SW			4		10			0.024	0.6		Prof. Dr. Arndt.
Breslau	29.32	744.8	29.85	758.2	23.9	—4.5	63	SW			2		9			0.002	0.05		Royal University Obs'y.
Carlsruhe	29.59	751.6	30.04	763.1	25.5	—3.6	85	SE			0		0			0	0		Albert Senz.
Cassel	29.27	743.5	29.87	758.7	24.4	—4.2	77	SW			6		5	SW		0.036	0.92	Snowing	Dr. H. Möhl.
Frankfort on the Main	29.69	754.2	30.08	764.1	24.6	—4.1	73	SW			2		7			0.004	0.1		Physical Society.
Friedrichshafen	28.48	723.4	29.99	761.8	26.2	—3.2	41	E			2		0			0.339	8.6		Chief Telegrapher Wilhelm.
Hamburg	29.78	756.4	29.85	758.2	20.3	—6.5	84	NW			3		3			0.020	0.5		Dr. R. Kleeman.
Kiel	29.75	755.7	29.77	756.1	22.5	—5.3	78	NNE			1		6			0.008	0.20	Snowing	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.44	747.7	29.89	759.1	23.4	—4.8	79	WSW			3		9			0	0		Prof. Dr. Bruhns.
Magdeburg	29.58	751.2	29.81	757.2	25.5	—3.6	85	WSW			6		7ks	W		0.004	0.1		Dr. Assmans.
Memel	29.56	750.7	29.60	751.9	24.1	—4.4	79	WNW			5		5k						Reinbrecht & Issermann.
Munich	28.08	713.2	29.93	760.3	25.0	—3.9	54	Calm			0		3	W		0.004	0.1		Central Station.
Neufahrwasser	29.67	753.5	29.68	753.9	19.4	—7.0	75	SSW			4		10			0.028	0.7		A Lothes.
Neustadt, Palatinate	29.34	745.2	29.87	758.8	27.7	—2.4		S			2		0			0	0		Dicknether.
Stuttgart	28.97	735.9	29.92	760.0	24.3	—4.3	68	N			1		3	W		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.41	721.5	29.94	760.4	23.9	—4.5	82	Calm			0		0			0	0		Prof. Kemlein.
Wustrow	29.71	754.5	29.73	755.1	23.7	—4.6	100	NE			2		10			0.118	3.0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.47	748.6	29.87	758.6	59.9	15.5	.....	W	.....	.....	3.0	.....	5	.....	.....	.....	.....	½ clear.....	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.97	761.3	30.02	762.6	74.9	23.8	66	SW	6.0	2.7	.....	.....	1	WSW	.....	0	0	D. clouds.....	
Deesa	29.50	749.4	29.98	761.4	81.5	27.5	36	NNW	7.0	3.1	.....	.....	6	SSW	.....	0	0	D. clouds.....	
Bombay	29.91	759.8	29.95	760.8	81.2	27.3	63	NW	12.0	5.4	.....	.....	6	WSW	.....	0	0	D. clouds.....	
Poona, Yarrowda	28.11	713.9	29.97	761.3	77.3	25.2	17	E	8.0	3.6	.....	.....	7	S	.....	0	0	D. clouds.....	
Belgaum	27.39	695.7	29.92	760.1	77.7	25.4	33	ENE	8.0	3.6	.....	.....	8	SW	NE	0	0	D. clouds.....	
Lahore	29.32	744.6	30.09	764.3	62.6	17.0	38	Calm	0.8	0.4	.....	.....	0	.....	.....	0	0	Blue sky.....	
Roorkee	29.13	739.9	30.06	763.6	65.8	18.8	38	Calm	0.8	0.4	.....	.....	0	.....	.....	0	0	.....	.....
Agra	29.49	749.1	30.07	763.8	72.3	22.4	39	E	2.0	0.9	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28.96	735.6	30.02	762.4	76.3	24.6	30	Calm	2.8	1.2	.....	.....	3	NE	.....	0	0	D. clouds.....	
Jubbulpore	28.66	727.9	30.05	763.4	71.2	21.8	30	E	1.7	0.8	.....	.....	0	.....	.....	0	0	Blue sky.....	
Lucknow	29.68	753.9	30.07	763.9	65.3	18.5	33	Calm	0.6	0.3	.....	.....	0	.....	.....	0	0	Blue sky.....	
Allahabad	29.75	755.7	30.08	764.0	62.8	17.1	57	Calm	0.5	0.2	.....	.....	0	.....	.....	0	0	Blue sky.....	
Patna	29.90	759.5	30.09	764.4	62.1	16.7	57	WNW	0.6	0.3	.....	.....	0	.....	.....	0	0	Blue sky.....	
Hazaribagh	27.99	710.9	30.07	763.8	63.8	17.7	31	NW	4.0	1.8	.....	.....	0	.....	.....	0	0	Blue sky.....	
Cuttack	29.94	760.6	30.03	762.7	73.1	22.8	53	NE	0.5	0.2	.....	.....	0	.....	.....	0	0	Blue sky.....	
Calcutta, Alipore	30.02	762.6	30.04	763.1	66.5	19.2	50	NNW	1.0	0.4	.....	.....	0	.....	.....	0	0	Blue sky.....	
Goalpara	29.61	752.1	30.03	762.6	68.4	20.2	60	Calm	0.9	0.4	.....	.....	0	.....	.....	0	0	Blue sky.....	
Chittagong	29.94	760.4	30.03	762.8	68.8	20.4	74	W	2.3	1.0	.....	.....	0	.....	.....	0	0	Blue sky.....	
Sibsagar	29.72	754.8	30.07	763.8	61.7	16.5	74	NE	1.3	0.6	.....	.....	0	.....	.....	0	0	Blue sky.....	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.67	753.6	30.10	764.4	31.5	— 0.3	62	Calm	0	0	.....	.....	4	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.51	749.6	30.06	763.4	27.9	— 2.3	92	E	3.8	1.7	.....	.....	6	SE	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.99	761 8	30.10	764.6	29.1	— 1.6	77	NNE	6.3	2.8	.....	.....	3	W	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.10	739.1	30.04	763.1	25.2	— 3.8	79	ENE	1.8	0.8	.....	.....	8	W	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.84	757.8	30.03	762.8	39.2	4.0	42	E	10.5	4.7	.....	.....	10	E	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.04	712.3	30.04	763.1	28.4	— 2.0	37	W	.....	.....	4	.....	9	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	30.05	763.2	30.10	764.5	29.5	— 1.4	72	W	4.9	2.2	.....	.....	8	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.81	757.1	30.07	763.8	34.0	1.1	78	N	.....	.....	2	.....	10	.....	.....	0	0	.....	Cav. F. Meucci.
Leghorn	29.98	761.4	30.06	763.6	34.7	1.5	63	NE	5.6	2.5	.....	.....	10	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.85	758.2	30.03	762.7	41.2	5.1	53	NNW	3.8	1.7	.....	.....	9	.....	.....	0.008	0.2	.....	Prof. P. S. Ferrari.
Lecce	29.84	757.8	30.09	764.3	42.6	5.9	52	NE	14.3	6.4	.....	.....	9	N	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.14	740.2	30.04	762.9	49.6	9.8	69	NW	1.3	0.6	.....	.....	10	NNW	.....	0.165	4.2	.....	Prof. D. Conti.
Cagliari	29.73	755.2	29.93	760.1	53.2	11.8	42	E	.....	.....	2	.....	10	.....	.....	0.012	0.3	.....	Prof. A. Pacinotti.
Palermo	29.76	755.8	30.00	762.1	52.3	11.3	57	NE	0.7	0.3	.....	.....	10	.....	.....	0.181	4.6	.....	Prof. G. Ciacciatore.
Syracuse	29.97	761.1	30.01	762.2	58.1	14.5	52	SE	8.7	3.9	.....	.....	10	S	.....	0	0	.....	Prof. Vincenzo Gulliano
Sub-Series.																			
Naples, S. R	29.51	749.5	30.06	763.4	41.9	5.5	48	ENE	1.3	0.6	.....	.....	8cs	NW	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	21.89	556.1	.....	.....	— 0.4	—18.0	66	SW	.....	.....	.....	.....	0	.....	.....	0	0	.....	P. F. Denza.
Valdobbia	21.83	554.5	.....	.....	6.8	—14.0	75	E	.....	.....	.....	.....	8	.....	.....	0	0	.....	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y†	30.24	768.1	30.26	768.6	36.6	2.4	74	NNE	4.8	2.1	.....	.....	1cs	.....	.....	0	0	Covered.....	K. Sasaki.
Kioto	30.06	763.5	30.25	768.3	31.8	— 0.1	78	.....	.....	.....	.....	ck	8cs	WSW	.....	0	0	Cloudy.....	.....
Nagasaki, I. M. Obs'y	30.00	762.0	30.21	767.3	38.8	3.8	76	SE	3.4	1.5	.....	.....	10s	.....	.....	0.060	1.52	Overcast.....	S. Takehayashi.
Tokei Obs'y, Yeddo	30.12	765.0	30.19	766.8	35.2	1.8	53	NW	4.4	2.0	.....	3ck	7s	W	W	0.	0	Cloudy.....	The Staff.
Wakayama	30.21	767.3	30.26	768.6	35.1	1.7	71	E	1.0	0.4	.....	.....	10s	.....	.....	0	0	Cloudy.....	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.65	753.1	29.83	757.8	80.9	27.2	69	ENE	19.5	8.7	.....	2	7	.....	ENE	0.01	0.3	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. Banda, C. E.
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanaxuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Leal.
Mazatlan	29.74	755.3	30.00	762.0	65.7	18.7	84	NNE	.....	.....	3	6c	1ks	.....	.....	0	0	Cloudy.....	F. Quijano, C. E.
Mexico, Central Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff.
Morelia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Fena, M. D.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.91	759.7	29.91	759.7	26.1	— 3.3	.....	SSW	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Groningen	.....	.....	.....	.....	22.6	— 5.2	.....	ESE	.....	.....	1	.....	.....	.....	.....	0.197	5.0	.....	
Helder	29.84	758.0	29.84	758.0	30.2	— 1.0	.....	ENE	.....	.....	2	.....	.....	.....	.....	0.039	1.0	.....	
Hellevoetsluis	29.87	758.7	29.84	758.7	28.6	— 1.9	92	SW	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Utrecht	29.86	758.4	29.91	759.6	26.8	— 2.8	90	SW	.....	.....	2	.....	5	.....	.....	0.020	0.5	Cloudy.....	H. van der Brink

STATIONS.	Barometer. Corrected for instru'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.68	753.8	29.74	755.4	27.7	— 2.4	79	ESE	3.4	1.5			7			0.075	2.0		
Christiania	29.64	752.8	29.80	756.9	7.3	—13.7	88	Calm	0	0			10			0	0		
Gjæsvær	29.93	760.1	29.95	760.7	16.7	— 8.5		NE			6		9						
Lodingen	29.95	760.7	30.00	761.9	14.9	— 9.5	63	N			2		1			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.71	754.5	29.87	758.6	52.2	11.2	78	NNE	7.4	3.3			3			0.906	23.0		Dr. J. A. Sampaio.
Campo Major	28.57	725 7	29.55	750.6	60.8	16.0	75	SSW	14.3	6.4			9			0.756	19.2		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.76	755.9	29.85	758.1	66.9	19.4	65	W					4			0.063	1.6		Capt. D. A. de Cunha.
Lisbon, Observatory	29.13	740.0	29.48	748.9	61.5	16.4	86	SSW	32.9	14.7			9	SW		0.169	4.3		The Staff.
Ponta Delgada, Azores	29.79	756.6	29.86	758.4	56.1	13.4	58	N	9.8	4.4			4			0.835	21.2		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.07	738.3	30.20	767.1	27.7	— 2.4	100	E	2	1			10					Light clouds	Capt. Lasarew.
Archangel	29.46	748.2	29.48	748.7	— 8.0	—22.2	80	SE	4	2			10						Capt. Sselliwerstow.
Astrakhan	29.70	754.4	29.62	752.3	30.9	— 0.6	98	SE	2	1			10			Blank		Foggy	Capt. Wisganow.
Barnaul	29.83	757.6	30.36	771.1	28.0	— 2.2	92	SW	2	1			10						Meteorological Obs'y.
Dorpat	29.17	741.0	29.44	747.7	5.4	—14.8	87	SSE	2	1			10k;ka						Observatory.
Ekaterinburg	29.08	738.7	30.13	765.2	12.7	—10.7	61	SSE	2	1			10						Meteorological Obs'y.
Kasan	29.59	751.6	29.88	759.0	13.5	—10.3	86	SSE	4	2			10					Light snow	Observatory.
Kertch	29.37	746.0	29.39	746.5	35.8	2.1	91	NW	9	4			9						Lagorio.
Kieff	29.00	736.6	29.69	754.1	9.3	—12.0	78	NW	11	5		c	3cs;ka						Observatory.
Krotkowo, N. 58°47′, E. 48°34′																			Cand. Fatjanow.
Lugan	28.88	733.5	29.09	738.8	33.4	0.8	96	Calm	0	0			10			Blank			Meteorological Obs'y.
Moscow	29.02	737.0	29.69	754.1	9.7	—12.4	77	S	7.8	3.5			7ks					Snowing	Meteorological Obs'y.
Nertchinsk	28.02	713.3	30.82	782.9	—27.4	—33.0	82						0						Meteorological Obs'y.
Nikolaiev	29.63	752.6	29.70	754.4	13.8	—10.1	93	NNW	45	20			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	30.03	762.8	30.12	765.0	6.8	—14.0	83	W	9	4			10n					Snowing	Lieut. Iwanow.
Nukuss	30.06	763.6	30.30	769.6	54.3	12.4	77	SSE	2	1			8n						Dr. Dobrochotow.
Pekin, China	29.84	757.8	29.98	761.4	29.1	— 1.6	90	Calm	0	0			10n			Blank			Physical Observatory.
St. Petersburg	29.44	747.8	29.46	748.2	— 4.5	—20.3	80	Calm	0	0			9					Snow-fog	Central Physical Obs'y.
Tashkend, Laboratory																			Teich, A. M.
Tiflis	28.34	719.8	29.76	756.0	48.4	9.1	83	Calm	0	0			10s						Physical Observatory.
Warsaw	29.37	745.9	29.82	757.4	17.4	— 8.1	82	WSW	13	6			2ks						Astronomical Obs'y
Wilna	29.21	742.0	29.66	753.4	15.1	— 9.4	76	SW	4	2			4					Light clouds	Berg, Assistant.
Yeniseisk	29.89	759.3	30.22	767.6	— 7.8	—22.1	85	SE	9	4			7					Snowing	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.78	756.4	17.0	— 8.3	100	W			1		0			0	0	Hazy	Andrew Gibb.
Monach Lt. House, Hebrides			29.64	752.8	33	0.6	89	SE			4		10						J. Youngclause.
North Unst, Shetland Isl'ds			29.77	756.1				SE			4	0	4			Blank	Blank		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.71	754.6	29.82	757.4	42.8	6.	86	NE	2.0	0.9			10			0.021	0.53	Rain-squalls	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.40	746.7	29.46	748.2	52.0	11.1	86	SE	7.8	3.48		2	7	W		0	0	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.58	675.0			45.1	7.3	85	S	8.3	3.70			10			0.177	4.5	Raining	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.41	696.2	29.61	752.0	47.5	8.6	87	SE	3.8	1.7			10			2.492	11.5	Covered	The Staff.
Murcia, Met. Obs'y. ‡	29.63	752.6	29.78	756.5	53.6	12.0	91	ENE	1.1	0.5		5	5			0.165	4.2	Raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.24	717.2	29.11	739.4	53.6	12.0	91	S	24.8	11.1			10			0.693	17.6	Raining	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.05	763 3	30.12	765.0	66.8	19.3	94	ENE	5.4	2.4		0	0			0	0	Clear	Benito Vines, S. J.
Manilla, Phillippine Islands	29.92	760.1	29.98	761.4	79.1	26.2	79	ESE	2.6	1.2		2cs	2s	E	W	0.01	0.2	Cloudy	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.73	755.1	29.83	757.6	64.0	17.8	86	W	9.8	4.4			10		SW	0.505	12.9		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.04	762.9	30.13	765.2	72.0	22.2	98	W	0	0		4c	6kn	W	E	0	0	Cloudy	Enrique Gadea, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.74	755.4	29.78	756.4	11.5	—11.4	93	N			4		10			0	0		
Umea	29.61	752.2	29.67	753.5	15.4	— 9.2	94	NE			7		10			0.126	3.2	Snowing	
Hernosand	29.66	753.4	29.71	754.7	17.1	— 8.3	79	N			4		6			0.016	0.4		
Stockholm	29.33	744.9	29.50	749.4	11.8	—11.2	85	WNW			2		9			0	0		
Wisby	29.48	748.7	29.54	750.2	15.8	— 9.0	88	NNW			4		10			0.224	5.7	Snowing	
Sub-Series.																			
Upsala	29.85	758.2	29.94	760.4	12.2	—11.0	82	NNW	12.8	5.7			10			0	0		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.47	723.1	29.99	761.7	24.8	— 4.0	69	S			1		8			0	0	Foggy	The Observatory.
Zurich	28.27	718.1	30.01	762.3	25.2	— 3.8	58	W			1		1			0.020	0.5	Clear	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —4.5 mm.; Ther. —5°.5 cent.; Hum. —10 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.95	760.7	32.2	0.1	89	N	9	4.0			10		N	0.323	8.2	Snowing	The Observatory.
Valona			30.02	762.6	47.3	8.5		NW			2		5			0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.98	761.4	73.8	23.2	56	SW			3		9cs			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instru'm'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.21	767.3	30.30	769.6	19	— 7.2	85	E	2	0.9			10s		Calm	0	0	Cloudy	
Alpena, Michigan	29.79	756.7	30.53	775.4	0	—17.8	70	W	6	2.7		0	0			0.15	3.8	Clear	
Attou Id., Alaska‡	29.36	745.7			24	— 4.4	74	N	18	8.0		0	8s		N	0	0	Cloudy	
Atlanta, Georgia	29.02	737.1	30.21	767.3	41	5.0	83	NE	6	2.7			10s		Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.25	768.3	30.26	768.6	27	— 2.8	76	N	8	3.6			10s		Calm	0	0	Cloudy	
Augusta, Georgia	30.08	764.0	30.29	769.4	44	6.7	84	Calm	0	0		2c	Sm'e	Calm	Calm	0	0	Fair	
Baltimore, Maryland	30.27	768.8	30.32	770.1	28	— 2.2	88	NW	4	1.8			10s;fg		NW;C	0	0	Cloudy	
Barnegat, New Jersey	30.23	767.8	30.25	768.3	27	— 2.8	88	NW	16	7.2			10s		Calm	0	0	Cloudy	
Benton, Montana	27.27	692.6			—13	—25.0	74	Calm	0	0		5cs	0	Calm		0	0	Fair	
Bismarck, Dakota	28.37	720.6	30.23	767.8	—13	—25.0		SE	4	1.8		0	0			0	0	Clear	
Boise City, Idaho	27.40	696.0	30.36	771.1	18	— 7.8	81	N	1	0.4		0	0			0.21	5.3	Clear	
Boston, Massachusetts	30.09	764.3	30.26	768.6	24	— 4.4	87	W	6	2.7			10s		Calm	0	0	Cloudy	
Brackettville, Texas	28.81	731.8	29.89	759.2	44	6.7	76	SW	2	0.9			10s		Calm	0	0	Cloudy	
Brownsville, Texas	29.83	757.7	29.87	758.7	68	20.0	100	E	4	1.8			10s		Calm	0	0	Cloudy	
Buffalo, New York	29.62	752.3	30.38	771.6	20	— 6.7	85	SW	7	3.1			10s		Calm	0.03	0.8	Cloudy	
Burlington, Vermont	29.97	761.2	30.28	769.1	20	— 6.7	85	SW	5	2.2			10n		SW	0.02	0.5	Light snow.	
Cairo, Illinois	30.05	763.3	30.48	774.2	19	— 7.2	85	N	11	4.9		2ck	2s	SW	Calm	0	0	Fair	
Campo, California	27.49	698.2	30.06	763.5	27	— 2.8	88	NW	3	1.3		0	0			0.64	16.3	Clear	
Camp Thomas, Arizona	27.18	690.4			35	1.7	80	Calm			0	0	0			0.03	0.8	Clear	
Cape Henry, Virginia	30.25	768.3	30.27	768.8	31	— 0.6	79	NW	15	6.7		0	0			0	0	Clear	
Cape May, New Jersey	30.22	767.6	30.25	768.3	29	— 1.7	77	NW	12	5.4		8cs	2s	NW	Calm	Inap.	Inap.	Cloudy	
Castroville, Texas	29.19	741.4	29.91	759.7	47	8.3	55	E	6	2.7			10s		Calm	0	0	Cloudy	
Cedar Keys, Florida	30.14	765.5	30.16	766.1	63	17.2	94	E	8	3.6			Fog		Calm	0.03	0.8	Dense fog	
Champaign, Illinois	29.63	752.6	30.53	775.4	11	—11.7	60	N	7	3.1			10s		N	0	0	Cloudy	
Charleston, S. Carolina	30.20	767.1	30.26	768.6	47	8.3	85	N	6	2.7		2c	0	W		Inap.	Inap.	Clear	
Charlotte, N. Carolina	29.40	746.7	30.26	768.6	35	1.7	90	NE	2	0.9		0	Fog		Calm	0	0	Clear	
Chattanooga, Tennessee	29.43	747.5	30.26	768.6	41	5.0	91	NE	3	1.3			10s;fg		Calm	Inap.	Inap.	Cloudy	
Cheyenne, Wyoming	24.03	610.4	29.97	761.2	19	— 7.2	85	SE	5	2.2			10n		Calm	0.05	1.3	Light snow.	
Chicago, Illinois	29.77	756.1	30.55	776.0	7	—13.9	63	N	5	2.2		0	0			0.10	2.5	Clear	
Chincoteague, Virginia	30.25	768.3	30.27	768.8	30	— 1.1	100	NW	8	3.6		8k	0	NW		Inap.	Inap.	Cloudy	
Cincinnati, Ohio	29.78	756.4	30.49	774.4	25	— 3.9	62	NE	4	1.8			10s;sm		N;NE	Inap.	Inap.	Cloudy	
Cleveland, Ohio	29.73	755.1	30.52	775.2	14	—10.0	91	NW	8	3.6			10s		Calm	Inap.	Inap.	Cloudy	
Coleman City, Texas	28.31	719.1	30.08	764.0	27	— 2.8	76	N	20	8.9			10s		Calm	0	0	Cloudy	
Columbus, Ohio	29.56	750.8	30.47	773.9	22	— 5.6	86	N	10	4.5			10ks		NW	0.02	0.5	Cloudy	
Concho, Texas	28.17	715.5	29.95	760.7	26	— 3.3	88	N	26	7.2			10s		NE	0	0	Cloudy	
Corsicana, Texas	29.67	753.6	30.16	766.1	36	2.2	71	N	12	5.4			10s		Calm	0	0	Cloudy	
Davenport, Iowa	29.90	759.4	30.65	778.5	—10	—23.3	77	Calm	0	0		5cs	0	S		0.14	3.6	Fair	
Dayton, Washington T'y	28.61	726.7	30.44	773.2	16	— 8.9	100	SW	8	3.6			10s		Calm	0	0	Cloudy	
Deadwood, Dakota	25.48	647.2			9	—12.8	57	SW	5	2.2		0	0			0	0	Clear	
Decatur, Texas	28.96	735.6	30.21	767.3	29	— 1.7	78	N	18	8.0		10cs	0	S		0	0	Cloudy	
Delaware Breakwater, Del.	30.25	768.3	30.27	768.8	28	— 2.2	77	NW	13	5.8			10ks		Calm	Inap.	Inap.	Cloudy	
Denison, Texas	29.37	746.0	30.21	767.3	29	— 1.7	89	N	15	6.7			10s		Calm	0	0	Cloudy	
Denver, Colorado	24.79	629.6	30.01	762.2	26	— 3.3	88	NW	7	3.1			10n		Calm	0.03	0.8	Light snow.	
Des Moines, Iowa	29.65	753.1	30.69	779.5	—10	—23.3	76	Calm	0	0		0	0			0.10	2.5	Clear	
Detroit, Michigan	29.75	755.6	30.50	774.7	10	—12.2	90	Calm	0	0		0	0			0.15	3.8	Clear	
Dodge City, Kansas	27.65	702.3	30.19	766.8	10	—12.2	58	NE	7	3.1		5k	0	Calm		Inap.	Inap.	Fair	
Dubuque, Iowa	29.84	757.9	30.67	779.0	—11	—23.9	76	Calm	0	0		0	2s;fg		Calm	0.11	2.8	Fair	
Duluth, Minnesota	29.69	754.1	30.47	773.9	1	—17.2	85	SW	8	3.6		0	0			0	0	Clear	
Eagle Pass, Texas	29.23	742.4	29.98	761.5	48	8.9	56	NW	5	2.2		10cs	0	Calm		0	0	Cloudy	
Eagle Rock, Texas	25.46	646.7	30.11	764.8	10	—12.2	79	N	3	1.3			10s		NW	0	0	Cloudy	
Eastport, Maine	30.10	764.5	30.18	766.6	15	— 9.4	65	N	7	3.1		5cs	0	NW		0	0	Fair	
Edinburg, Texas					17	— 8.3	89	S			1		10s		Calm	0	0	Foggy	
El Paso, Texas	26.14	663.9			40	4.4	91	N	4	1.8			10n		NW	0.12	3.0	Light rain	
Erie, Pennsylvania	29.62	752.3	30.09	764.3	24	— 4.4	87	W	5	2.2			10s		Calm	0	0	Cloudy	
Escanaba, Michigan	29.80	756.9	30.58	776.7	—15	—26.1	100	Calm	0	0		0	0			0	0	Clear	
Florence, Arizona	28.49	723.6	30.09	764.3	36	2.2	71	W	2	0.9		0	2s		Calm	0	0	Fair	
Fort Apache, New Mexico	24.90	632.4	30.35	770.9	23	— 5.0	73	NE	1	0.4		1ck	5s	NW	NW	0.01	0.3	Fair	
Fort Assinniboine, Montana	27.24	691.9			3	—16.1	46	SW	20	8.9		0	0			0	0	Clear	
Fort Bennett, Dakota	28.70	729.0			—18	—27.8	67	SE	1	0.4		0	0			0	0	Clear	
Fort Buford, Dakota	28.19	716.0	30.33	770.4	—12	—24.4	75	Calm	0	0		0	0			0	0	Clear	
Fort Custer, Montana	27.01	686.0			— 9	—22.8	78	S	8	3.6		0	0			0	0	Clear	
Fort Davis, Texas	25.08	637.0	30.04	763.0	25	— 3.9	87	N	11	4.9			10s		Calm	0	0	Threatening.	
Fort Elliott, Texas	27.37	695.2	29.86	758.4	12	—11.1	23	N	16	7.2		5c	0	N		0	0	Fair	
Fort Gibson, Indian T'y	29.72	754.9	30.30	769.6	27	— 2.8	76	N	5	2.2			10s		Calm	0	0	Cloudy	
Fort Grant, Arizona	25.09	637.3	29.89	759.2	33	0.6	89	NW	4	1.8			10s		W	0.05	1.3	Cloudy	
Fort Griffin, Texas	28.81	731.8	30.17	766.3	23	— 5.0	60	N	16	7.2			10s		Calm	0	0	Cloudy	
Fort Keogh, Montana	27.71	703.8			—21	—29.4		SW	4	1.8		0	0			0	0	Clear	
Fort Macon, North Carolina	30.26	768.6	30.28	769.1	40	4.4	91	NW	10	4.5			10s		Calm	0.13	3.3	Cloudy	
Fort Missoula, Montana	26.70	678.2			—22	—30.0	100	Calm	0	0		0	0			0	0	Clear	
Fort McKavett, Texas	27.74	704.6	29.74	755.4	31	— 0.6	69	NE	14	6.3			10s		Calm	0	0	Cloudy	
Fort Shaw, Montana	26.39	670.3			18	— 7.8	68	W	34	15.2		10cs	0	Calm		0	0	Cloudy	
Fort Sill, Indian Territory	28.99	736.3	30.23	767.8	11	—11.7	80	N	26	11.6			10s		Calm	0	0	Cloudy	
Fort Stevenson, Dakota	28.38	720.8			—12	—24.4	75	SW	30	13.4		0	0			0	0	Clear	
Fort Verde, Arizona					32	0.0	89	E			1		Fog		Calm	0.03	0.8	Dense fog	
Fredericksburg, Texas	28.26	717.8	29.87	758.7	39	3.9	64	N	8	3.6			10s		Calm	0	0	Cloudy	
Galveston, Texas	29.94	760.5	29.98	761.5	55	12.8	93	E	6	2.7			Fog		Calm	0	0	Dense fog	
Grand Haven, Michigan	29.82	757.4	30.54	775.7	17	— 8.3	83	N	1	0.4			10s		N	0.15	3.8	Cloudy	
Hatteras, North Carolina	30.23	767.8	30.25	768.3	37	2.8	100	NW	6	2.7			10s		Calm	0.25	6.3	Cloudy	
Helena, Montana	25.98	659.9			—14	—25.6	100	SW	2	0.9		2c	0	Calm		0	0	Fair	
Henrietta, Texas	29.21	741.9	30.23	767.8	23	— 5.0	73	N	14	6.3		0	8s		N	0	0	Cloudy	
Indianapolis, Indiana	29.63	752.6	30.49	774.4	18	— 7.8	84	NE	5	2.2			10s		Calm	0	0	Cloudy	
Indianola, Texas	29.93	760.2	29.96	761.0	51	10.6	79	NE	22	9.8			10s		Calm	0	0	Cloudy	
Jacksboro, Texas	28.98	736.1	30.19	766.8	28	— 2.2		N	9	4.0			10s		NW	0	0	Cloudy	
Jacksonville, Florida	30.16	766.1	30.21	767.3	58	14.4	94	NE	2	0.9			Fog			0	0	Dense fog	
Keokuk, Iowa	29.89	759.2	30.63	778.0	4	—15.6	74	N	2	0.9		5cs;hz	0	Calm		0.20	5.1	Fair	
Key West, Florida	30,12	765.0	30.15	765.8	73	22.8	81	E	6	2.7		0	0			0	0	Clear	
Kittyhawk, North Carolina	30.26	768.6	30.29	769.4	33	0.6	89	N	9	4.0		0	0			0.27	6.9	Clear	
Knoxville, Tennessee	29.26	743.2	30.32	770.1	37	2.8	100	NE	6	2.7			10s;fg		Calm	0	0	Cloudy	
La Crosse, Wisconsin	29.79	756.7	30.67	779.0	—14	—25.6	100	S	8	3.6		0	0			Inap.	Inap.	Clear	
La Mesilla, New Mexico	25.98	659.9	30.13	765.3	40	4.4	65	W	1	0.4			10s		Calm	0	0	Cloudy	
Laredo, Texas	29.48	748.8	29.82	757.4	51	10.6	81	NE	8	3.6			10s		NE	0	0	Cloudy	
Leavenworth, Kansas	29.62	752.3	30.58	776.7	6	—14.4	76	N	7	3.1			10s			0.03	0.8	Cloudy	
Lewiston, Idaho	29.55	750.6	30.26	768.6	15	— 9.4	67	NW	1	0.4			10s		Calm	0	0	Cloudy	
Little Rock, Arkansas	29.94	760.5	30.28	769.1	32	0.0	89	N	11	4.9			10s		Calm	0	0	Cloudy	
Los Angeles, California	29.74	755.4	30.10	764.5	40	4.4	73	NE	3	1.3		0	0			0	0	Clear	
Louisville, Kentucky	29.82	757.4	30.44	773.2	20	— 6.7	70	N	9	4.0		2c	0	Calm		0.03	0.8	Clear	
Lynchburg, Virginia	29.58	751.3	30.30	769.6	34	1.1	79	Calm	0	0			10s		NW	0	0	Cloudy	
Madison, Wisconsin	29.46	748.3	30.59	777.0	0	—17.8	70	NW	5	2.2		1c	0	W		0.07	1.8	Fair	
Marquette, Michigan	29.68	753.9	30.49	774.4	— 2	—18.9	35	SW	4	1.8		0	0			0.02	0.5	Clear	
Mason, Texas	28.37	720.6	30.20	767.1	35	1.7	70	NE	20	8.9			10ks		NE	0	0	Cloudy	
Memphis, Tennessee	29.91	759.7	30.27	768.8	33	0.6	89	N	10	4.5			10s		Calm	0.06	1.5	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.75	755.6	30.58	776.7	4	—15.6	74	NW	8	3.6	.....	0	1s	.....	Calm	0.06	1.5	Clear	
Mobile, Alabama	30.02	762.5	30.09	764.3	61	16.1	94	NE	5	2.2	.....	.....	Fog	.....	.....	Inap.	Inap.	Dense fog	
Montgomery, Alabama	29.93	760.2	30.16	766.1	55	12.8	93	SE	3	1.3	.....	.....	Fog	.....	Calm	0.07	1.8	Dense fog	
Morgantown, W. Virginia	29.34	745.2	30.38	771.6	34	1.1	61	N	12	5.4	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Moorhead, Minnesota	29.31	744.5	30.43	772.9	—13	—25.0	74	S	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Mt. Washington, N. H.	23.69	601.7	30.05	763.3	15	— 9.4	65	NW	20	8.9	.....	.....	10s	.....	NW	0	0	Cloudy	
Nashville, Tennessee	29.79	756.7	30.36	771.1	34	1.1	90	N	7	3.1	.....	.....	10ks	.....	N	0	0	Cloudy	
New Haven, Connecticut	30.14	765.5	30.27	768.8	24	— 4.4	61	N	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
New London, Connecticut	30.22	767.6	30.27	768.8	29	— 1.7	78	N	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
New Orleans, Louisiana	30.00	762.0	30.06	763.5	57	13.9	94	SE	6	2.7	.....	.....	Fog	.....	.....	0	0	Dense fog	
Newport, Rhode Island	30.12	765.0	30.22	767.6	29	— 1.7	89	N	6	2.7	.....	.....	10s	.....	W	0	0	Cloudy	
New River, N. Carolina	.....	.....	.....	.....	40	4.4	83	W	.....	.....	2	8cs	0	Calm	.....	.....	.....	Cloudy	
New Shoreham, Rhode I'd	30.23	767.8	30.26	768.6	31	— 0.6	79	NE	9	4.0	.....	.....	10s	.....	N	0	0	Cloudy	
New York, New York	30.08	764.0	30.27	768.8	30	— 1.1	89	N	4	1.8	.....	.....	10s;fg	.....	Calm	0	0	Cloudy	
Norfolk, Virginia	30.23	767.8	30.29	769.4	31	— 0.6	79	N	5	2.2	.....	0	Sm'e	.....	Calm	0	0	Clear	
North Platte, Nebraska	27.33	694.2	30.16	766.1	11	—11.7	80	E	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Olympia, Washington T'y	30.11	764.8	30.15	765.8	34.0	1.1	95	W	2	0.9	.....	.....	10n	.....	Calm	0.01	0.3	Light rain	
Omaha, Nebraska	29.34	745.2	30.63	778.0	— 6	—21.1	81	Calm	0	0	.....	5cs	0	Calm	.....	0.01	0.3	Fair	
Oswego, New York	29.96	761.0	30.30	769.6	27	— 2.8	88	N	8	3.6	.....	.....	10s	.....	N	0.01	0.3	Cloudy	
Pensacola, Florida	30.08	764.0	30.11	764.8	62	16.7	100	E	2	0.9	.....	.....	Fog	.....	Calm	0.04	1.0	Dense fog	
Philadelphia, Pa	30.22	767.6	30.27	768.8	25	— 3.9	75	N	8	3.6	.....	.....	10s;fg	.....	Calm	0	0	Cloudy	
Phœnix, Arizona	28.91	734.3	30.81	782.6	34	1.1	90	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.47	443.7	29.68	753.9	4	—15.6	74	Calm	0	0	.....	.....	Fog	.....	Calm	0	0	Light fog	
Pilot Point, Texas	29.38	746.2	30.28	769.1	30	— 1.1	68	NE	11	4.9	.....	.....	10s	.....	S	0	0	Cloudy	
Ploche, Nevada	24.04	610.6	29.81	757.2	24	— 4.4	74	N	12	5.4	.....	1k	0	N	.....	0.19	4.8	Clear	
Pittsburg, Pennsylvania	29.54	750.3	30.41	772.4	26	— 3.3	88	NW	4	1.8	.....	.....	10s	.....	NW	0.04	1.0	Cloudy	
Port Huron, Michigan	29.73	755.1	30 48	774.2	9	—12.8	78	NW	10	4.5	.....	0	2s	.....	Calm	0.24	6.1	Clear	
Portland, Maine	30.15	765.8	30.20	767.1	23	— 5.0	86	N	2	0.9	.....	.....	10s;fg	.....	Calm	0	0	Cloudy	
Portland, Oregon	30.18	766.6	30.26	768.6	33	0.6	84	E	2	0.9	.....	.....	10s	.....	SW	0	0	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	38	3.3	81	N	8	3.6	.....	0	0	.....	.....	0.24	6.1	Clear	
Prescott, Arizona	24.64	625.8	30.00	762.0	32	0.0	79	W	2	0.9	.....	10k	0	W	.....	0	0	Cloudy	
Punta Rassa, Florida	30.12	765.0	30.14	765.5	64	17.8	94	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Red Bluff, California	29.94	760 5	30.30	769.6	39.0	3.9	91	NW	5	2.2	.....	0	0	.....	.....	0.03	0.8	Clear	
Rio Grande City, Texas	29.68	753.9	29.90	759.4	66	18.9	95	SE	2	0.9	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Rochester, New York	29.68	753.9	30.34	770.6	25	— 3.9	87	NW	7	3.1	.....	.....	10s	.....	Calm	0.04	1.0	Cloudy	
Roseburg, Oregon	29.70	754.4	30.29	769.4	42	5.6	91	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Sacramento, California	30.19	766.8	30.27	768.8	45	7.2	84	NW	5	2.2	.....	0	0	.....	.....	0.01	0.3	Clear	
St. Louis, Missouri	29.86	758.4	30.51	774.9	13	—10.6	81	N	14	6.3	.....	10cs	0	Calm	.....	0	0	Cloudy	
St. Paul, Minnesota	29.59	751.6	30.57	776.5	—13	—25.0	74	SE	2	0.9	.....	0	0	.....	.....	0.02	0.5	Clear	
Salt Lake City, Utah	25.75	654.0	30.08	764.0	29	— 1.7	56	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
San Antonio, Texas	29.32	744.7	30.04	763.0	44	6.7	52	N	8	3.6	.....	.....	10s	.....	N	0	0	Cloudy	
San Diego, California	30.07	763.8	30.14	765.5	47	8.3	77	NE	10	4.5	.....	0	0	.....	.....	0.13	3.3	Clear	
Sandusky, Ohio	29.77	756.1	30.51	774.9	17	— 8.3	83	NW	6	2.7	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Sandy Hook, New Jersey	30.22	767.6	30.26	768.6	28	— 2.2	88	N	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
San Francisco, California	30.20	767.1	30.26	768.6	48	8.9	89	N	7	3.1	.....	0	Fog	.....	NW	0.07	1.8	Clear	
Santa Fé, New Mexico	23.08	586.2	29.62	752.3	22	— 5.6	86	N	6	2.7	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Savannah, Georgia	30.18	766.6	30.28	769.1	50	10.0	86	N	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Shreveport, Louisiana	29.90	759.4	30.16	766.1	41	5.0	91	NE	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Silver City, New Mexico	24.08	611.6	30.44	773.2	30	— 1.1	68	N	7	3.1	.....	0	2s	.....	N	0.02	0.5	Clear	
Smithville, North Carolina	30.25	768.3	30.29	769.4	42	5.6	83	N	3	1.3	.....	8k	2s	SW	Calm	0	0	Cloudy	
Socorro, New Mexico	25.28	642.1	29.34	745.2	34	1.1	61	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.83	757.7	30.59	777.0	9	—12.8	78	N	9	4.0	.....	10cs	0	W	.....	Inap.	Inap.	Cloudy	
Springfield, Massachusetts	30.13	765.3	30.27	768.8	23	— 5.0	86	SW	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Stockton, Texas	27.01	686.0	30.01	762.2	26	— 3.3	88	NE	16	7.2	.....	.....	10s	.....	NE	0	0	Cloudy	
St. Vincent, Minnesota	29.28	743.7	30.17	766.3	— 3	—19.4	100	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Thatcher's Island, Mass	30.20	767.1	30.26	768.6	32	0.0	79	W	14	6.3	.....	0	5s	.....	W	0	0	Fair	
Toledo, Ohio	29.76	755.9	30.52	775.2	13	—10.6	82	W	4	1.8	.....	0	Sm'e	.....	Calm	0.06	1.5	Clear	
Tucson, Arizona	27.50	698.5	30.05	763.3	39	3.9	73	SE	3	1.3	.....	0	0	.....	.....	0.05	1.3	Clear	
Umatilla, Oregon	30.15	765.8	30.70	779.8	12	—11.1	90	SE	8	3.6	.....	10cs	0	Calm	.....	0	0	Cloudy	
Uvalde, Texas	29.20	741.7	29.98	761.5	47	8.3	56	Calm	0	0	.....	5c	0	Calm	.....	0	0	Fair	
Vicksburg, Mississippi	29.99	761.7	30.15	765.8	51	10.6	86	N	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
Visalia, California	29.84	757.9	30.22	767.6	42.5	5.8	87	SE	2	0.9	.....	10k	0	Calm	.....	0	0	Cloudy	
Washington, D. C	30.20	767.1	30.32	770.1	25	— 3.9	87	NW	2	0.9	.....	.....	10s	.....	NW	0	0	Cloudy	
Wickenburg, Arizona	.....	.....	.....	.....	33	0.6	89	NW	.....	.....	1	2c;k	1s	Calm	Calm	0	0	Clear	
Wilmington, N. Carolina	30.24	768.1	30.30	769.6	43	6.1	83	N	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
Winnemucca, Nevada	25.82	655.8	30.18	766.6	23	— 5.0	73	NE	6	2.7	.....	2c	0	NE	.....	0	0	Clear	
Wood's Holl, Mass	30.18	766.6	30.22	767.6	30	— 1.1	89	SE	6	2.7	.....	.....	10s	.....	SW	0	0	Cloudy	
Yankton, Dakota	29.10	739.1	30.65	778.5	—16	—26.7	70	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Yuma, Arizona	29.88	758.9	30.03	762.7	40	4.4	91	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	21.99	558.5	.....	.....	52.0	11.1	76	Calm	0	0	.....	10cs;ck	0	.....	.....	0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica	29.90	759.4	30.21	767.3	66	18.9	90	E	.....	.....	.....	2c	0	.....	.....	.....	.....	.....	Charles Hasselbrink.
Havana, Cuba, W. I.	30.08	764.0	30.13	765.3	70	21.1	84	SE	2.4	1.1	.....	0	0	.....	.....	0	0	Clear	
Jakobshavn, Greenland	30.34	770.7	30.40	772.1	29.5	— 1.4	.....	Calm	.....	.....	0	.....	7	.....	.....	0	0	.....	Maxwell Hall.
Kingston, Jamaica, W. I.	30.08	764.0	30.09	764.3	66.5	19.2	89	N	1	0.4	.....	0	0	.....	.....	0	0	Fine	F. M. Everett.
Navassa, W. I.	30.00	762.0	30.08	764.0	76	24.4	68	NE	9	4.0	.....	5k	2s	E	NE	0	0	Fair	Dr. C. J. Hering.
Paramaribo, S. A.	30.02	762.5	30.03	762.7	75	23.9	90	E	.....	.....	2	5k	8ks	E	.....	0.480	12.19	½ Cloudy	Francesco J. Cisneros.
Puerto Berrio, U. S. Col'mbia	29.41	747.0	29.97	761.2	79	26.1	85	Calm	.....	.....	0	.....	10ks;s	.....	N	0	0	Cloudy	Earl Flint.
Rivas, Nicaragua	.....	.....	.....	.....	72	22	.....	SE	.....	.....	1	0	1ks	.....	SE	0	0	.....	Robert Mason.
Santiago de Cuba, W. I.	30.07	763.8	30.10	764.5	73	22.8	72	NNE	3.6	1.6	.....	0	0	.....	.....	0	0	.....	G. O. Gellich.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Upernavik, Greenland	30.38	771.6	30.44	773.2	15.1	— 9.4	.....	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	J. Fortescue & W. Wood.
York Factory, B. A.	29.53	750.0	29.58	751.3	—29.0	—33.9	.....	SW	15	6.7	.....	.....	10n	.....	SW	0.01	0.3	Snowing	

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
M.H. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, N. 35° 51′, E. 14° 31′	30.04	763.0	61	16.1	67	NW			1		8	WNW						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. W. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Elfott
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.22	767.6	63	17.2		NW			2		2	NW						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 11° 55′, E. 79° 52′	29.90	759.4	78	25.6		NE			4		9	NE			6	NE		Showery	Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J. Garforth
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.93	760.2	79	26.1	66	NW			2		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon,																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Callao Bay, Peru	30.01	762.2	66	18.9	89	SSE			2		7							Misty	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	30.01	762.2	52.5	11.4	69	NNW			3		2	NNW			3	NW		D. clouds	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 26° 59′, E. 120° 30′	30.13	765.3	51.4	10.8	89	Calm			0		2							Misty	Capt. R. H. Napier.
H. M. S. Malabar, Bombay, India	29.95	760.7	81	27.2	87	NW			1		2	NW			2	NE		D. clouds	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 38° 42′, W. 9° 06′	29.46	748.3	63	17.2	89	SW			7		5	WSW						D. clouds	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, St. John's, Antigua, W. I.	30.08	764.0	77	25.0	86	Calm			0		2	NE						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 45° 56′	29.77	756.1	79	26.1	82	ESE			2		2	NE				2	SE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis, N. 27° 47′, E. 33° 48′	30.12	765.0	76	24.4	68	NW			1		1	NW				Sm'h		Blue sky	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb, N. 37° 03′, E. 15° 18′	30.05	763.3	61	16.1	66	E			2		7	WNW						Misty	Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	30.12	765.0	68.5	20.3	61	Calm			0		0							Blue sky	Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	30.00	762.1	76.6	24.8	80	ENE			4		2			0	0	2		D. clouds	S. C. da Silva Costa, Comd't.
Sado, S. 8° 48′, E. 13° 08′	29.94	760.4	79.3	26.3	82	W			2		8			0	0	2	W	D. clouds	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, N. 34° 26′, E. 25° 08′	29.89	759.2	65.3	18.5	87	WSW			2		2							Misty	

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.16	766.1	62	16.7	94	NE	3	1.3			10		NE	0	0			Foggy	
N. Yard, Portsmouth, N. H.	30.23	767.8	20	— 6.7	56	Calm	0	0		10c		S		0	0			Cloudy	
Naval Hospital, Yokohama, Japan	30.00	762.0	35.5	1.9	85	Calm			0		8		SW	0	0			Fair	
Adams, Ancon, Peru	30.09	764.3	69	20.6	95	W			0-3		10		W			Sm'h		Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.17	766.3	45	7.2	92	SSE			1		10			0	0			Misty	
Alert, Hong-Kong, China *	29.99	761.7	66	18.9	74	Calm			0		2		Calm	0	0	Sm'h		Hazy	
Alliance, Pensacola, Fla	30.09	764.3	60	15.6	100	N			1		10			Light				Foggy	
Ashuelot, Tientsin, China	29.95	760.7	34	1.1	100	N			1		10							Cloudy	
Colorado, New York, N. Y.	30.25	768.3	30	— 1.1	89	NE	1	0.4			10			0	0			Overcast	
Constitution, N. Yard, League I'd., Pa			25	— 3.9		NE	2	0.9			8		NW					Cloudy	
Franklin, Off N. Yard, Norfolk, Va	30.22	767.6	33	0.6	70	NW	6	2.7			0			0	0			Clear	
Galena, N. 36° 40′, W. 2° 00′	29.79	756.7	61	16.1	100	ESE			2		8					Mod.	S	Fair	
Independence, N. Yard, Mare I'd, Cal.	30.26	768.6	41	5.0	91	Calm	0	0			0			0.21	5.3			Clear	
Jamestown, Sitka, Alaska *	29.22	742.2	38	3.3	90	E			2		10			0.02	0.5			Cloudy	
Kearsarge, Port Royal, Jamaica, W.I.	30.08	764.0	73	22.8	85	NNW			1		2					Sm'h		Fair	
Lackawanna, Ancon, Peru †	30.13	765.3	69	20.6	90	NW			1		10		S	0	0			Cloudy	
Marion, Straits of Magellan	29.74	755.4	47	8.3	62	SSW			5		8		S	Light		Mod.	SSW	Cloudy?	
Michigan, Erie, Pennsylvania	30.38	771.6	24	— 4.4		WNW			1		10							Cloudy	
Monocacy, Shanghai, China	30.16	766.1	44	6.7	84	NW			1		10							Overcast	
New Hampshire, Port Royal, S. C.	30.23	767.8	51	10.6	93	NE	6	2.7			10			0	0			Foggy	
Nipsic, Villafranca, France	29.97	761.2	47	8.3	55	NE			1		10					Sm'h		D. clouds	
Onward, Chimbote Bay, Peru †	29.95	760.7	70	21.1	90	SSE			4		2		NW			Long	N;W	Clear	
Palos, Shanghai, China	30.25	768.3	45	7.2	84	SE			1		10							Overcast	
Passaic, Washington, D. C.	30.27	768.8	27	— 2.8	88	NW			1		8		NW					Cloudy	
Pensacola, N. 23° 15′, W. 105° 42′	29.96	761.0	71	21.7	80	ENE			1-2		2?			0	0			Cloudy?	
Portsmouth, Washington, D. C.	30.27	768.8	29	— 1.7	100	NW			1									Cloudy	
Powhatan, New York, N. Y.	30.25	768.3	28	— 2.2	100	NNE			2		10							Overcast	
Quinnebang, N. 32° 32′, E. 25° 12′	29.99	761.7	70	21.1	75	W			4		2		Calm			Light	W		
Richmond, Amoy, China	30.14	765.5	57	13.9	87	SSE			2		0			0.16	4.1	Sm'h		Clear	
Saratoga, Baltimore, Md	30.25	768.3	28	— 2.2	100	NW			1		10		Calm	0	0			Cloudy	
Shenandoah, Montevideo, Uruguay *	30.02	762.5	67	19.4	69	N			5		0					Mod.	N	Clear	
St. Louis, League Island, Pa	30.26	768.6	25	— 3.9	87	NNW	2	0.9			10		Var.	0	0			Cloudy	
Swatara, Kobe, Japan †	30.13	765 3	43	6.1	59	NE			2		8		Calm			Sm'h		Hazy	
Tennessee, St. Croix, W. I.	30.12	765.0	77	25.0	86	NE	2	0.9			8		NE	0.26	6.6	Sm'h		Rainy	
Trenton, Villafranca, France *	29.96	761.0	47	8.3	55	N			3		10			3 h'rs	light	Sm'h		Cloudy	
Vandalia, N. 22° 09′, W. 56° 48′	30.14	765.5	74	23.3	72	SSW			1		2		Calm			Long	NE	Fair	
Wabash, Boston, Massachusetts	30.26	768.6	24	— 4.4	74	WNW	3	1.3			10		Calm	0	0			Hazy	
Wachusetts, Panama, Panama *	29.56	750.8	77	25.0	86	NW			2		2		N	0	0	Sm'h		Clear	
Wyoming, Naples, Italy	30.02	762.5	46	7.8	54	NNE			2		8		WSW			Sm'h		Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡																			
S. 34° 11′, E. 25° 03′	29.83	757.7	72	22.2	87	SW				7								D. clouds	Capt. C. J. Russell.
British Merchant, ‡																			
S. 42° 55′, E. 132° 25′	29.93	760.2	53.5	11.9	77	NE			3–4		10							Overcast	Capt. E. J. Molony. Capt. John Arbuckle.
S. S. Bateshire																			Capt. A. J. Brown.
Barque Belleisle																			Capt. E. Heggum.
Ship Blychswood																			
Chin Yang, ‡																			
N. 31° 22′, W. 180° 02′	29.86	758.4	66.7	19.3	75	WSW			6		2							Blue sky	Capt. H. Youlden.
S. S. Cipero,																			
N. 35° 50′, W. 360° 35′	30.14	765.5	61	16.1		NW			1		2					2	NE	Blue sky	W. N. Lalley.
City of Agra, ‡																			
S. 56° 20′, W. 72° 00′	29.80	756.9	41.9	5.5	74	S			5		5							Squally	Capt. T. Young. Capt. W. Scott.
Barque Commewyne ‡																			
Barque Coppename,																			
N. 28° 12′, W. 20° 08′	30.05	763.3	68.1	20.1	88	WNW			4		3							Showery	Capt. A. Buchan. Capt. H. Y. Murdock.
Denbigshire																			
Barque Dochra, ‡																			
S. 29° 40′, E. 39° 32′	29.43	747.5	76	24.4	68	E			5		100s		NE					Overcast	Capt. H. Spalding. Capt. J. E. C. Patterson.
Ship Ellen Stuart																			Capt. A. Watson.
Barque Elissa																			Capt. A. Campbell.
S. S. Ethiopia ‡																			Capt. J. Kidder.
S. S. Fleurs Castle																			Capt. H. Park.
Barque Gem																			Capt. W. Waring.
S. S. Gordon Castle																			Capt. H. H. Williams.
Barque Harvest Home																			Capt. W. Randall.
Ship Iron Cross																			Capt. A. Kellett.
S. S. Kangaroo																			Capt. Alex. Wilson.
Kryolith																			Capt. G. H. Jones.
S. S. Lamperts																			Capt W. P. Hughes.
Laomene																			
Ship Lochee, ‡																			
N. 20° 06′, E. 88° 46′	30.13	765.3	72.3	22.4	62	N			3		0							Misty	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland,																			
N. 36° 45′, W. 21° 50′	29.67	753.6	55.5	13.1	94	NW			6		8							Showery	Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡																			
N. 36° 46′, E. 12° 21′	29.98	761.5	55.0	12.8	74	Calm			0		10							Showery	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE.																			
A. Schumacher & Co.																			Capt. F. Archer.
S. S. Hibernian																			Capt. Wm. Richardson.
S. S. Nova Scotian																			
CUNARD LINE.																			
Ch. G. Francklyn.																			Capt. W. Watson.
S. S. Algeria																			
S. S. Bothnia																			
S. S. Scythia,																			
N. 44° 39′, W. 44° 05′	30.15	765.8	51	10.6	93	NE			4		0			Sprinkles		Long	ENE	Fine	Capt. W. H. P. Hains.
WHITE STAR LINE.																			
Ismay, Imrie & Co.																			
S. S. Adriatic,																			Capt. J. W. Jennings.
N. 50° 58′, W. 20° 05′ †	29.73	755.1	41	5.0		NE			5		8		N			Mod.	NNE	Fair	Capt. H. Perry.
S. S. Britanic																			Capt. Benj. Gleadell.
S. S. Celtic																			
S. S. Germanic,																			
N. 40° 42′, W. 66° 06′ †	30.18	766.6	42	5.6		NE			4		2		NE	0	0	Mod.	E	Clear	Capt. Ch. W. Kennedy. Capt. B. I. Irving.
S. S. Republic																			
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen.																			
A. Schumacher & Co.																			Capt. H. Baur.
S. S. Hermann																			
S. S. Köln,																			
N. 48° 00′, W. 38° 57′	30.39	771.9	48.2	9.0		NE			5		8		NE	Light		Cross	NNE	Fair	
S. S. Leipzig, ‡																			
N. 39° 50′, W. 68° 40′	30.18	756.6	47.5	8.6	70	E			2		10		E			Sm'h	E	Sprinkling	Capt. F. Pfeiffer. Capt. G. Meyer.
S. S. Ohio																			
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			
S. 18 20′, W. 32° 21′	30.20	767.0	78.8	26.	88	NNE			3		5?							Overcast?	Capt. Albert Fredholm. Capt. O. F. Skötdebrand
Ship Peru ‡																			

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO.																			
H. B. Welsh, President.																			
S. S. Illinois, N. 40° 59′, W. 67° 23′	30.03	762.7	38	3.3	90	NNW			4		5?		W			Mod.	NW	Clear?	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 46° 40′, W. 46° 59′ †‖	30.36	771.1	41	5.0	91	E			2		2		E	0	0	Sm'h	SE	Clear.	Capt. R. W. Sargent.
S. S. Ohio, ‡ Liverpool, England †*	29.75	755.6	27	— 2.8	100	SE			3		10		SE	Fog	Fog			Cloudy	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, N. 51° 26′, W. 14° 07′ †‖	29.43	747.5	40	4.4		ENE			5		5		E	0.25	6.3	Sm'h	E	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO.																			
J. Birmingham.																			
S. S. Newbern, Guaymas, Mexico †	30.02	762.5	64	17.8	68	N			1		2		N	0	0			Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO.																			
Leland Stanford, President.																			
S. S. Belgic, ‡ Yokohama, Japan †	30.08	764.0	42	5.6	66	NNW			1		5?		W	0	0	Sm'h		Clear?	Capt. H. Davison.
S. S. Gaelic, San Francisco, Cal. †*	30.34	770.6	53	11.7	80	SW			3		2		SW					Clear	Capt. W. H. Kidley.
S. S. Oceanic, N. 44° 21′, W. 159° 54′	29.41	747.0	48	8.9	92	SSW			6		8		SW	0.17	4.3	High	SW	Fine	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO.																			
K. Van Oterendorp.																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia, N. 40° 43′, W. 124° 32′ †	30.28	769.1	50.5	10.3	82	Calm			0		5		NW			Long H'vy	W	Fair	Capt. Fred. Bolles
S. S. Oregon, Portland, Oregon †	30.15	765.8	33.5	0.8	84	NE			1		2		W					Fair	Capt E. Polemann.
PACIFIC COAST S.S. CO.																			
Goodall, Perkins & Co																			
S. S. Ancon, San Francisco, Cal. †.	30.18	766.6	48	8.9	92	NE			2		0							Clear	Capt. J. N. Ingalls.
S. S. Idaho, San Francisco, Cal. †	30.24	768.1	47	8.3	92	N			3		2		SW					Fine	C. E. Lyons, 1st Officer.
S. S. Orizaba.																			
S. S. Senator, San Pedro, Cal †	30.24	768.1	49	9.4	93	NE			1		0					Mod.	SW	Clear	Thos. Wallace.
S. S. State of California, San Francisco, Cal. †	30.27	768.8	47	8.3	100	NE			2		10							Foggy	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal. *†	30.20	767.1	46	7.8	100	N			3		0							Clear	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO.																			
J. B. Houston, President.																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, S. 34° 09′, E. 163° — †	29.77	756.1	69	20.6	83	SSW			5		8		SW	Light rain		Light	SW	Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, N. 29° 43′, W. 171° 20′ †.	29.85	758.2	60	15.6	82	SSW			5		2		SW	0	0	Mod.	W	Fair	Capt. G. G. Berry.
S. S. City of Sidney, N. 11° 45, W. 161° 29′ †	29.89	759.2	78	25.6	78	ENE			4		2		NE	0	0	H'vy	NNE	Fair	Capt. H. C. Dearborn
S. S. City of Tokio, N. 30° 55′, E. 130° 00′ †	30.27	768.8	55	12.8	68	NE			4		10			0	0	Sm'h		Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 27° 30′, W. 114° 49′ †	30.06	763.5	60	15.6	60	NW			5		10		WNW	0	0	R'gh	NW	Cloudy	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, N. 12° 44′, W. 88° 30′ †	29.91	759.7	78	25.6	78	E			2		5?		NE	0	0	Sm'll	E	Clear?	
S. S. Zealandia																			
RED STAR LINE.																			
Jas. A. Wright, President.																			
S. S. Belgenland, ‡ N. 48° 06′, W. 26° 34′ †	29.66	753.4	46	7.8	84	N			9		5		NE			H'vy	N	Hailing	Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland, ‡ N. 39° 27′, W. 70° 43′ †	30.13	765.3	49	9.4	?	ENE			6		10		ENE	0.1	3.	Mod.	ENE	Light rain	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ Off Scilly Island	29.61	752.1				S			6		10		SW	0	0	Short	S	Cloudy	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, New London, Conn †	30.24	768.1	10	—12.2		NE			2		10							Light snow	Capt. A. Mehaffey.
Sch'r Addie Fuller, Brunswick, Ga	30.06	763.5	58	14.4	82	Calm	0	0			Fog			0	0			Foggy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, ‡ Arroyo, P. R. †	30.24	768.1	78	25.6		NNE			4		0			0	0	Sm'h		Fine	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	30.29	769.4	34	1.1	100	NNW	1	0.4		0	28			0	0			Clear	
Sch'r Hattie V. Kelsey,																			Capt. J. L. Randall.
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Portugal †	29.38	746.2	64	17.8	100	SW			8		10		W	Heavy				Rainy	Capt. Jos. Hand.

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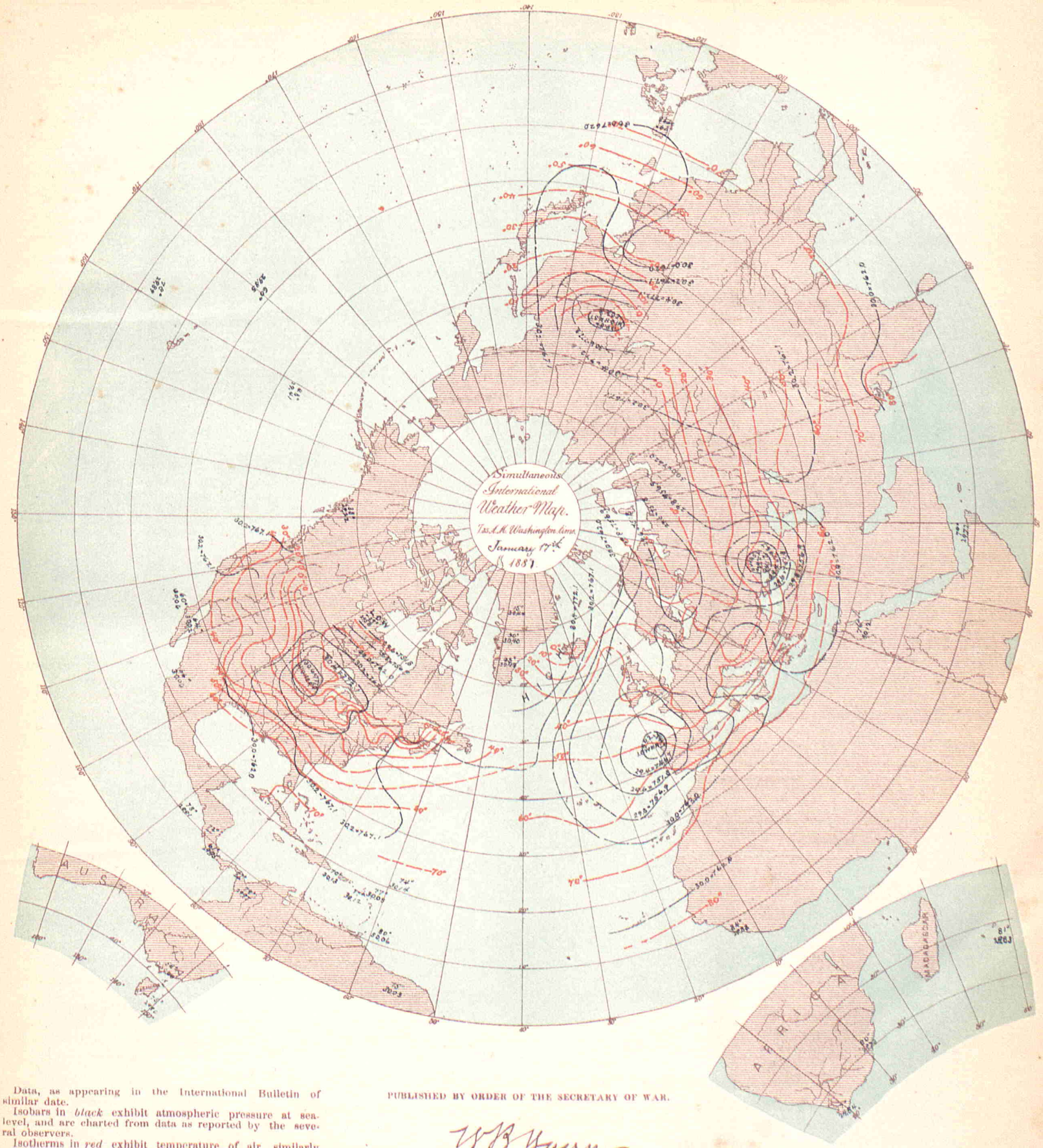
H. B. Hazen

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 18, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.02	762.6	67.6	19.8	87	SW			6		7			0.039	1.0	Very cloudy	Dr. Ollive.
Nemours			29.79	756.7	72.3	22.4	65	S			2		1			0	0	Very fair	Raynard.
Algie s			29.83	757.6	67.3	19.6	60	W			2		3			Inap.	Inap.	Pretty fair	Nicolas.
La Calle			29.92	759.9	74.5	23.6	72	W			1		4			0	0	Cloudy	Fonfréde.
Tunis			29.76	755.8															Jacques.
Sfax			30.08	764.0															Gau.
Said.a			29.94	760.5	66.2	19.0	47	SW			3		1			0	0	Very fair	Dumas.
Tebessa			29.98	761.4	73.4	23.0	24	SSW			0		0			0	0	Clear	Watrin.
Gerville																			Lonchamp.
Laghouat			30.04	763.1	74.1	23.4	40	S			1		0			0	0	Clear	Herbin.
Biskra			30.03	762.8	73.8	23.2	68	E			1		3			0	0	Pretty fair	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.87	758.7	29.96	761.0	69.0	20.6	55	S	4	1.8			10					Rainy	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.80	756.9	72	22.2		SE			2		4ks			0	0	Squally	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.26	743.2	29.85	758.2	18.3	— 7.6	82	Calm			0		10			0.173	4.4		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.11	739.3	29.93	760.2	18.3	— 7.6	86	W	6.3	2.8			5			0	0		Dr. Wiersbicki.
Eperies	28.99	736.3	29.95	760.8	11.1	—11.6	93	Calm			0		10			0	0		Julius Mikolik.
Gratz‡	28.48	723.3	29.80	757.0	22.5	— 5.3	83	WSW			2		10			0	0		Andreas Rospini.
Hermannstadt	28.45	722.6	30.04	763.0	3.2	—16.0	100	SSE			2		2			0.126	3.20		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.26	717.7	29.69	754.0	18.3	— 7.6	95	NNE			3		10			0.055	1.4		The Staff.
Lemberg	28.80	731.4	29.85	758.3	18.0	— 7.8	72	NW			3		10			0.039	1.0		Dr. T. Stanecki.
Pola	29.69	754.0	29.80	756.9	41.9	5.5	93	SE			1		10			0.654	16.6	Snowing	I. R. HydrographicOffice
Szathmar	29.50	749 2	29.95	760.7	19.8	— 6.8	81	SE			2		10			0	0		Beicht Peter, S. J.
Szegedin	29.61	752.1	29.91	759.8	14.7	— 9.6	87	S			3		10			0.236	6.00		Karl Stancel.
Trieste	29.74	755.3	29.84	757.9	35.1	1.7	75	Calm			0		10			0.480	12.2	Snowing	P. Busin.
Vienna	29.07	738.4	29.84	758.0	17.2	— 8.2	79	SE			1		4			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.14	740.2	29.35	745.5	21.0	— 6.1	100	E			6		10			0.492	12.5	Snowing	Royal Observatory
Furnes																			M. E. de Cae.
Maseyck	29.80	757.0	29.93	760.2	26.2	— 3.2	81	SW			2		1			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 25, 1882.

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

BRITISH SERIES.

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

Aberdeen	29.78	756.4	29.89	759.2	25.5	— 3.6	75	WNW	9	4.0		3				0.170	4.3	Misty	W. Boswell.
Armagh, Observatory	29.38	746.2	29.63	752.6	32.0	0.0	59	ENE	13	5.8		10						Overcast	S. Call.
Bidston, Liverpool Obs'y			29.48	748.8	30.4	— 0.9	57	ENE	42	18.8		10						Overcast	John Hartnup.
Bolton, Sharples	28.96	735.6	29.52	749.8	28.9	— 1.7	97	ENE	34	15.2		10						Squally	Thomas Mackereth.
Bradford, Yorkshire	29.16	740.7	29.55	750.6	28.3	— 2.1	89	NE			1	7				0	0	D. clouds	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	30.00	762.0	30.03	762.7	81	27.2	72	NE			1	3						D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			29.29	744.0	31.0	— 0.6	89	E			9.0	10						Overcast	John McLaren.
Chatham, School M. E.	29.11	739.4	29.24	742.7	27.2	— 2.7	90	NE			6	10						Heavy snow	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	28.82	732.0	29.04	737.6	28.8	— 1.8	99	ENE			4	10						Snowing	The Staff.
Fort Napier, Natal	27.50	698.5	29.71	754.6	90.3	32.4	99	NE			1	0						Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	85	29.4	83	SW			2	4						D. clouds	C. E. Keane.
Galway, Queen's College			29.44	747.8	32	0.0	100	NE			4	10						Overcast	J. O'Donaghadue.
Gibraltar, Mediterranean	29.86	758.4	29.92	760.0	63.6	17.6	92	WSW			4	9						Raining	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.57	751.1	29.78	756.4	29.9	— 1.2	89	NE			1							Blue sky	D. G. MacLean.
Greenwich, Royal Obs'y	29.00	736.6	29.17	740.9	26.8	— 2.9	99	ENE			9	10						Snowing	The Staff.
Guernsey	28.53	724.6	28.76	730.5	38.5	3.6	90	WSW			5	7						D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.14	740.1	29.18	741.1	27.5	— 2.5	94	ENE	58	25.9		10						Snowing	The Met'g'l Office.
Leicester, Museum	29.16	740.7	29.42	747.3	29.9	— 1.2	81	NE			6	10						Overcast	J. E. Carryer.
Malta, Mediterranean	29.87	758.7	29.94	760.5	65.0	18.3	84	SE			3	8						Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas			30.25	768.3	73.0	22.8	72	NE			3	7						D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.81	731.8	29.34	745.2	28.9	— 1.7	63	ENE			7–8	10						Overcast	Robert Pate.
Oxford, Radcliffe Obs'y	28.94	735.1	29.20	741.7	26.7	— 2.9	?	ESE			8	10						Snowing	The Staff.
Plymouth	28.91	734.3	28.99	736.3	29.0	— 1.7	98	NNE			6	10						Snowing	John Merrifield.
Sandwick Manse, Orkneys			29.97	761.2	28.2	— 2.1	94	E	13	5.8		5						Snowing	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.01	762.2	30.08	764.0	39.8	4.3	66	SE			1	1						Blue sky	Serg't W. H. Lyne.
Sheffield	29.28	743.7	29.57	751.1	30.3	— 0.9	98	ENE			4	10				0	0	Overcast	W. F. Cooper.
Silloth Rectory	29.62	752.3	29.65	753.1	29.4	— 1.4	54	NE			5	8				0	0	D. clouds	Rev. F. Redford, A. M.
Stonyhurst, Observatory			29.55	750.6	30.1	— 1.1	79	N	4	1.8		10						Squally	Rev. S. J. Perry.
Strathfield Turgiss	28.88	733.5	29.11	739.4	27.8	— 2.3	98	E			4–6	10						Snowing	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution			29.06	738.1	28	— 2.2	88	NE			4	10						Snowing	W. Newcombe.
Valencia, Observatory	29.36	745.7	29.39	746.5	32.6	0.4	79	NE	24	10.7		10						Squally	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B	30.19	766.8	30.23	767.8	13.6	—10.2		NW	10	4.5		2cs	0			0	0	Clear	Hon. J. Ferguson.
Chatham, N. B.*	30.14	765.5	30.21	767.3	11	—11.7	84	W	6	2.7		0	0			0.03	0.8	Clear	G. A. Blair.
Charlottetown, P. E. Island	30.10	764.5	30.14	765.5	15	— 9.4	93	W	15	6.7		0	0			0.470	11.94	Clear	H. J. Cundall, C. E.
Chicontime, Quebec					8.2	—13.2		NW			3	0	6n			0.25	6.3	Fair	Rev. V. A. Huart.
Cornwall, Ontario	30.46	773.7	30.68	779.3	0.4	—17.6	100	W			2	0	0			0	0	Clear	James Smith, M. A.
Dalhousie, N. B	30.18	766.6	30.22	767.6	11.0	—11.7		W			3	1k	0			0	0	Clear	H. A. Johnson.
Father Point, Quebec*	30.38	771.6	30.41	772.4	11	—11.7	78	NW	8	3.6		0	0			Inap.	Inap.	Clear	J. McWilliams.
Fredericton, N. B	30.28	769.1	30.35	770.9	13.1	—10.5	79	NW	15	6.7		0	0			0	0	Clear	Prof. Harrison.
Fort Garry, Manitoba*	29.24	742.7	30.16	766.1	1	—17.2	94	SW	15	6.7		0	0			0	0	Clear	James Stewart.
Granton, Ontario	29.52	749.8	30.80	782.3	— 5.8	—14.6	72	Calm			0	3cs	0			0	0	Fair	James Grant.
Halifax, N. S.*	30.08	764.0	30.21	767.3	20	— 6.7	88	NW	9	4.0		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario	30.30	769.6	30.75	781.0	0.6	—17.4	77	SW			1	8cs	0			0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	30.33	770.4	30.72	780.3	— 4	—20.0	72	Calm	0	0		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S	30.00	762.0	30.04	763.0	27.5	— 2.5	94	N	4	1.8		6k	0	N		0.85	21.6	Fair	C. H. Rigby.
Montreal, Quebec*	30.43	772.9	30.66	778.7	4	—15.6	74	W	19	8.5		0	0			0	0	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A.
Parry Sound, Ontario*	29.94	760.5	30.76	781.3	—11	—23.9	71	E	1	0.4		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario	29.92	760.0	30.78	781.8	— 2.9	—19.4	66	Calm			0		10n			0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.97	761.2	30.77	781.5	— 4	—20.0	100	N	5	2.2		5c	0	NW		0	0	Fair	H. Morgan.
Port Stanley, Ontario	30.03	762.7	30.78	781.8	—10	—23.3	100	N	2	0.9		0	0			0	0	Clear	M. Payne.
Quebec, Quebec*	30.16	766.1	30.52	775.2	9	—12.8	57	NW			3	0	2s			0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.19	766.8	30.74	780.8	—16	—26.7	77	Calm	0	0		0	0			0	0	Clear	W. H. McIntyre.
St. Andrews	30.31	769.9	30.36	771.1	14	—10.0	85	NW	1	0.4		0	0			0	0	Clear	
St. John's, N. B	30.17	766 3	30.35	770.9	15.0	— 9.4	82	NW	7	3.1		0	0			0	0	Clear	G. Murdock, C. E.
Saugeen, Ontario*	29.93	760.2	30.75	781.0	2	—16.7	95	Calm	0	0		0	0			Inap.	Inap.	Clear	K. Stewart.
Stratford, Ontario	29.30	744.2	30.81	782.6	—12.0	—24.4	95	Calm	0	0		0	Fog			0	0	Foggy	C. J. Macgregor, M. A.
Sydney, C. B*	29.98	761.5	30.02	762.5	29	— 1.7	88	W	11	4.9			10ks	NW		0.85	21.6	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	30.33	770.4	30.77	781.5	3	—16.1	86	NW	2	0.9		2cs	0			0	0	Fair	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario	29.56	750.8	30.81	782.6	— 8.9	—22.7	96	W	1	0.4		0	0			0	0	Clear	Prof. Wolverton.
Yarmouth, N. S.*	30.23	767.8	30.30	769.6	23	— 5.0	78	N	12	5.4		2k		N		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	30.04	763.0	30.21	767.3	35	1.7	100	SE	1	0.4			n			0.10	2.5	Foggy	John Delany.
St. Pierre, N. F			29.90	759.4	34.9	1.6		SE			3					0.39	9.9		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.88	758.9	29.92	760.0	81.0	27.2	64	NNW	5.9	2.6		8	8ks			0	0		The Staff, for D. Gill.
Cape St. Francis Lt. House	29.77	756.1			70.5	21.4	89	SW	19.5	8.7			5s			0	0	Fine	John Duthie.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.17	766.2	30.19	766.8	37.0	2.8	25	WNW	10.5	4.7			10			0	0	Covered	M. Marc Dechevrens, S. J.

COSTA RICA SERIES.

By authority of the MINISTER OF FOREIGN AFFAIRS.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

STATIONS.	Barometer, corrected for instrum'tal error and temperature: Inch.	Mill.	Barometer, reduced to sea-level: Inch.	Mill.	Temperature of the air: Fah.	Cent.	Rel. Hum.: Per Ct.	Wind direction: From.	Wind velocity: Miles p. h'r	Mtrs p. sec	Wind force: 0—10	Clouds amount and kind, Up'er: 0—10	Lo'er: 0—10	Clouds direction, Upper: From.	Lower: From.	Rain-fall or melted snow in the past 24 hours: Inch.	Mill.	WEATHER.	OBSERVERS.
San José	26.26	667.0	29.98	761.5	61.2	16.2	94	NE			2	2d		NE		0	0	Clear	Federico Maison.

DANISH SERIES.

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

STATIONS.	Bar. corr. Inch.	Mill.	Bar. red. Inch.	Mill.	Fah.	Cent.	Rel. Hum.	Wind From.	Miles p. h'r	Mtrs p. sec	Force	Up'er	Lo'er	Upper From.	Lower From.	Rain Inch.	Mill.	WEATHER.	OBSERVERS.
Copenhagen	29.92	760.0	29.97	761.2	14.0	—10.0	90	E	13	6			0						
Fanöe	29.93	760.2	29.95	760.7	15.1	— 9.4	94	ENE			4		1						
Godthaab, Greenland	30.31	769.8	30.35	770.9	31.6	— 0.2	83	SSW			4		5						
Stykkisholm, Iceland	30.51	774.9	30.55	776.0	11.5	—11.4	93	E			4		0						
Thorshavn,	30.12	765.1	30.16	766.0	33.1	0.6	83	NE	22	10			7					Snow & hail	
Vestervig	29.89	759.3	29.99	761.7	13.6	—10.2	100	ENE			4		3						

FRENCH SERIES.

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

STATIONS.	Bar. corr. Inch.	Mill.	Bar. red. Inch.	Mill.	Fah.	Cent.	Rel. Hum.	Wind From.	Miles p. h'r	Mtrs p. sec	Force	Up'er	Lo'er	Upper From.	Lower From.	Rain Inch.	Mill.	WEATHER.	OBSERVERS.
Agen, Normal School	28.84	732.5	29.45	748.1	50.0	10	81	SSE			1		10n	NE	NE	0.110	2.8	Covered	M. Labroue, Director.
Alençon	28.57	725.7	29.12	739.7	39.9	4.4	93	S			1		5	N	N	0.425	10.8	Raining	M. Nicot, Director.
Arras, Engineer School	28.89	733.9	29.15	740.5	27.5	—2.5	92	ESE	16.1	7.2			10					Snowing	M. Klein, Commandant.
Avignon, Normal School	29.48	748.8	29.56	750.8	40.6	4.8	97	SE			1		10					Raining	M. Giraud, Director.
Bar-sur-Seine ‖	28.76	730.6	29.32	744.7	43.0	6.1	77	S			1		8k		W	0.524	13.3	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	28.86	733.1	29.13	739.8	39.7	4.3	91	S			2		8		SW	1.18	30.	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	28.54	724.8	29.43	747.6	42.1	5.6	77	SSW			1		10n		SSW	0	0	Covered	M. Gobin, Director.
Bordeaux, Observatory	29.14	740.2	29.40	746.7	53.6	12.0	49	WNW			2		2		WSW	0.126	3.2	Slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	28.71	729.2	29.26	743.2	46.0	7.8	80	SW			1		2k		SW	0.63	16.	Raining	M. Postel, Director.
Brest, Naval Observatory	28.84	732.5	29.08	738.7	43.5	6.4	75	W			2		4		WNW	0.030	0.75		M. de Rermaree, Dir.
Caen, Normal School	28.82	731.9	28.90	734.0	40.3	4.6	97	SW			1		1		SW	0.406	10.3	Clear	M. Biétrix, Director.
Châlons-sur-Marne, N. Sch'l	28.97	735.7	29.29	744.0	41.0	5.0	90	SSW			1		8		SSE	0.071	1.8	Very cloudy	M. Jadot, Director.
Charleville, Normal School.	28.78	731.0	29.32	744.6	26.6	—3	78	SE			6		10		SE	0.138	3.5	Snow-storm	M. Baumier, Director.
Clermont-Ferrand Obs'y	28.00	711.2	29.34	745.2	50.0	10.0	51	SW			3		2		SW	0.154	3.9		M. Alluard, Director.
Cluny, Normal School	28.56	725.4	29.41	747.1	50.4	10.2	64	SSW			3		5	WSW	SSW	0	0	Cloudy	M. de Villemontée, Dir.
Commercy, Normal School	28.89	733.8	29.39	746.5	29.8	—1.2	92	E			4		n		E	0	0		Dr. Coulet, Director.
Gap, Normal School	27.08	687.9	29.72	754.9	30.2	—1	80	SE			1		10		S			Snowing	M. Jeangirard, Director.
Gréasque, du. Rhone	28.47	723.2	29.61	752.2	37.8	3.2	97	NE			1		10		SE	0.138	3.5		M. Kina, Director.
Grenoble, Normal School	28.77	730.9	29.95	760.8	37.8	3.2		NE			1		kn			0.220	5.60		M. Ablard, Director.
Guéret, Normal School	27.79	705.8	29.37	746.0	44.6	7	67	SW			4		5ks			0	0	Cloudy	M. Rivoir, Director.
Lamballe, Normal School	28.68	728.5	28.96	735.6	41.0	5	74	SSW			1		5		SSW	0.724	18.4	Cloudy	M. Ollitrault, Director.
Lescar, Normal School	28.89	733.9	29.56	750.8	54.0	12.2	61	E			1		2		W	0	0	Slightly cld'y	M. Chauvin, Director.
Lorient, Naval Observatory	29.00	736.6	29.10	739.2	46.0	7.8	66	WSW			6		8		W	0.669	17.0	¾ covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.43	722.2	29.45	748.0	48.2	9.0	58	SSW			3		n	W	SSW	0	0		M. André, Director.
Mans, Normal School	28.82	731.9	29.13	739.9	44.2	6.8	97	W			6		2		W	0.701	17.8	Slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.25	743.0	29.52	749.9	48.4	9.1	79	SE			1		10		SSE	0.004	0.10		M. Stephan, Director.
Montlouis l'Instituteur	24.35	618.5	29.59	751.5	36.0	2.2	68	SW	16.8	7.5			5	W		0.016	0.4		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.41	746.9	29.52	749.8	45.3	7.4	97	NNE			2		8		SSW	1.89	48.	Raining	M. Galzin, Director.
Nancy, Normal School	28.62	726.9	29.41	747.0	29.5	—1.4	92	NE			1		10			0.906	23.0	Snowing	M. Hasse.
Nantes, Observatory	29.08	738.5	29.24	742.6	46.8	8.2	89	W			2		8n		WSW	0.740	18.8		M. Larocque, Dir.
Nice	29.60	751.9	29.63	752.7	42.8	6.0	85	N			2		10	N	N	0.157	4.0	Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.43	747.6	29.54	750.3	51.8	11.0	85	SW	7.4	3.3			5	SW	SW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.01	559.0			26.6	—3.0							5		SW	0	0	Cloudy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.46	722.9	29.54	750.4	41.9	5.5	84	Calm			0		10			0	0	Covered	M. Tallien.
Puy de Dôme Obs'y, Summit	24.38	619.2			28.9	—1.7	98	WSW			8		5			0.142	3.6	Stormy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.27	743.4	29.30	744.2	50.0	10.0	97	WSW			3		5	W		0.75	19.	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.00	736.5	29.21	741.9	49.6	9.8	60	SSW			4		5		SSW	0.843	21.4	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.44	696.9	29.59	751.6	42.8	6.0	81	NE			1		10			0	0	Covered	M. Richard, Director.
Rouen, Normal School	28.98	736.0	29.05	738.2	42.4	5.8	21	SW			1		2		S	0	0	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	28.78	731.1	28.94	735.1	41.7	5.4	66	WSW			2		8		WSW	0.098	2.5	Very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.01	736.8	29.17	741.0	44.6	7.0	70	SSW			3		10	SW	SW				M. Renou, Director.
Toulouse, Observatory	28.82	732.1	29.53	750.1	48.7	9.3	95	SSE			1		10			0.346	8.8	Covered	M. Bailland, Director.
Tours	29.02	737.2	29.22	742.2	48.2	9.0	71	SW			3		8		WSW	0.756	19.2	¾ covered	M. de Tastes.
Versailles, Observatory	28.66	728.0	29.15	740.5	41.7	5.4	78	SW			4		8			0.285	7.24	Almost cov'd	Dr. A. Bérigny, Director.
SUB-SERIES.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

STATIONS.	Bar. corr. Inch.	Mill.	Bar. red. Inch.	Mill.	Fah.	Cent.	Rel. Hum.	Wind From.	Miles p. h'r	Mtrs p. sec	Force	Up'er	Lo'er	Upper From.	Lower From.	Rain Inch.	Mill.	WEATHER.	OBSERVERS.
Bamberg	28.77	730.7	29.62	752.3	24.1	— 4.4	62	SE			7		6cs			0	0		Prof. Dr. Hoh.
Berlin	29.71	754.7	29.90	759.4	19.0	— 7.2	79	NE			1		2			0	0		Prof. Dr. Arndt.
Breslau	29.37	746.1	29.90	759.5	16.7	— 8.5	82	NNE			1		10			0	0		Royal University Obs'y.
Carlsruhe	29.11	739.5	29.56	750.8	25.2	— 3.8	82	E			2		10	SW		0.142	3.6	Snowing	Albert Senz.
Cassel	29.10	739.0	29.69	754.2	21.2	— 6.0	74	E			4		10	SW		0.006	0.14	Snowing	Dr. H. Möhl.
Frankfort on the Main	29.33	744.9	29.71	754.7	25.0	— 3.9	38	E			3		10					Snowing	Physical Society.
Friedrichshafen	28.11	714.0	29.61	752.1	24.4	— 4.2	75	N			3		10	N		0.083	2.1	Heavy snow.	Chief Telegrapher Wilhelm.
Hamburg	29.81	757.1	29.88	758.9	18.3	— 7.6	64	ESE			3		10			0	0		Dr. R. Kleeman.
Kiel	29.90	759.4	29.91	759.8	20.3	— 6.5	71	NE			2		9			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.40	746.7	29.85	758.2	16.0	— 8.9	91	E			2		8			0	0		Prof. Dr. Bruhns.
Magdeburg	29.63	752.5	29.87	758.6	15.4	— 9.2	88	NE			2		10ks			0.004	0.1		Dr. Assmams.
Memel	29.82	757.5	29.87	758.7	3.2	—16.0	100	SE			2		1s						Reinbrecht & Issermann.
Munich	27.69	703.4	29.52	749.9	18.9	— 7.3	91	E			3		10			0.079	2.0	Snowing	Central Station.
Neufahrwasser	29.87	758.6	29.88	759.0	16.5	— 8.6	88	S			2		10			0.122	3.1	Snowing	A Lothes.
Neustadt, Palatinate	28.95	735.3	29.47	748.4	24.8	— 4		N			2		10	N		0.276	7.		Dicknether.
Stuttgart	28.57	725.7	29.51	749.5	23.9	— 4.5	88	E			1		10			0.150	3.8		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.06	712.8	29.58	751.2	21.7	— 5.7	90	E			2		10			0.043	1.1		Prof. Kemlein.
Wustrow	29.91	759.6	29.93	760.2	20.7	— 6.3	89	NE			2		5k			0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.72	754.9	30.12	765.0	51.4	10.8		NE			1.0		10					Covered	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.01	762.2	30.06	763.5	78.7	25.9	39	SW	5.0	2.2			0			0	0	Blue sky	
Deesa	29.52	749.9	30.00	762.0	81.8	27.7	31	NNW	9.2	4.1			0			0	0	Blue sky	
Bombay	29.91	759.7	29.95	760.7	81.7	27.6	60	NW	15.0	6.7			0			0	0	Blue sky	
Poona, Yarrowda	28.09	713.5	29.94	760.6	81.0	27.2	25	E	8.0	3.6			0			0	0	Blue sky	
Belgaum	27.38	695.5	29.92	760.0	76.5	24.7	42	E	4.0	1.8			4	SW	SE	0	0	D. clouds	
Lahore	29.33	744.9	30.10	764.5	65.6	18.7	32	W	1.6	0.7			0			0	0	Blue sky	
Roorkee	29.11	739.3	30.04	763.0	65.8	18.8	36	NW	2.1	0.9			0			0	0		
Agra	29.48	748.7	30.06	763.5	68.8	20.4	49	W	2.5	1.1			0			0	0		
Nagpur	28.97	735.7	30.02	762.4	78.7	25.9	32	NE	2.3	1.0			0			0	0	Blue sky	
Jubbulpore	28.66	728.0	30.06	763.5	70.6	21.4	36	N	2.9	1.3			0			0	0	Blue sky	
Lucknow	29.72	754.8	30.11	764.7	69.3	20.7	29	NW	1.1	0.5			0			0	0	Blue sky	
Allahabad	29.73	755.0	30.05	763.2	67.6	19.8	54	Calm	1.2	0.5			0			0	0	Blue sky	
Patna	29.88	759.0	30.07	763.8	62.9	17.2	52	W	0.6	9.3			0			0	0	Blue sky	
Hazaribagh	27.98	710.7	30.07	763.7	62.6	17.0	39	NNW	6.1	2.7			0			0	0	Blue sky	
Cuttack	29.94	760.6	30.03	762.7	73.7	23.2	53	Calm	0.5	0.2			0			0	0	Blue sky	
Calcutta, Alipore	30.00	761.9	30.02	762.5	66.5	19.2	52	NNW	3.0	1.3			0			0	0	Blue sky	
Goalpara	29.60	751.7	30.01	762.3	67.0	19.4	68	WNW	1.0	0.4			0			0	0	Blue sky	
Chittagong	29.90	759.5	30.00	761.9	68.8	20.4	74	WNW	2.4	1.1			0			0	0	Blue sky	
Sibsagar	29.71	754.7	30.07	763.7	61.9	16.6	77	Calm	1.3	0.6			0			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.41	746.9	29.83	757.7	31.5	— 0.3	94	N	0.7	0.3			10			0	0		Prof. Giovanni Clodig.
Milan	29.34	745.1	29.88	758.9	28.0	— 2.2	96	N	5.6	2.5			10			0	0		Prof. Schiaparelli.
Padua	29.73	755.1	29.84	757.9	30.4	— 0.9	96	NNE	7.4	3.3			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.94	735.0	29.89	759.2	30.2	— 1.0	88	NNW	3.1	1.4			10			0.354	9.0		Prof. P. F. Denza.
Genoa	29.56	750.7	29.75	755.7	28.0	— 2.2	84	NW	18.6	8.3			10	SE		0	0		Prof. G. M. Garibaldi.
Mondovi	27.87	708.0	29.87	758.8	24.6	— 4.1	91	W			4		9			0	0		Prof. D. C. Bruno.
Pesaro	29.76	756.0	29.82	757.3	29.1	— 1.6	88	W	21.7	9.7			10			0	0		Prof. Luigi Guidi.
Florence	29.44	747.7	29.70	754.4	36.0	2.2	89	NE			2		10			0.126	3.2		Cav. F. Meucci.
Leghorn	29.54	750.3	29.63	752.5	35.8	2.1	93	E	11.2	5.0			10			0.315	8.0		Prof. P. Monte.
Rome	29.56	750.8	29.74	755.3	55.0	12.8	84	S	14.3	6.4			10			0	0		Prof. P. S. Ferrari.
Lecce	29.70	754.4	29.96	760.9	51.6	10.9	89	WSW	28.0	12.5			10	SW		0	0		Prof. C. de Giorgi.
Cosenza	29.04	737.6	29.93	760.3	58.3	14.6	70	SW	1.3	0.6			9	SSW		0.299	7.6		Prof. D. Conti.
Cagliari	29.57	751.1	29.76	756.0	62.2	16.8	82	SE			4		5	W		0.024	0.6		Prof. A. Pacinotti.
Palermo	29.77	756.1	30.02	762.4	70.7	21.5	48	SW	24.8	11.1			9			0.193	4.9		Prof. G. Ciaccatore.
Syracuse	29.98	761.4	30.02	762.5	58.6	14.8	84	E	4.9	2.2			8	SW		0.177	4.5		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.30	744.1	29.82	757.5	54.3	12.4	95	WSW	4.9	2.2			10k	W		0.268	6.8		Prof. F. Brioschi.
Stelvio	21.85	555.8			12.9	—10.6	80	SW					10			1.969‖	50.0‖		P. F. Denza.
Valdobbia	21.67	550.5			14.0	—10.0	84	E					10			7.874‖	200.0‖		
‖ Unmelted snow.																			
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y†	29.84	757.9	29.86	758.4	34.7	1.5	94	NNE	3.2	1.4			10ck;s			0.440	11.18	Overcast	K. Sasaki.
Kioto	29.70	754.4	29.89	759.2	34.5	1.4	97						10n			0.588	14.93	Snowing	
Nagasaki, I. M. Obs'y	29.65	753.1	29.86	758.4	45.0	7.2	92	WSW	5.7	2.5		ck	8s			0.415	10.54	Fair	S. Takehayashi.
Tokei Obs'y, Yeddo	29.94	760.5	30.01	762.2	41.1	5.1	66	NE	2.5	1.1			10s			1.195	30.35	Light rain	The Staff.
Wakayama	29 75	755.6	29.80	756.9	38.3	3.5	89	N	2.1	0.9			10n			0.706	17.93	Raining	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.64	752.8	29.83	757.7	80.0	26.7	65	ENE	23.5	10.5		4	6	SSE	E	0.22	5.6	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.77	756.2	30.04	762.9	63.4	17.4	80	N			1	0	6n			0	0	½ cloudy	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.37	746.0	29.37	746.0	23.0	— 5.0		E			7					0	0		
Groningen					15.6	— 9.1		E			3					0	0		
Helder	29.69	754.0	29.69	754.0	23.0	— 5.0		E			6					0	0		
Hellevoetsluis	29.48	748.8	29.48	748.8	24.1	— 4.4	95	E			6					0	0		
Utrecht	29.55	750.5	29.60	751.7	23.5	— 4.7	86	E			5		10			0.091	2.3	Dull	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.91	759.7	29.97	761.3	23.4	— 4.8	53	Calm	0	0			10					Light snow.	
Christiania	29.95	760.8	30.11	764.9	10.2	—12.1	63	ESE	0	0			10			0	0		
Gjæsvær	29.89	759.1	29.91	759.7	17.1	— 8.3		NE			6		10						
Lødingen	29.88	758.9	29.93	760.1	14.0	—10.1	73	N			4		8			0.197	5.0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.81	757.1	29.97	761.2	54.0	12.2	69	NNW	18.6	8.3			2			0.059	1.5		Dr. J. A. Sampaio.
Campo Major	28.64	727.4	29.64	752.8	54.3	12.4	72	WSW	11.2	5.0			9			0.240	6.1		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.89	759.3	29.98	761.5	64.8	18.2	52	W	11.9	5.3			1			0.031	0.8		Capt. D. A. de Cunha.
Lisbon, Observatory	29.30	744.2	29.66	753.3	56.5	13.6	56	WSW	29.3	13.1			6	WSW		0.201	5.1		The Staff.
Ponta Delgada, Azores	29.91	759.7	29.98	761 5	55.8	13.2	60	NW	9.4	4.2			4			0.165	4.2		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.83	732.3	29.97	761.1	24.4	— 4.2	100	SSE	9	4			10						Capt. Lasarew.
Archangel	29.56	750.7	29.58	751.2	—20.6	—29.2	80	Calm	0	0			10						Capt. Sseliwerstow.
Astrakhan	30.17	766.2	30.08	764.1	20.7	— 6.3	61	W	34	15			1k			Blank			Capt. Wisganow.
Barnaul	29.69	754.1	30.22	767.7	21.7	— 5.7	84	Calm	0	0			3					Light clouds	Meteorological Obs'y.
Dorpat	29.44	747.7	29.71	754.6	— 7.8	—22.1	85	WNW	7	3			0						Observatory.
Ekaterinburg	28.41	721.7	29.42	747.3	17.1	— 8.3	94	SE	2	1			10					Foggy	Meteorological Obs'y.
Kasan	28.87	733.4	29.16	740.7	10.2	—12.1	81	WSW	16	7			10						Observatory.
Kertch	30.01	762.3	30.03	762.7	31.1	— 0.5	90	Calm	0	0			10						Lagorio.
Kieff	29.01	736.8	29.69	754.0	17.8	— 7.9	80	W	27	12		0	10cs;ks						Observatory.
Krotkowo, N. 58°47′, E. 48°34′																			Cand. Fatjanow.
Lugan	29.70	754.3	29.92	759.9	18.5	— 7.5	69	SW	22	10			1			Blank			Meteorological Obs'y.
Moscow	28.89	733.8	29.49	749.0	3.2	—16.0	76	S	7.8	3.5			3ks						Meteorological Obs'y.
Nertchinsk	27.95	709.8	30.66	778.8	—25.6	—32.0							8					Light clouds	Meteorological Obs'y.
Nikolaiev	29.94	760.4	30.01	762.2	20.5	— 6.4	93	SSW	9	4			3cs					Light clouds	1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.76	755.9	29.85	758.1	— 7.2	—21.8	77	Calm	0	0			0						Lieut. Iwanow.
Nukuss	29.71	754.7	29.95	760.6	59.4	15.2	54	S	9	4			9kn						Dr. Dobrochotow.
Pekin, China	30.16	766.1	30.30	769.7	17.8	— 7.9	34	NW	20	9			0						Physical Observatory.
St. Petersburg	29.57	751.1	29.59	751.5	—11.9	—24.4	63	WNW	11	5			ck	7s					Central Physical Obs'y.
Tashkend, Laboratory																			Teich, A. M.
Tiflis	28.66	727.9	30.17	766.4	37.9	3.3	44	NW	45	20			3s						Physical Observatory.
Warsaw	29.42	747.2	29.87	758.8	15.3	— 9.3	87	W	11	5			10n					Snowing	Astronomical Obs'y.
Wilna	29.28	743.6	29.74	755.4	0.1	—17.7	79	WNW	4	2			10					Heavy clouds	Berg, Assistant.
Yeniseisk	30.22	767.7	30.55	776.0	— 6.9	—21.6	78	Calm	0	0			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.85	758.2	32.0	0.0	90	E				2	1	S		0.45	11.4	Light haze	Andrew Gibb.
Monach Lt. House, Hebrides			29.88	758.9	34	1.1	90	ESE				4	5	5	ENE				J. Youngclause.
North Unst, Shetland Isl'ds			29.94	760.5				E				7		10		Blank	Blank		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.47	748.4	29.57	751.0	60.8	16.	54	W	4.2	1.9			4			0.180	4.58		Antonio Rave, Director.
Bilbao, Met. Obs'y	29.40	746.7	29.46	748.2	56.1	13.4	47	S	6.8	3.04		3	3	W		0	0	Cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.58	675.2			41.5	5.3	72	SW	12.1	5.42		2	6	NE		0.472	12.0	Cloudy	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.41	696.1	29.64	752.9	47.8	8.8	61	SW	25.0	11.2			10			0.150	3.8	Covered	The Staff.
Murcia, Met. Obs'y. ‡	29.55	750.5	29.70	754.3	70.7	21.5	55	SW	5.1	2.3		4	4	NE		0.016	0.4	Misty	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.43	722.1	29.33	744.9	45.0	7.2	90	SW	13.6	6.1			10			1.453	36.9	Raining	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.14	765.5	30.20	767.2	69.3	20.7	89	E	5.8	2.6		0	0			0	0	Clear	Benito Vines, S. J.
Manilla, Phillippine Islands	29.93	760.2	29.98	761.5	80.6	27.0	75	S	4.8	2.2			4km		E	0	0	Covered	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.72	755.0	29.82	757.5	57.6	14.2	90	SW	17.6	7.9			10		WSW	0.060	1.5	Raining	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I.	30.06	763.4	30.15	765.7	72.7	22.6	98	S	0	0		4cs	3k	S	S	0	0	D. clouds	Enrique Gadea, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.80	756.8	29.84	757.8	—10.5	—23.6	100	N			2		0			0	0		
Umea	29.87	758.7	29.92	760.0	— 0.8	—18.2	100	N			2		0			0	0		
Hernosand	29.93	760.1	29.98	761.4	4.1	—15.5	76	Calm			0		1			0.004	0.1		
Stockholm	29.75	755.6	29.93	760.1	7.5	—13.6	92	NNW			4		6			0.059	1.5		
Wisby	29.76	755.9	29.82	757.4	17.6	— 8.0	83	ENE			6		5			0.067	1.7		
Sub-Series.																			
Upsala	29.85	758.2	29.94	760.4	3.9	—15.6	90	NNW	11.2	5.0			0			0	0		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.14	714.8	29.65	753.0	29.1	— 1.6	96	NNW			2		6			0.248	6.3	Snowing	The Observatory.
Zurich	27.92	709.1	29.66	753.4	24.4	— 4.2	98	E			2		10			0.236	6.0	Foggy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —12.8 mm.; Ther. —3°.1 cent.; Hum. +18 per cent																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.11	764.9	37.0	2.8	60	ESE	4	2.0			0			0	0		The Observatory.
Valona			29.98	761.6	53.2	11.8		NW			2		5			0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.98	761.4	66.2	19.0	81	SW			3		10n		SW	0.07	1.8		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES. By authority of the Secretary of War. Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	30.50	774.7	30.60	777.2	13	—10.6	62	NE	4	1.8		0	0			0	0	Clear	
Alpena, Michigan	29.98	761.5	30.74	780.8	— 3	—19.4	66	SW	3	1.3		0	0			0	0	Clear	
Attou Id., Alaska‡	29.35	745.5			20	— 6.7	69	NW	16	7.2		0	8s			0	0	Cloudy	
Atlanta, Georgia	29.22	742.2	30.40	772.1	48	8.9	92	E	17	7.6			10n		Calm	0.22	5.6	Light rain	
Atlantic City, New Jersey	30.65	778.5	30.66	778.7	30	— 1.1	70	N	8	3.6		0	0			0	0	Clear	
Augusta, Georgia	30.29	769.4	30.50	774.7	50	10.0	93	NE	8	3.6			10n		NE	0.10	2.5	Light rain	
Baltimore, Maryland	30.65	778.5	30.70	779.8	25	— 3.9	62	N	4	1.8		5c	Haze	W	Calm	0	0	Fair	
Barnegat, New Jersey	30.63	778.0	30.65	778.5	20	— 6.7	70	N	14	6.3		0	Haze		Calm	0	0	Clear	
Benton, Montana	27.28	692.9			38	3.3	72	W	27	12.1			10s		Calm	0	0	Cloudy	
Bismarck, Dakota	28.37	720.6	30.22	767.6	18	— 7.8	84	W	8	3.6		5c	0	Calm		0	0	Fair	
Boise City, Idaho	27.51	698.7	30.47	773.9	27	— 2.8	88	NW	2	0.9		0	0			Inap.	Inap.	Clear	
Boston, Massachusetts	30.40	772.1	30.58	776.7	17	— 8.3	67	W	11	4.9		0	0			Inap.	Inap.	Clear	
Brackettville, Texas	29.14	740.1	30.28	769.1	31	— 0.6	79	N	1	0.4			10s		Calm	0	0	Cloudy	
Brownsville, Texas	30.19	766.8	30.24	768.1	42	5.6	91	N	16	7.2			10n		Calm	0.07	1.8	Light rain	
Buffalo, New York	29.96	761.0	30.76	781.3	9	—12.8	57	SW	2	0.9		0	Sm'e		Calm	Inap.	Inap.	Dense smoke	
Burlington, Vermont	30.43	772.9	30.76	781.3	13	—10.6	62	NE	5	2.2		0	0			Inap.	Inap.	Clear	
Cairo, Illinois	30.02	762.5	30.44	773.2	31	— 0.6	100	N	3	1.3			10n		N	0.01	0.3	Light rain	
Campo, California	27.60	701.0	30.17	766.3	43	6.1	51	NE	8	3.6		0	0			0	0	Clear	
Camp Thomas, Arizona	27.47	697.7			28	— 2.2	77	E			1	0	0			0	0	Clear	
Cape Henry, Virginia	30.66	778.7	30.67	779.0	30	— 1.1	78	N	8	3.6		0	8s		N	0	0	Cloudy	
Cape May, New Jersey	30.65	778.5	30.68	779.3	24	— 4.4	74	N	15	6.7		0	0			0	0	Clear	
Castroville, Texas	29.46	748.3	30.22	767.6	33	0.6	79	NW	10	4.5			10s		NW	0.03	0.8	Cloudy	
Cedar Keys, Florida	30.28	769.1	30.31	769.9	63	17.2	94	NE	8	3.6		1cs	0	Calm		0	0	Clear	
Champaign, Illinois	29.65	753.1	30.54	775.7	19	— 7.2	69	NE	3	1.3			10s		SW	0	0	Cloudy	
Charleston, S. Carolina	30.44	773.2	30.50	774.7	49	9.4	78	N	17	7.6			10s		Calm	Inap.	Inap.	Threatening	
Charlotte, N. Carolina	29.70	754.4	30.56	776.2	38	3.3	72	NE	8	3.6			10s		Calm	0	0	Cloudy	
Chattanooga, Tennessee	29.58	751.3	30.42	772.7	46	7.8	77	NE	9	4.0			10s		Calm	0	0	Cloudy	
Cheyenne, Wyoming	24.19	614.4	30.13	765.3	10	—12.2	58	NW	10	4.5		0	0			0.10	2.5	Clear	
Chicago, Illinois	29.85	758.2	30.61	777.5	22	— 5.6	72	SE	5	2.2		0	0			0	0	Clear	
Chincoteague, Virginia	30.63	778.0	30.65	778.5	25	— 3.9	87	N	11	4.9		1k	0	Calm		0	0	Clear	
Cincinnati, Ohio	29.88	758.9	30.60	777.2	24	— 4.4	80	NE	4	1.8			10s;sme		Calm	0	0	Cloudy	
Cleveland, Ohio	29.90	759.4	30.72	780.3	14	—10.0	91	SE	3	1.3			Fog			0	0	Dense fog	
Coleman City, Texas	28.53	724.6	30.34	770.6	23	— 5.0	86	N	20	8.9			10s		Calm	0.05	1.3	Cloudy	
Columbus, Ohio	29.72	754.9	30.66	778.7	16	— 8.9	83	NE	5	2.2			10s		Calm	0	0	Cloudy	
Concho, Texas	28.42	721.9	30.30	769.6	26	— 3.3	88	NW	10	4.5			10s		Calm	0	0	Cloudy	
Corsicana, Texas	29.87	758.7	30.37	771.4	33	0.6	100	N	8	3.6			10ks		Calm	0.40	10.2	Cloudy	
Davenport, Iowa	29.84	757.9	30.57	776.5	8	—13.3	78	NE	6	2.7			10s		Calm	0	0	Cloudy	
Dayton, Washington T'y	28.45	722.6	30.24	768.1	23	— 5.6	100	Calm	0	0			10s		Calm	0.24	6.1	Cloudy	
Deadwood, Dakota	25.54	648.7			20	— 6.7	70	S	2	0.9		0	0			0	0	Clear	
Decatur, Texas	29.15	740.4	30.42	772.7	27	— 2.8	88	N			6		10s		N	0.60	15.2	Cloudy	
Delaware Breakwater, Del.	30.64	778.2	30.67	779.0	26	— 3.3	75	N	21	9.4		2ck	0	SW		0	0	Clear	
Denison, Texas	29.52	749.8	30.37	771.4	31	— 0.6	89	NW			1		10s		Calm	Inap.	Inap.	Cloudy	
Denver, Colorado	25.00	635.0	30.22	767.6	17	— 8.3	67	SE	3	1.3		0	0			0.01	0.3	Clear	
Des Moines, Iowa	29.61	752.1	30.63	778.0	0	—17.8	70	Calm	0	0		2cs	0	Calm		0	0	Clear	
Detroit, Michigan	29.96	761.0	30.73	780.5	5	—15.0	75	Calm	0	0			Fog		Calm	0	0	Foggy	
Dodge City, Kansas	27.71	703.8	30.22	767.6	18	— 7.8	68	N	14	6.3			10s		Calm	0.03	0.8	Cloudy	
Dubuque, Iowa	29.86	758.4	30.69	779.5	— 6	—21.1	100	Calm	0	0			Fog		Calm	0	0	Dense fog	
Duluth, Minnesota	29.66	753.4	30.42	772.7	7	—13.9	88	SW	4	1.8			10s		SW	0	0	Cloudy	
Eagle Pass, Texas	29.57	751.1	30.36	771.1	34	1.1	61	N	14	6.3		2cs	0	Calm		Inap.	Inap.	Cloudy	
Eagle Rock, Texas	25.72	653.3	30.37	771.4	18	— 7.8	84	N	2	0.9			10s		W	0	0	Cloudy	
Eastport, Maine	30.30	769.6	30.38	771.6	15	— 9.4	65	NW	14	6.3		0	0			0	0	Clear	
Edinburg, Texas					40	4.4	82	N			4		10s		N	0	0	Cloudy	
El Paso, Texas	26.44	671.6			34	1.1	70	NE	2	0.9			10s		E	Inap.	Inap.	Cloudy	
Erie, Pennsylvania	29.92	760.0	30.73	780.5	10	—12.2	79	SW	3	1.3			10s;fg		Calm	Inap.	Inap.	Cloudy	
Escanaba, Michigan	29.88	758.9	30.66	778.7	—14	—25.6	100	Calm	0	0		0	0			0	0	Clear	
Florence, Arizona	28.69	728.7	30.29	769.4	34	1.1	79	NE	1	0.4		0	0			0	0	Clear	
Fort Apache, New Mexico	25.17	639.3	30.62	777.7	20	— 6.7	56	W	1	0.4		2c	0	Calm		0.02	0.5	Fair	
Fort Assinniboine, Montana	27.24	691.9			33	0.6	70	SW	16	7.2			10s		Calm	0	0	Cloudy	
Fort Bennett, Dakota	28.66	728.0			1	—17.2	71	NW	2	0.9		1cs	0	Calm		0	0	Clear	
Fort Buford, Dakota	28.31	719.1	30.38	771.6	4	—15.6	74	Calm	0	0		5cs	0	NW		0	0	Fair	
Fort Custer, Montana	27.05	687.1			6	—14.4	76	S	10	4.5		0	8s		Calm	0	0	Fair	
Fort Davis, Texas	25.35	643.9	30.31	769.9	22	— 5.6	86	NE	13	5.8			10s		Calm	0	0	Threatening	
Fort Elliott, Texas	27.24	691.9	29.69	754.1	17	— 8.3	66	N	20	8.9		0	0			0.02	0.5	Clear	
Fort Gibson, Indian T'y	29.74	755.4	30.32	770.1	34	1.1	79	Calm	0	0			10s		Calm	0.60	15.2	Cloudy	
Fort Grant, Arizona	25.29	642.4	30.09	764.3	31	— 0.6	69	NE	1	0.4		0	0			Inap.	Inap.	Clear	
Fort Griffin, Texas	29.00	736.6	30.38	771.6	24	— 4.4	61	NW	17	7.6			10s		Calm	0.37	9.4	Cloudy	
Fort Keogh, Montana	27.72	704.1			5	—15.0	75	Calm	0	0		5c	0	Calm		0	0	Fair	
Fort Macon, North Carolina	29.56	750.8	30.57	776.5	34	1.1	90	N	19	8.5		8cs	Haze	NW	Calm	0	0	Fair	
Fort Missoula, Montana	26.97	685.0			8	—13.3	100	Calm	0	0		5k	2ks	SW	Calm	0	0	Cloudy	
Fort McKavett, Texas	28.00	711.2	30.08	764.0	23	— 5.0	73	NW	15	6.7			10s		Calm	Inap.	Inap.	Cloudy	
Fort Shaw, Montana	26.44	671.6			30	— 1.1	78	SW	24	10.7		5cs	0	Calm		0	0	Fair	
Fort Sill, Indian Territory	29.12	739.6	30.34	770.6	21	— 6.1	86	N	15	6.7			10s		Calm	0.85	21.6	Cloudy	
Fort Stevenson, Dakota																			
Fort Verde, Arizona					27	— 2.8	76	NW			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.51	724.1	30.19	766.8	27	— 2.8	88	N	14	6.3			10s		N	0.02	0.5	Cloudy	
Galveston, Texas	30.12	765.0	30.16	766.1	46	7.8	92	N	22	9.8			10s		N	1.05	26.7	Cloudy	
Grand Haven, Michigan	29.93	760.2	30.68	779.3	0	—17.8	100	E	3	1.3		0	0			0	0	Clear	
Hatteras, North Carolina	30.52	775.2	30.54	775.7	38	3.3	91	N	24	10.7		5cs	5s	E	Calm	0	0	Cloudy	
Helena, Montana	25.97	659.6			10	—12.2	79	SW	2	0.9		8ck	0	SW		0	0	Fair	
Henrietta, Texas	29.36	745.7	30.39	771.9	24	— 4.4	87	NW	18	8.0			10s		Calm	0.37	9.4	Cloudy	
Indianapolis, Indiana	29.66	753.4	30.51	774.9	21	— 6.1	71	E	6	2.7			10s		Calm	0	0	Cloudy	
Indianola, Texas	30.19	766.8	30.22	767.6	40	4.4	91	N	26	11.6			10n		Calm	0.52	13.2	Light rain	
Jacksboro, Texas	29.19	741.4	30.42	772.7	26	— 3.3		N	8	3.6			10s		Calm	0.17	4.3	Cloudy	
Jacksonville, Florida	30.32	770.1	30.37	771.4	59	15.0	94	NE	6	2.7			10s		NE	0.01	0.3	Cloudy	
Keokuk, Iowa	29.78	756.4	30.51	774.9	15	— 9.4	74	NE	5	2.2			10s		Calm	0	0	Cloudy	
Key West, Florida	30.20	767.1	30.24	768.1	73	22.8	81	E	8	3.6		0	0			0	0	Clear	
Kittyhawk, North Carolina	30.59	777.0	30.62	777.7	35	1.7	80	NE	22	9.8			10s		Calm	0	0	Cloudy	
Knoxville, Tennessee	29.40	746.7	30.45	773.4	43	6.1	83	NE	1	0.4			10s		Calm	0	0	Cloudy	
La Crosse, Wisconsin	29.82	757.4	30.69	779.5	—12	—24.4	75	S	2	0.9		0	0			0	0	Clear	
La Mesilla, New Mexico	26.29	667.8	30.44	773.2	27	— 2.8	96	N	2	0.9		1c	2s	NW	Calm	Inap.	Inap.	Fair	
Laredo, Texas	29.92	760.0	30.28	769.1	36	2.2	61	N	8	3.6			10ks		N	0	0	Cloudy	
Leavenworth, Kansas	29.51	749.5	30.44	773.2	19	— 7.2	85	N	7	3.1			10s			0	0	Cloudy	
Lewiston, Idaho	29.42	747.3	30.09	764.3	38	3.3	80	E	8	3.6			10s		Calm	0.02	0.5	Cloudy	
Little Rock, Arkansas	30.00	762.0	30.34	770.6	30	— 1.1	89	N	4	1.8			10s		Calm	0.30	7.6	Cloudy	
Los Angeles, California	29.88	758.9	30.23	767.8	42	5.6	74	NE	4	1.8		0	0			0	0	Clear	
Louisville, Kentucky	29.87	758.7	30.48	774.2	27	— 2.8	100	NE	7	3.1			Fog		Calm	Inap.	Inap.	Dense fog	
Lynchburg, Virginia	29.95	760.7	30.70	779.8	29	— 1.7	78	NE	1	0.4			10s		Calm	0	0	Cloudy	
Madison, Wisconsin	29.52	749.8	30.05	778.5	1	—17.2	71	SE	3	1.3			Fog		Calm	0	0	Light fog	
Marquette, Michigan	29.72	754.9	30.50	774.7	15	— 9.4	65	S	3	1.3		2c	0	SW		0	0	Clear	
Mason, Texas	28.62	726.9	30.57	776.5	22	— 5.6	74	NW	16	7.2			10ks		NW	Inap.	Inap.	Cloudy	
Memphis, Tennessee	29.97	761.2	30.33	770.4	33	0.6	89	N	6	2.7			10s		Calm	Inap.	Inap.	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0–10	Clouds. Amount and kind. Up'er 0–10	Lo'er 0–10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.82	757.4	30.65	778.5	9	—12.8	100	NW	4	1.8			Fog			0	0	Dense fog...	
Mobile, Alabama	30.17	766.3	30.25	768.3	64	17.8	94	SE	10	4.5			10n		SW	0.21	5.3	Light rain...	
Montgomery, Alabama	30.09	764.3	30.33	770.4	54	12.2	96	E	6	2.7			Fog		Calm	0.05	1.3	Dense fog....	
Morgantown, W. Virginia	29.56	750.8	30.06	778.7	19	— 7.2	69	Calm	0	0		5cs	Sm'e	NW	Calm	0	0	Fair.....	
Moorhead, Minnesota	29.20	741.7	30.27	768.8	5	—15.0	75	S	16	7.2		0	2s		Calm	0	0	Fair.....	
Mt. Washington, N. H.	23.68	601.5	30.04	763.0	— 2	—18.9	51	NW	70	31.3		0	2s		NW	0	0	Clear.....	
Nashville, Tennessee	29.83	757.7	30.40	772.1	38	3.3	91	NE	4	1.8			10n		Calm	0.41	10.4	Heavy rain.	
New Haven, Connecticut	30.50	774.7	30.63	778.0	18	— 7.8	75	N	7	3.1		0	0			0	0	Clear.....	
New London, Connecticut	30.56	776.2	30.62	777.7	20	— 6.7	70	NW	2	0.9		0	0			Inap.	Inap.	Clear.....	
New Orleans, Louisiana	30.12	765.0	30.18	766.6	62	16.7	94	E	7	3.1			Fog			0	0	Dense fog....	
Newport, Rhode Island	30.52	775.2	30.57	776.5	21	— 6.1	70	NW	12	5.4		0	0			0	0	Clear.....	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.55	776.0	30.58	776.7	24	— 4.4	61	NE	23	10.3		0	0			0	0	Clear.....	
New York, New York	30.48	774.2	30.67	779.0	23	— 5.0	86	N	5	2.2		0	Fog		Calm	0	0	Clear.....	
Norfolk, Virginia	30.60	777.2	30.67	779.0	29	— 1.7	78	N	9	4.0		5k	0	NE		0	0	Fair.....	
North Platte, Nebraska	27.38	695.4	30.32	770.1	— 2	—18.9	84	NW	9	4.0		0	0			Inap.	Inap.	Clear.....	
Olympia, Washington T'y	29.95	760.7	29.99	761.7	49	9.4	64	S	13	5.8			10s		SW	1.40	35.4	Cloudy.....	
Omaha, Nebraska	29.32	744.7	30.57	776.5	5.5	—14.7	88	N	3	1.3			10s		Calm	0	0	Cloudy.....	
Oswego, New York	30.36	771.1	30.72	780.3	22	— 5.6	79	N	7	3.1		0	0			0	0	Clear.....	
Pensacola, Florida	30.25	768.3	30.29	769.4	61	16.1	94	E	10	4.5			10s		Calm	0.17	4.3	Cloudy.....	
Philadelphia, Pa	30.63	778.0	30.68	779.3	20	— 6.7	70	N	14	6.3		0	Sm'e		Calm	0	0	Clear.....	
Phœnix, Arizona	29.11	739.4	31.05	788.7	31	— 0.6	69	SE	3	1.3		0	0			0	0	Clear.....	
Pike's Peak, Colorado	17.69	449.3	29.90	759.4	0	—17.8	39	N	12	5.4		0	0			0.02	0.5	Clear.....	
Pilot Point, Texas	29.56	750.8	30.48	774.2	30	— 1.1	57	NW	6	2.7			10s		NW	0.16	4.1	Cloudy.....	
Ploche, Nevada	24.31	617.5	30.08	764.0	22	— 5.6	65	NW	6	2.7		0	0			0	0	Clear.....	
Pittsburg, Pennsylvania	29.80	756.9	30.70	779.8	21	— 6.1	86	NE	3	1.3		0	0			0	0	Clear.....	
Port Huron, Michigan	29.95	760.7	30.72	780.3	0	—17.8	70	Calm	0	0			Fog			0	0	Dense fog...	
Portland, Maine	30.46	773.7	30.52	775.2	18	— 7.8	68	NW	5	2.2		0	0			0	0	Clear.....	
Portland, Oregon	30.07	763.8	30.14	765.5	38.5	3.6	81	E	2	0.9			10ks		SW	0.10	2.5	Cloudy.....	
Portsmouth, N. Carolina					39	3.9	73	NE	25	11.2		10k	0	W		0	0	Cloudy.....	
Prescott, Arizona	24.93	633.2	30.29	769.4	23	— 5.0	60	Calm	0	0		0	0			0	0	Clear.....	
Punta Rassa, Florida	30.20	768.6	30.27	768.8	68	20.0	95	NE	8	3.6		5c	2ks	W	NE	0	0	Fair.....	
Red Bluff, California	30.04	763.0	30.40	772.1	42.0	5.6	87	NW	3	1.3		Haze	0	Calm		0	0	Dense haze.	
Rio Grande City, Texas	30.09	764.3	30.32	770.1	42	5.6	66	NW	14	6.3			10s		Calm	0	0	Cloudy.....	
Rochester, New York	30.05	763.3	30.74	780.8	11	—11.7	60	W	4	1.8		4c	1s	W	Calm	0	0	Fair.....	
Roseburg, Oregon	29.63	752.6	30.21	767.3	43	6.1	87	Calm	0	0		10cs	0	Calm		0.02	0.5	Cloudy.....	
Sacramento, California	30.30	769.6	30.38	771.6	44	6.7	92	E	3	1.3		0	Fog		Calm	0	0	Clear.....	
St. Louis, Missouri	29.82	757.4	30.44	773.2	25	— 3.9	81	E	6	2.7			10n		Calm	Inap.	Inap.	Light rain...	
St. Paul, Minnesota	29.58	751.3	30.53	775.4	0	—17.8	85	SE	5	2.2		5k	0	W		0	0	Fair.....	
Salt Lake City, Utah	26.04	661.4	30.37	771.4	26	— 3.3	40	Calm	0	0		0	0			0	0	Clear.....	
San Antonio, Texas	29.58	751.3	30.33	770.4	35	1.7	70	N	8	3.6			10s		N	0.01	0.3	Cloudy.....	
San Diego, California	30.20	767.1	30.27	768.8	42	5.6	66	N	4	1.8		0	0			0	0	Clear.....	
Sandusky, Ohio	29.95	760.7	30.71	780.0	12	—11.1	80	E	9	4.0			10s		Calm	0	0	Cloudy.....	
Sandy Hook, New Jersey	30.61	777.5	30.65	778.5	22	— 5.6	72	N	15	6.7		0	0			0	0	Clear.....	
San Francisco, California	30.28	769.1	30.34	770.6	48	8.9	81	N	5	2.2		4cs	0	W		0	0	Fair.....	
Santa Fé, New Mexico	23.34	592.8	29.88	758.9	20	— 6.7	70	N	8	3.6		0	Haze		Calm	0	0	Hazy.....	
Savannah, Georgia	30.36	771.1	30.46	773.7	53	11.7	86	E	12	5.4			10ks		E	0.36	9.1	Cloudy.....	
Shreveport, Louisiana	30.04	763.0	30.30	769.6	34	1.1	100	NE	6	2.7			10n		Calm	0.77	19.6	Light rain...	
Silver City, New Mexico	24.35	618.5	30.92	785.4	20	— 6.7	56	Calm	0	0		0	0			0	0	Clear.....	
Smithville, North Carolina	30.52	775.2	30.56	776.2	36	2.2	80	N	10	4.5		2k	1s	SW	Calm	0	0	Fair.....	
Socorro, New Mexico	25.49	647.4	29.55	750.6	26	— 3.3	40	SW	3	1.3			10s		W	0	0	Cloudy.....	
Springfield, Illinois	29.75	755.6	30.49	774.4	22	— 5.6	72	NE	10	4.5		5cs	2s	W	W	0	0	Fair.....	
Springfield, Massachusetts	30.49	774.4	30.04	778.2	19	— 7.2	69	N	5	2.2		0	0			0	0	Clear.....	
Stockton, Texas	27.28	692.9	30.28	769.1	25	— 3.9	87	N	12	5.4			10s		N	0	0	Cloudy.....	
St. Vincent, Minnesota	29.20	741.7	30.06	763.5	9	—12.8	100	S	10	4.5		0	0			0	0	Clear.....	
Thatcher's Island, Mass	30.54	775.7	30.60	777.2	21	— 6.1	57	NW	7	3.1		0	0			0	0	Clear.....	
Toledo, Ohio	29.91	759.7	30.69	779.5	10	—12.2	80	NE	5	2.2			Fog		Calm	0	0	Dense fog...	
Tucson, Arizona	27.70	703.6	30.25	768.3	32	0.0	53	S	3	1.3		0	0			0	0	Clear.....	
Umatilla, Oregon	29.95	760.7	30.48	774.2	23	— 5.0	86	NW	3	1.3			10s		Calm	0.05	1.3	Cloudy.....	
Uvalde, Texas	29.32	744.7	30.18	766.6	34	1.1	43	N	4	1.8		2c	0	Calm		0	0	Fair.....	
Vicksburg, Mississippi	29.98	761.5	30.24	768.1	48	8.9	93	N	4	1.8			Fog			0	0	Dense fog...	
Visalia, California	29.96	761.0	30.35	770.9	38	3.3	91	SE	2	0.9		0	0			0	0	Clear.....	
Washington, D. C.	30.58	776.7	30.70	779.8	20	— 6.7	85	Calm	0	0		5c	Sm'e	NW	Calm	0	0	Fair.....	
Wickenburg, Arizona					34	1.1	70	NW			1	0	0			0	0	Clear.....	
Wilmington, N. Carolina	30.52	775.2	30.58	776.7	36	2.2	70	N	10	4.5		5c	0	Calm		0	0	Fair.....	
Winnemucca, Nevada	25.95	659.1	30.31	769.9	27	— 2.8	76	NE	8	3.6		0	0			0	0	Clear.....	
Wood's Holl, Mass	30.50	774.7	30.54	775.7	21	— 6.1	71	NW	20	8.9		0	0			0	0	Clear.....	
Yankton, Dakota	29.09	738.9	30.53	775.4	11	—11.7	80	NW	6	2.7		10c	0	Calm		0	0	Cloudy.....	
Yuma, Arizona	30.14	765.5	30.29	769.4	52	11.1	41	NW	8	3.6		0	0			0	0	Clear.....	
Sub-Series.																			
Bogota, U. S. Columbia	21.99	558.5			50.5	10.3	76	Calm	0	0		2cs;k	0			0	0	Fair.....	Thomas Herran.
Buff Bay Town, Jamaica ‡	29.94	760.5	30.25	768.3	71	21.7	95	W				2k	5k						Charles Hasselbrink.
Havana, Cuba, W. I.	30.16	766.1	30.22	767.6	72	22.2	81	SE	1.2	0.5		0	0			0	0	Clear.....	
Jakobshavn, Greenland	30.24	768.0	30.30	769.6	35.6	2.		W			4		10			0.008	0.2		Maxwell Hall.
Kingston, Jamaica, W. I.	30.11	764.8	30.12	765.0	69.0	20.6	85	N	1	0.4		0	0			0	0	Fine.....	F. M. Everett.
Navassa, W. I.	30.01	762.2	30.09	764.3	77	25.0	67	NE	17	7.6		0	5s		NE	0	0	Fair.....	Dr. C. J. Hering.
Paramaribo, S. A.	30.00	762.0	30.01	762.2	75	23.9	90	E			1	6ck	5s	Calm		2.150	54.61	½ cloudy....	Francesco J. Cisneros.
Puerto Berrio, U. S. Col'mbia	29.46	748.3	30.02	762.5	77	25.0	89	NW			2		10ks;s		N	0.73	18.5	Cloudy.....	Earl Flint.
Rivas, Nicaragua					73	23		ENE			4	0	1ks		ENE	0	0		Robert Mason.
Santiago de Cuba, W. I.	30.11	764.8	30.14	765.5	74	23.3	70	N	2.4	1.1		0	1s		NE	0	0		G. O. Gellich.
St. Thomas, W. I.																			
Upernavik, Greenland	30.11	764.7	30.17	766.3	23.7	— 4.6		SE			2		0			0.07	1.8		J. Fortescue & W. Wood.
York Factory, B. A.	29.82	757.4	29.88	758.9	—34.0	—36.7		NW	8	3.6		3k	3s	W	NW	0.07	1.8	Cloudy.....	

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandra, N. 35° 51′, E. 14° 31′	29.98	761.5	65.5	18.6	81	ESE			1–2		3							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. S. Hope.
H. M. S Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. J. F. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.09	764.3	65.7	18.7		NW			1–3		1	NW						Blue sky	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 11° 55′, E. 79° 52′	29.89	759.2	79	26.1		NE			5		10	NE				6	NE	Showery	Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.91	759.7	81	27.2	62	NW			1		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, St. John's, Antigua, W.I	30.11	764.8	78	25.6		NE			2		2	NE				1	NNE	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Callao Bay, Peru	29.97	761.2	65	18.3	94	Calm			0		10							Foggy	Comm. E. E. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	30.08	764.0	51.5	10.8	76	SSE			2		10	SSE				1	SE	Drizzling	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 28° 14′, E. 121° 36′	30.13	765.3	50.5	10.3	73	ENE			1		0							Blue sky	Capt. R. H. Napier.
H. M. S. Malabar, Bombay, India	29.94	760.5	81	27.2	87	WNW			1		2	NW				2	NE	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 38° 42′, W. 9° 06′	29.63	752.6	60	15.6	76	WSW			6		5	WSW						D. clouds	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, St. Kittis, Windward Id.	30.07	763.8	76	24.4	82	NNE			2		2	NE						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. Á. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 56′	29.79	756.7	79	26.1	78	ESE			1		0					3	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis, N. 23° 49′, E 36° 25′	30.34	770.6	77	25.0	77	NW			1		0							Blue sky	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	30.03	762.7	69.5	20.8	61	S			1		0							Blue sky	Capt. R. D. Cumming.
H. M. S. Zephys																			Lt. Comm. G. W. Pollar.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	30.03	762.7	79.3	26.3	73	NNE			4		0			0	0	2		Blue sky	S. C. da Silva Costa, Comd't.
Sado, Porta Bannana, L. Guinea	29.94	760.4	82.8	28.2	79	NNW			3		6			0	0	1		D. clouds	G. A. de Brito Capello, Comd t.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, N. 33° 53′, E. 23° 31′	30.09	764.3	66.9	19.4	87	S			2		0							Blue sky	

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

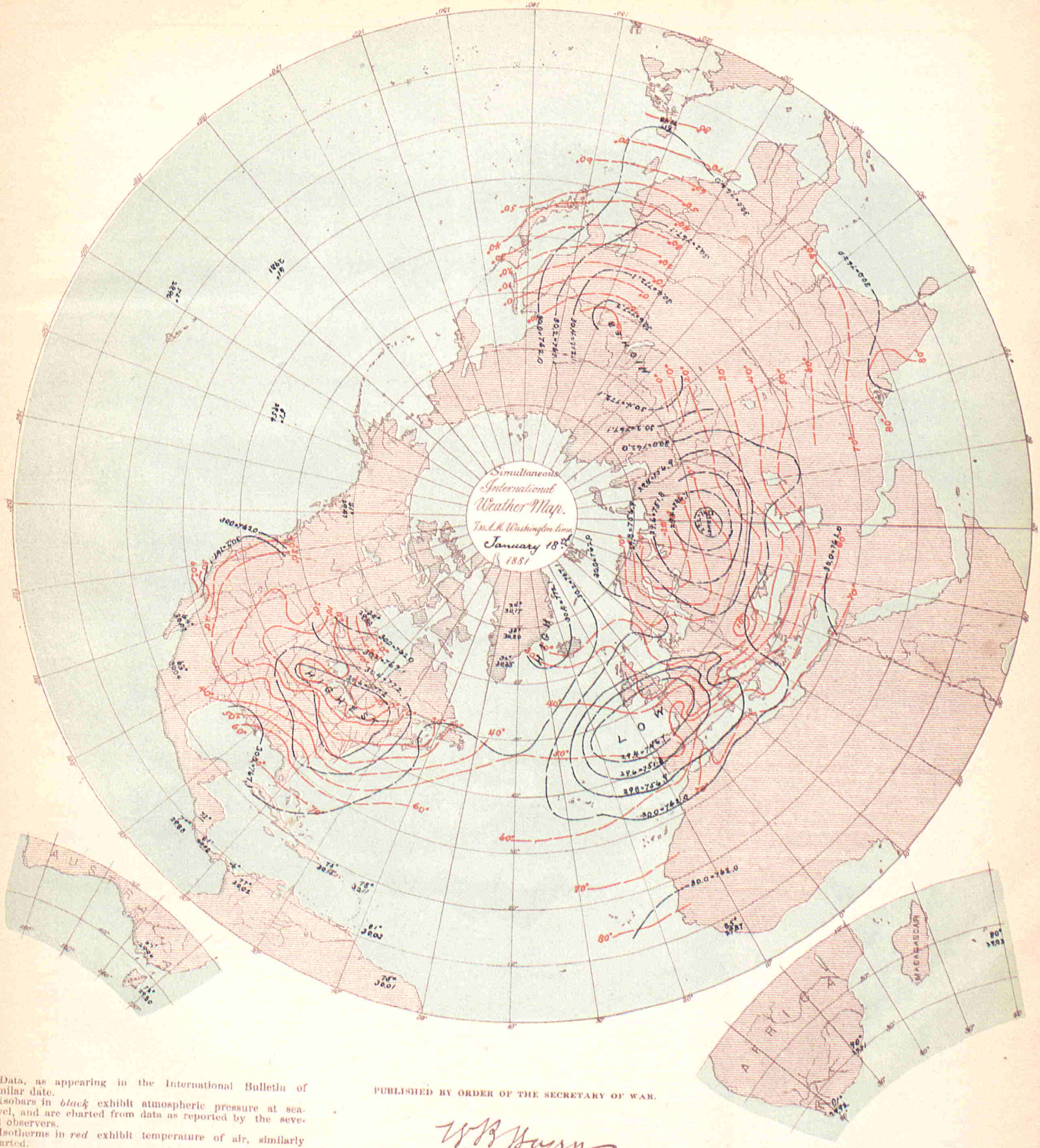
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.29	769.4	62	16.7	88	E	8	3.6			10		E	0.54	13.7			Cloudy	
N. Yard, Portsmouth, N. H.	30.53	775.4	14	—10.0	100	NW	4	1.8			0			0	0			Clear	
Naval Hospital, Yokohama, Japan	29.94	760.5	41.5	5.3	74	Calm			0		10		W	Slight				Light rain	
Adams, Ancon, Peru	30.10	764.5	69	20.6	95	Calm			0		10		W			Sm'h		Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.25	768.3	45	7.2	92	Calm			0		2			0	0			Fair	
Alert, Hong-Kong, China *	30.03	762.7	68	20.0	42	ENE			1		0			0	0	Sm'h		Hazy	
Alliance, Pensacola, Fla	30.25	768.3	61	16.1	100	E			2		10			Light		Sm'h		Foggy	
Ashuelot, Tientsin, China	30.21	767.3	19	— 7.2	85	NNW			6		2							Clear	
Colorado, New York, N. Y	30.65	778.5	22	— 5.6		N	1	0.4			0			0	0			Light mist	
Constitution, N. Yard, League I'd., Pa			20	— 6.7		W	1	0.4			10							Snowing	
Franklin, Off N. Yard, Norfolk, Va	30.58	776.7	31	— 0.6	89	NE	11	4.9			5		NE	0	0			Fair	
Galena, N. 39° 32′, E. 1° 00′	29.67	753.6	61	16.1	77	WSW			4		8		WSW			Sm'h	wsw	Fair	
Independence, N. Yard, Mare I'd, Cal	30.29	769.4	46	7.2	84	ESE	4.8	2.1			5		Calm	0	0			Fair	
Jamestown, Sitka, Alaska *	29.47	748.5	41	5.0	91	SE			2		10			0.30	7.6			Overcast	
Kearsarge, Port Royal, Jamaica, W.I.	30.11	764.8	73	22.8	81	NNW			1		0					Sm'h		Clear	
Lackawanna, Ancon, Peru †	30.07	763.8	68	20.0	90	SE			0–1		8		SE	0	0			Fair	
Marion, Straits of Magellan	29.64	752.8	50	10.0	79	WSW			3		8		WSW	Drizzle		Sm'h		Drizzling	
Michigan, Erie, Pennsylvania	30.67	779.0	13	—10.6		E			1		10		E					Foggy	
Minnesota, New York, N. Y	30.65	778.5	24	— 4.4		NNW			1		3							Misty	
Monocacy, Shanghai, China	30.13	765.3	38	3.3	33	NW			3		0							Hazy	
New Hampshire, Port Royal, S. C	30.46	773.7	52	11.1	93	ENE	24	10.7			10			0.25	6.3			Overcast	
Nipsic, Villafranca, France	29.63	752.6	50	10.0	79	WNW			1		10					Sm'h		Drizzling	
Onward, Chimbote Bay, Peru †	29.91	759.7	72	22.2	80	SSE			4		8		N			Long	N;W	Cloudy	
Palos, Shanghai, China	30.20	767.1	36	2.2	39	WNW			4–6		0							Clear	
Passaic, Washington, D. C	30.71	780.0	22	— 5.6	86	Calm			0		5		Calm					Fair	
Pensacola, Mazatlan, Mexico	30.00	762.0	65	18.3	84	Calm			0		2			0	0			Clear	
Portsmouth, Washington, D. C	30.66	778.7	18	— 7.8	100	NW			1		2		N					Clear	
Powhatan, New York, N. Y	29.63	778.0	21	— 6.1	86	N			2		2							Foggy	
Quinnebaug, N. 32° 05′, E. 21° 06′	30.05	763.5	71	21.7	75	NE			3		2		Calm			Long	W		
Richmond, Amoy, China	30.18	766.6	59	15.0	76	SE			1		0			0	0			Clear	
Saratoga, Baltimore, Md	30.64	778.2	23	— 5.0	100	ESE			2		2		ESE	0	0			Clear	
Shenandoah, Montevideo, Uruguay *	29.79	756.7	69	20.6	80	NW			2		8					Sm'h		Fair	
St. Louis, League Island, Pa	30.59	777.0	17	— 8.3	83	NNW	5	2.2			0			0	0			Clear	
Swatara, Kobe, Japan †	29.72	754.9	39	3.9	82	NE			4		10		Calm			Mod.		Raining	
Tennessee, N. 17° 36′, W. 66° 10′	30.15	765.8	78	25.6	86	NE	16	7.2			2		NE	0.01	0.3	Sm'h		Clear	
Trenton, Villafranca, France *	29.60	751.8	46	7.8	77	NNW			0–1		10			16 h'r's	mod	Sm'h		Rainy	
Vandalia, N. 20° 41′, W. 56° 25′	30.10	764.5	74	23.3	86	W			1		8		N			Long	NE	Fair	
Wabash, Boston, Massachusetts	30.60	777.2	17	— 8.3	67	NW	10	4.5						0	0			Hazy	
Wachusetts, Panama, Panama *	29.59	751.6	76	24.4	91	NW			3		2		N	0	0	Sm'h		Fair	
Wyoming, Naples, Italy	29.79	756.7	58	14.4	88	SSE			4		10		SW			Sm'h		Raining	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡																			
S. 34° 38′, E. 24° 15′	29.81	757.2	72.4	22.4	84	W			6		3							D. clouds	Capt. C. J. Russell.
British Merchant, ‡																			
S. 43° 21′, E. 135° 58′	29.52	749.8	56.5	13.6	92	NNE			5		10							Drizzling	Capt. E. J. Molony.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡																			
N. 29° 45, W. 180° 02′	30.06	763.5	65.5	18.6	76	W			4		7							Showery	Capt. N. Youlden.
S. S. Cipero,																			
N. 32° 20′, W. 39° 10′	30.03	762.7	60	15.6		SE			5		10					5	SE	Raining	Capt. W. N. Lailey.
City of Agra, ‡																			
S. 56° 39′, W. 65° 45′	29.20	741.7	43.7	6.5	76	WSW			6		10							Showery	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Coppename,																			
N. 26° 25′, W. 20° 30′	30.15	765.8	68.3	20.2	77	NNW			3		2							Blue sky	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra, ‡																			
S. 30° 35′, E. 37° 44′	29.84	757.9	82	27.8	63	WNW			3		9							Overcast	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡																			
N. 21° 10′, E. 88° 00′	30.04	763.0	70.9	21.6	56	NNW			2		0							Misty	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. O. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 33° 36′, W. 21° 59′	30.04	763.0	59.5	15.3	80	W			1		3					4	NW	D. clouds	Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡																			
N. 37° 27′, E. 7° 48′	29.74	755.4	65.5	18.6	84	SSW			2		4							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
Moravian																			
S. S. Peruvian																			Capt. W. H. Smith, R.N.R.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia,																			
N. 46° 39′, W. 38° 27′	30.05	763.5	52	11.1	93	NNE			5		8		NE	Showers		Long	ENE	Cloudy	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic,																			
N. 50° 20′, W. 29° 34′ †	30.06	763.5	44	6.7		NNE			6		5		NE			H'vy	NNE	Clearing	Capt. J. W. Jennings.
S. S. Britanic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic,																			
N. 41° 13′, W. 58° 38′ †	30.07	763.8	49	9.4		NNW			5		8?		N	o	o	H'vy	ESE	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. L. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Undütsch.
S. S. Hermann																			Capt. H. Maur.
S. S. Köln,																			
N. 48° 56′, W. 33° 43′	30.10	764.5	45.5	7.5		N			6–7		8		N	Heavy		Cross	NNE	Cloudy	
S. S. Leipzig, ‡																			
N. 37° 43′, W. 74° 40′	30.62	777.7	39.0	3.9	64	NNW			3		10		N			Sm'h	N	Sprinkling	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolph Fredholm, ‡																			
S. 17° 08′, W. 32° 09′ *†	30.18	756.5	79.7	26.5	84	NE			3		4							Blue sky	Capt Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötterbrand

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 38° 58′, W. 74° 09′	30.47	773.9	28	— 2.2	77	NNE			6		2		NNE			Sm'h	NNE	Clear	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 48° 38′, W. 40° 47′ †	30.31	769.9	45	7.2	92	E			2		8		E	0	0	Sm'h	SE	Cloudy	Capt. R. W. Sargent.
S. S. Ohio, ‡ Liverpool, England. †*	29.51	749.5	31	— 0.6	89	ENE			5		10		ENE	0	0			Cloudy	Wm. Shakford, 1st Off'r.
S. S. Pennsylvania, N. 52° 00′, W. 7° 00′ †	29.28	743.7	35	1.7		E			7		5		E	0.50	12.7	Sm'h	E	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 25° 44′, W. 110° 42′ †	30.07	763.8	64	17.8	73	WNW			5		5		NW	0	0	G'tl	NW	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 34° 25′, E. 138° 21′ †	29.84	757.9	56	13.3	69	NE			5		10			Rain		High	NE	Overcast	Capt. H. Davison.
S. S. Gaelic, San Francisco, Cal. *†	30.42	772.7	53	11.7	73	WNW			2		8		W					Fair	Capt. W. H. Kidley.
S. S. Oceanic, N. 44° 17′, W. 152° 56′	29.56	750.8	51	10.6	79	SSW			5		5		SSW	0.08	2.0	Mod.	S	Fine	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia, N. 46° 00′, W. 124° 12′ †	30.38	771.6	48	8.9	92	SSW			6		10		SSE			H'vy	SW	Misty	Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon †	30.08	764.0	38.5	3.6	100	ESE			1		2		SW					Clear	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal. †	30.27	768.8	47	8.3	85	N			1		0							Clear	Capt. J. N. Ingalls.
S. S. Idaho, San Francisco, Cal. †	30.31	769.9	47	8.3	85	N			2		5		W					Fair	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, Santa Barbara, Cal. †	30.30	769.6	49	9.4	57	N			1		0					Sm'h		Clear	Thos. Wallace.
S. S. State of California, San Francisco, Cal. †	30.35	770.9	47	8.3	92	NE			1		10		Calm					Foggy	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal. *†	30.28	769 0	47	8.3	85	NW			2		0							Clear	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, S. 34° 06′, E. 155° — †	30.03	762.7	72	22.2	100	SSW			3		1		SW	0	0	Light	SW	Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, N. 29° 43′, W. 174° 57′ †	29.81	757.2	61	16.1	66	W			6		5		W	0	0	R'gh	W	Fair	Capt. G. G. Berry.
S. S. City of Sidney, N. 15° 18′, W. 160° 13′ †	29.96	761.0	76	24.4	86	NE			3		5		NE	0	0	Mod.	NE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 32° 41′, E 134° 25′ †	29.72	754.9	57	13.9	69	N			8		10		NE	2.	51.	R'gh	ENE	Rainy	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 31° 02′, W. 116° 44′ †	30.17	766.3	60	15.6	65	NNW			4		1		WNW	0	0	Mod.	NW	Clear	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, N. 9° 40′, W. 85° 30′ †	29.88	758.9	79	26.1	74	ENE			3		0			0	0	Sm'll	NE	Clear	
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland, ‡ N. 48° 20′, W. 20° 20′ †	29.26	743.2	48	8.9	70	NE			8		10		N			Cross	NNE,E	Threatening	Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhyniand, ‡ N. 41° 04′, W. 64° 28′	30.25	768,3	39	3.9	90	N			6		8		NNE	0.1	3.	Long	N	Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 49° 32′, W. 13° 03′	29.35	745.5				NE			6		10		NE	Li	ght	R'gh	NE	Cloudy	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby Bentley, New London, Conn. †	30.52	775.2	12	—11.1		Calm			0		0			0	0			Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, Brunswick, Ga	30.34	770.6	58	14.4	87	NE	13	5.8			10s		NE	0.22	5.6			Cloudy	Capt J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, ‡ Arroyo, P. R. †	30.25	768.3	78	25.6		NNE			5		0			0	0	Sm'h		Fine	Capt. W H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va. †	30.59	777.0	30	— 1.1	78	NNE	2	0.9		2ks	2k			0	0			Fine	
Sch'r Hattie V. Kelsey																			Capt. J. L. Randall.
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Spain †	29.62	752.3	64	17.8	100	SW			7		10		W	Hea	vy			Rainy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 19, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instru'm'tal error and temperature. Inch.	Barometer. Corrected for instru'm'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather	Observers.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.12	765.1	66.7	19.3	87	Calm			0		3			0.217	5.5	Pretty fair...	Dr. Ollive.
Nemours			29.91	759.7	66.9	19.4	56	E			2		1			0	0	Very fair....	Raynard.
Algie s			29.87	758.8	65.1	18.4	47	W			4		1			0	0	Very fair....	Nicolas.
La Calle			29.90	759.4	67.6	19.8	58	WNW			4		5			0	0	Cloudy.....	Fonfrède.
Tunis			29.89	759.1															Jacques.
Sfax			30.00	762.1															Gau.
Said.a			29.97	761.1	64.8	18.2	48	W			4		2			0	0	Fair.....	Dumas.
Tebessa			29.96	760.9	63.7	17.6	37	W			3		3			0	0	Pretty fair..	Watrin.
Gerville																			Lonchamp.
Laghouat			30.06	763.5	66.6	19.2	55	S			1		0			0	0	Clear.....	Herbin.
Biskra			30.02	762.6	71.2	21.8	72	NW			5		3			0	0	Pretty fair..	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.81	757.2	29.90	759.4	70.6	21.4	67	ESE	5	2.2			10			0.06	1.5	Dull.....	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.60	751.8	68	20.0		SW			3		7k			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.04	737.5	29.61	752.0	30.2	— 1.0	96	Calm			0		10			0.354	9.0	Rain & snow	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.79	731.3	29.60	751.7	23.0	— 5.0	90	E	5.6	2.5			10			0.004	0.1		Dr. Wiersbicki.
Eperies	28.72	729.5	29.65	753.2	21.7	— 5.7	90	Calm			0		10ns			0.042	1.08		Julius Mikolik.
Gratz‡	28.27	718.0	29.57	751.1	28.9	— 1.7	63	S			2		6			0	0		Andreas Rospini.
Hermannstadt	28.15	715.1	29.63	752.7	30.2	— 1.0	84	NW			1		10			0	0		Prof. A. Gottschling.
Kremsmnnster, Obs'y	28.03	712.0	29.45	748.1	18.3	— 7.6	97	Calm			0		5			0	0		The Staff.
Lemberg	28.60	726.5	29.65	753.1	19.8	— 6.8	73	SE			1		9			0.035	0.9		Dr. T. Stanecki.
Pola	29.49	749.0	29.60	751.9	41.4	5.2	97	E			1		10			0.354	9.0		I. R. HydrographicOffice
Szathmar	29.19	741.4	29.63	752.7	32.0	0.0	96	SE			2		10			0.051	1.3		Beicht Peter, S. J.
Szegedin	29.35	745.6	29.65	753.1	26.6	— 3.0	96	SE			2		10			0.514	13.05		Karl Stancel.
Trieste	29.52	749.8	29.62	752.4	36.1	2.3	93	Calm			0		10			0.283	7.2	Rain & fog...	P. Busin.
Vienna	28.82	732.0	29.58	751.2	21.9	— 5.6	98	SE			2		10			0.134	3.4		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	28.93	734.7	29.13	739.8	35.8	2.1	98	Calm			0		10			0.187	4.0	Foggy.....	Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck	29.01	736.8	29.13	740.0	36.0	2.2	87	SW			2		10			0.157	4.0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 26, 1882.

STATIONS.	Barometer. Corrected for instrn'm'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.60	751.8	29.70	754.4	25.0	— 3.9	94	NNW	10	4.5			7			0.340	8.64	D. clouds	W. Boswell.
Armagh, Observatory	29.46	748.3	29.71	754.6	27.0	— 2.8	76	N	3	1.3			0					Blue sky	S. Call.
Bidston, Liverpool Obs'y			29.52	749.8	28	— 2.2	88	NE	18	8.0			10					Overcast	John Hartnup.
Bolton, Sharples	28.95	735.3	29.50	749.3	26.0	— 3.3	100	E	10	4.5			10					Snowing	Thomas Mackereth.
Bradford, Yorkshire	29.08	738.6	29.48	748.8	27.1	— 2.7	97	SW			1		5			0.02	0.5	D. clouds	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.96	761.0	29.99	761.7	78	25.6	72	NE			1		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			29.26	743.2	27.0	— 2.8	100	NE			5.0		10					Overcast	John McLaren.
Chatham, School M. E.	29.09	738.9	29.23	742.4	29.2	— 1.6	90	NE			2		10					Gloomy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.07	738.4	29.30	744.2	29.5	— 1.4	65	ENE			6		8					Gloomy	The Staff.
Fort Napier, Natal	27.62	701.5	29.83	757.7	70.1	21.2	95	E			2		10					Overcast	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.88	758.9	84	28.9	83	SW			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			29.67	753.6	30	— 1.1	100	N			2		2					Blue sky	J. O'Donaghadue.
Gibraltar, Mediterranean	30.01	762.2	30.07	763.8	61.2	16.2	95	W			3		8					Gloomy	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.48	748.8	29.68	753.9	28.9	— 1.7	72	N			3		7					D. clouds	D. G. MacLean.
Greenwich, Royal Obs'y	29.06	738.1	29.24	742.7	27.6	— 2.4	88	NNE			3		10					Snowing	The Staff.
Guernsey	28.84	732.5	29.07	738.4	37.5	3.1	76	WSW			2		8					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.22	742.2	29.25	742.9	27.8	— 3.3	88	NE	20	8.9			10					Snowing	The Met'g'l Office.
Leicester, Museum	29.10	739.1	29.36	745.7	29.8	— 1.2	91	NE			4		10					Snowing	J. E. Carryer.
Malta, Mediterranean	29.79	756.7	29.87	758.7	69.8	21.0	57	SW			2		2					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			30.18	766.6	71.8	22.1	77	NE			2		6					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.86	733.0	29.41	747.0	24.7	— 4.1	100	NNE			5		10					Snowing	Robert Pate.
Oxford, Radcliffe Obs'y	29.07	738.4	29.33	745.0	26.8	— 2.9	98	ENE			6		10					Snowing	The Staff.
Plymouth	29.16	740.7	29.24	742.7	28.0	— 2.2	94	NNE			6		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.72	754.9	28	— 2.2	100	NE	24	10.7			10					Snowing	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.76	755.9	29.82	757.4	49.6	9.8	66	S			2		9					Gloomy	Serg't W. H. Lyne.
Sheffield	29.20	741.7	29.49	749.0	28.0	— 2.2	97	NE			4		10					Snowing	W. F. Cooper.
Silloth Rectory	29.58	751.3	29.61	752.1	29.3	— 1.5	59	NE			5		0			0	0	Blue sky	Rev. F. Redford, A. M.
Stonyhurst, Observatory			29.52	749.8	27.5	— 2.5	71	E	30	13.4			10			Blank		Overcast	Rev. S. J. Perry.
Strathfield Turgiss	29.03	737.3	29.26	743.2	27.0	— 2.8	98	NE			2		10					Snowing	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution			29.181	741.1?	27	— 2.8	100	NE			7		10					Snowing	W. Newcombe.
Valencia, Observatory	29.71	754.6	29.74	755.4	34.1	1.1	67	NNE	15	6.7			4			Blank		D. clouds	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	30.09	764.3	30.13	765.3	6.6	—14.1		NW	5	2.2		0	3s			0	0	Clear	Hon. J. Ferguson.
Chatham, N. B.*	30.10	764.5	30.16	766.1	— 1	—18.3	97	W	3	1.3		8c	2s	W	W	0	0	Fair	G. A. Blair.
Charlottetown, P. E. Island	30.02	762.5	30.07	763.8	8	—13.3	89	W	14	6.3		0	0			0	0	Clear	H. J. Cundall, C. E.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario	30.00	762.0	30.21	767.3	5.1	—14.9	87	E			1	0	3s			0	0	Clear	James Smith, M. A.
Dalhousie, N. B					7.0	—13.9													H. A. Johnson.
Father Point, Quebec*	30.27	768.8	30.29	769.4	— 8	—22.2	76	S	2	0.9		2cs	5ks	Calm	Calm	0	0	Fair	J. McWilliams.
Fredericton, N. B	30.20	767.1	30.27	768.8	6.7	—14.1	86	NW	8	3.6		0	0			0	0	Clear	Prof. Harrison.
Fort Garry, Manitoba*	28.99	736.3	29.86	758.4	20	— 6.7	97	SW	15	6.7			10n			0	0	Cloudy	James Stewart.
Granton, Ontario	29.10	739.1	30.34	770.6	— 2.8	—19.3	72	Calm			0	0	0			0	0	Clear	James Grant.
Halifax, N. S.*	30.05	763.3	30.19	766.8	14	—10.0	85	NW	5	2.2		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario	29.85	758.2	30.29	769.4	4.3	—15.4	90	SW			1	4c	0	SW		0	0	Fair	Geo. Dickson, B. A.
Kingston, Ontario*	29.83	757.7	30.20	767.1	5	—15.0	83	N	3	1.3		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S.	29.88	758.9	29.92	760.0	15.0	— 9.4	97	N	3	1.3		6k	0	N		0	0	Fair	C. H. Rigby.
Montreal, Quebec*	30.08	764.0	30.31	769.9	2	—16.7	94	SE	6	2.7		Haze	2s			0	0	Hazy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.49	749.0	30.25	768.3	11	—11.7	90	E	3	1.3			10n		E	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.44	747.8	30.27	768.8	— 2.9	—19.4	99	W			1	0	6ks			0	0	Fair	J. F. Jeffers, M. A.
Port Dover, Ontario	29.51	749.5	30.28	769.1	4	—15.6	82	NW	5	2.2		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	29.58	751.3	30.32	770.1	— 3	—19.4	100	NW	6	2.7		0	0			0	0	Clear	M. Payne.
Quebec, Quebec*	30.00	762.0	30.36	771.1	3	—16.1	73	W			1	2s	2s	W	W	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.75	755.6	30.27	768.8	— 3	—19.4	83	Calm	0	0		0	5c		NW	0	0	Fair	W. H. McIntyre.
St. Andrews	30.24	768.1	30.29	769.4	10	—12.2	82	NW	3	1.3		Haze	Haze			0	0	Clear	
St. John's, N. B	30.07	763.8	30.25	768.3	19.0	— 7.2	100	NW	1	0.4		0	0			0	0	Clear	G. Murdock, C. E.
Saugeen, Ontario*	29.48	748.8	30.28	769.1	3	—16.1	79	NE	8	3.6		2cs	0			0	0	Clear	K. Stewart.
Stratford, Ontario	28.86	733.0	30.34	770.6	— 9.5	—23.1	96	Calm	0	0		0	Fog			0	0	Foggy	C. J. Macgregor, M. A.
Sydney, C. B*	29.89	759.2	29.94	760.5	18	— 7.8	81	W	9	4.0		0	8ks		W	0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.84	757.9	30.26	768.6	18	— 7.8	87	NW	4	1.8			Fog			0	0	Foggy	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario	29.10	739.1	30.32	770.1	— 5.1	—20.6	100	NW	3	1.3		0	0			0	0	Foggy	Prof. Wolverton.
Yarmouth, N. S.*	30.22	767.6	30.28	769.1	21	— 6.1	66	NW	5	2.2		10ck	0	W		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.80	756.9	29.97	761.2	29	— 1.7	100	NW	1	0.4		0	0			0.56	14.2	Fair	John Delany.
St. Pierre, N. F.			29.75	755.6	20.1	— 6.6		NW			3					0	0		N. F. Land, Comd't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.90	759.4	29.94	760.5	76.7	24.8	79	S	24.6	11.0		0	2cs			0	0		The Staff, for D. Gill.
Cape St. Francis Lt. House	29.98	761.5			72.0	22.2	76	SE	21.8	9.7			7s			0.153	3.89	Dull	John Duthie.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.23	767.9	30.26	768.6	29.7	— 1.3	40	WNW	2.5	1.1			0			0	0	Clear	M. Marc Dechevrens, S. J.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the MINISTER OF FOREIGN AFFAIRS.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.23	666.2	29.95	760.7	62.2	16.8	84	NE			3	2d		NE		0	0	Clear	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.52	749.7	29.56	750.9	18.9	— 7.3	87	E	29	13			8						
Fanöe	29.47	748.6	29.49	749.1	15.4	— 9.2	81	NE			6		8						
Godthaab, Greenland	30.35	771.0	30.40	772.1	27.1	— 2.7	83	Calm			0		5						
Stykkisholm, Iceland	30.36	771.1	30.40	772.2	14.4	— 9.8	94	E			2		10					Foggy	
Thorshavn	29.96	761.0	30.00	761.9	28.9	— 1.7	78	N	20	9			5					Snowing	
Vestervig	29.52	749.8	29.61	752.2	9.5	—12.5	100	ENE			4		2						
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	28.78	731.0	29.42	747.3	50.7	10.4	39	SW			3	clr		N		0	0		M. Labroue, Director.
Alençon	28.69	728.8	29.24	742.8	36.3	2.4	89	S			1	10				0.24	6.	Foggy	M. Nicot, Director.
Arras, Engineer School	28.85	732.7	29.11	739.3	31.8	—0.1	94	NW	3.1	1.4		0						Clear	M. Klein, Commandant.
Avignon, Normal School	29.40	746.8	29.48	748.8	49.6	9.8	76	NW			1	5		SW		0.39	10.	Cloudy	M. Giraud, Director.
Bar-sur-Seine ‖	28.66	727.9	29.22	742.1	38.7	3.7	83	S			1	8k		SW		0.189	4.8	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	28.87	733.4	29.14	740.2	36.0	2.2	95	S			1	10						Snowing	M. Frère Eugene Marie.
Besançon, Normal School	28.43	722.0	29.32	744.8	41.2	5.1	85	SSW			1	10n		SSW		0	0	Covered	M. Gobin, Director.
Bordeaux, Observatory	29.10	739.2	29.37	745.9	41.9	5.5	91	NW			3	10		WSW		0.039	1.0	Covered	M. Rayet, Director.
Bourges, Normal School	28.63	727.2	29.18	741.2	44.6	7	78	SSW			3	5kn		SSW		0.327	8.3	Raining	M. Postel, Director.
Brest, Naval Observatory	29.02	737.0	29.26	743.2	36.3	2.4	75	NW			1	5		NW		0.010	0.25	Snow squalls	M. de Rermaree, Dir.
Caen, Normal School	28.97	735.7	29.05	737.8	38.1	3.4	83	S			1	5		S		0.134	3.4	Cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	28.87	733.2	29.19	741.4	39.4	4.1	87	S			1	8		W		0	0	Very cloudy	M. Jadot, Director.
Charleville, Normal School	28.64	727.4	29.15	740.3	39.2	4	83	S			1	10				0.20	5.	Covered	M. Baumler, Director.
Clermont-Ferrand Obs'y	27.85	707.5	29.20	741.6	46.8	8.2	55	SW			6	5				0.024	0.6	Showery	M. Alluard, Director.
Cluny, Normal School	28.47	723.0	29.31	744.5	46.8	8.2	70	SSW			3	5		SSW	SSW	0.043	1.1	Cloudy	M. de Villemontée, Dir.
Commercy, Normal School	28.36	720.3	29.22	742.2	39.0	3.9	93	SW			8	10n		SW		0.728	18.5	Raining	Dr. Coulet, Director.
Gap, Normal School	26.96	684.7	29.60	751.7	24.1	—4.4	91	NE			2	n		SW		0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.42	721.8	29.56	750.8	52.2	11.2	61	SW			6	5		SW		0.098	2.5		M. Kina, Director.
Grenoble, Normal School	28.67	728.3	29.45	748.0	42.1	5.6	91	S			3	10n						Raining	M. Ablard, Director.
Guéret, Normal School	27.68	703.1	29.26	743.3	40 6	4.8	90	SW			4	10		NW	SW	0.638	16.2	Raining	M. Rivoir, Director.
Lamballe, Normal School	28.84	732.6	29.13	739.9	34.5	1.4	92	NNW			1	10			NNW			Snow-flakes	M. Ollitrault, Director.
Lescar, Normal School	28.87	733.4	29.55	750.6	51.1	10.6	63	W			4	2			W	0	0	Slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	29.18	741.1	29.28	743.7	39.2	4.0	67	W			4	10	Calm		W	0.276	7.0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.32	719.4	29.34	745.2	47.5	8.6	50	SW			4	cu	WNW	SW		0	0		M. André, Director.
Mans, Normal School	28.91	734.3	29.22	742.2	38.3	3.5	97	W			4	10				0.28	7.	Covered	M. Piboen, Director.
Marseille, Observatory	29.21	741.9	29.48	748.7	57.4	14.1	51	WSW			2–3	1			W	0.004	0.10		M. Stephan, Director.
Montlouis l'instituteur	24.31	617.4	29.54	750.4	28.0	— 2.2	100	SW	24.2	10.8		10		NW		0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.37	745.9	29.48	748.8	55.0	12.8	64	NNW			1	5			W	0.047	1.2	Cloudy	M. Galzin, Director.
Nancy, Normal School	28.44	722.4	29.21	741.9	40.6	4.8	90	NNW			1	10ck			SW	0	0	Covered	M. Hasse.
Nantes, Observatory	29.14	740.2	29.30	744.3	41.0	5	90	S			1	10			SW	0.378	9.6	Gloomy	M. Larocque, Dir.
Nice	29.46	748.2	29.49	749.1	50.7	10.4	86	W			3	10		SW	SW	0.504	12.8	Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.34	745.3	29.45	748.0	57.2	14.0	48	W	22.4	10.0		2		NW		0.028	0.7		Dr. Fines.
Pic-du-Midi, Plantade	21.83	557.4			15.8	— 9.0						10			NW	0.362	9.2	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.41	721.6	29.48	748.7	46.4	8	80	Calm			0	10				0	0	Covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.31	617.4			26.1	—3.3	98	SW			8	10				0.031	0.8	Stormy, fog'y	M. Alluard, Director.
Rochefort, Naval Obs'y	29.24	742.8	29.28	743.6	42.6	5.9	88	SW			4	10				0.91	23.	Raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.07	738.3	29.28	743.7	42.1	5.6	88	W			1	5			W	4.496	12.6	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.34	694.5	29.50	749.2	43.1	5.6	61	W			2	10			W	0.118	3.0	Raining	M. Richard, Director.
Rouen, Normal School	29.04	737.7	29.13	739.9	41.7	5.4	69	SE			1	10			SW	0.008	0.2	Covered	M. Platrier, Director.
Saint Lô, Normal School	28.98	736.2	29.14	740.2	38.1	3.4	87	S			1	8			SW	0.043	1.1	Snowing	M. Delaplanche, Dir.
Saint Maur, Observatory	28.98	736.0	29.14	740.2	36.0	2.2	97	SW			2	10			SW			Raining	M. Renou, Director.
Toulouse, Observatory	28.77	730.7	29.48	748.7	48.9	9.4	63	NNW			1	2				0	0	Slightly cl'dy	M. Bailland, Director.
Tours	29.00	736.6	29.20	741.6	41.5	5.3	91	SW			2	10			WSW	0.622	15.8	Rainy	M. de Tastes.
Versailles, Observatory	28.63	727.2	29.12	739.7	34.2	1.2	96	SW			1	10				0.546	13.87	Covered	Dr. A. Bérigny, Director.
SUB-SERIES.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.47	723.0	29.31	744.4	32.2	0.1	70	W			3	5k		W		0.063	1.6		Prof. Dr. Hoh.
Berlin	29.18	741.1	29.36	745.7	21.1	— 6.0	82	SE			2	10						Snowing	Prof. Dr. Arndt.
Breslau	28.95	735.2	29.47	748.5	23.0	— 5.0	79	SE			2	4				0.002	0.05		Royal University Obs'y.
Carlsruhe	28.88	733.6	29.31	744.5	35.2	1.8	75	S			0	10		SW		0.091	2.3	Raining	Albert Senz.
Cassel	28.60	726.3	29.19	741.4	32.7	0.4	89	SE			2	10		SW		0.120	3.06	Snowing	Dr. H. Möhl.
Frankfort on the Main	28.99	736.3	29.36	745.8	31.6	— 0.2	83	SE			1	10				0.232	5.9		Physical Society.
Friedrichshafen	27.91	709.0	29.39	746.4	30.9	— 0.6	81	E			1	9		W		0.161	4.1		Chief Telegrapher Wilhelm.
Hamburg	29.27	743.5	29.34	745.3	17.4	— 8.1	91	E			4	10				0.031	0.8		Dr. R. Kleeman.
Kiel	29.39	746.5	29.41	746.9	20.7	— 6.3	76	E			7	10				0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	28.89	733.7	29.32	744.7	28.8	— 1.8	92	SSE			2	10				0.035	0.9		Prof. Dr. Bruhns.
Magdeburg	29.06	738.0	29.29	744.0	22.6	— 5.2	93	E			2	10ks				0.055	1.4		Dr. Assmams.
Memel	29.80	756.8	29.84	758.0	1.6	—16.9	80	NE			3	6cs							Reinbrecht & Issermann.
Munich	27.55	699.8	29.37	746.1	27.9	— 1.3	70	S			1	8				0.189	4.8	Light fog	Central Station.
Neufahrwasser	29.69	754.1	29.71	754.5	10.0	—12.2	63	Calm			0	5				0	0	Hazy	A Lothes.
Neustadt, Palatinate	28.63	727.3	29.13	740.0	34.7	— 1.5		Calm			0	10				0.199	5.04		Dicknether.
Stuttgart	28.34	719.9	29.24	742.7	41.0	5.0	76	S			1	10				0.091	2.3		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	27.83	706.8	29.33	744.9	33.1	0.6	89	SE			4	10		W		0.024	0.6		Prof. Kemlein.
Wustrow	29.41	746.9	29.43	747.5	16.2	— 8.8	100	E			5	10				0	0		Profs. Brandes & Reimer.

‖ Observation taken 25 minutes late.

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

GREEK SERIES.

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

Athens	29.55	750.5	29.94	760.5	61.7	16.5		S			3.0		5					½ clear	Alexander Wourlisch

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	30.02	762.6	30.08	763.9	77.8	25.4	34	WSW	8.0	3.6			0			0	0	Blue sky	
Deesa	29.58	751.2	30.05	763.3	82.3	27.9	31	WNW	11.0	4.9			0			0	0	Blue sky	
Bombay	29.90	759.4	29.94	760.3	82.7	28.2	67	NNW	14.0	6.3			0			0	0	Blue sky	
Poona, Yarrowda	28.08	713.2	29.93	760.2	81.8	27.7	31	E	8.0	3.6			2		ESE	0	0	D. clouds	
Belgaum	27.39	695.7	29.93	760.1	77.6	25.3	43	E	3.0	1.3			4		SE	0	0	D. clouds	
Lahore	29.27	743.4	30.04	762.9	67.7	19.8	34	Calm	1.2	0.5			0			0	0	Blue sky	
Roorkee	29.09	739.0	30.03	762.7	64.2	17.9	45	NW	2.2	1.0			1			0	0		
Agra	29.48	748.9	30.07	763.7	71.3	21.8	27	N	4.2	1.9			0			0	0		
Nagpur	28.95	735.3	30.00	761.9	80.5	26.9	29	E	2.0	0.9			0			0	0	Blue sky	
Jubbulpore	28.66	727.9	30.06	763.5	70.6	21.4	38	Calm	2.2	1.0			3			0	0	D. clouds	
Lucknow	29.66	753.2	30.05	763.2	67.8	19.9	34	NW	2.3	1.0			0			0	0	Blue sky	
Allahabad	29.71	754.6	30.03	762.8	67.5	19.7	56	Calm	0.9	0.4			0			0	0	Blue sky	
Patna	29.85	758.2	30.04	763.0	62.9	17.2	61	Calm	0.7	0.3			0			0	0	Blue sky	
Hazaribagh	27.98	710.7	30.06	763.4	65.0	18.3	36	NNW	7.2	3.2			0			0	0	Blue sky	
Cuttack	29.98	761.4	30.06	763.6	72.2	22.3	48	Calm	0.8	0.4			0			0	0	Blue sky	
Calcutta, Alipore	30.00	762.1	30.02	762.6	67.3	19.6	48	NNW	1.0	0.4			0			0	0	Blue sky	
Goalpara	29.59	751.5	30.00	762.1	69.1	20.6	55	NW	1.4	0.6			0			0	0	Blue sky	
Chittagong	29.91	759.8	30.00	762.1	68.6	20.3	73	WNW	2.9	1.3			0			0	0	Misty	
Sibsagar	29.70	754.3	30.05	763.3	62.0	16.7	82	NE	0.8	0.4			0			0	0	Blue sky	

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.17	741.0	29.60	751.8	33.3	0.7	90	Calm	0	0			10			0.051	1.3		Prof. Giovanni Clodig.
Milan	29.07	738.3	29.61	752.1	25.9	— 3.4	98	W	0.7	0.3			10			0.228	5.8		Prof. Schiaparelli.
Padua	29.48	748.7	29.59	751.5	31.1	— 0.5	94	NNE	3.1	1.4			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.66	727.9	29.60	751.9	27.0	— 2.8	89	WNW	1.8	0.8			8			0	0		Prof. P. F. Denza.
Genoa	29.33	745.0	29.53	750.0	41.9	5.5	92	N	0.7	0.3			10		SE	0.063	1.6		Prof. G. M. Garibaldi.
Mondovi	27.61	701.4	29.60	751.9	30.0	— 1.1	61	WNW			4		3			0	0		Prof. D. C. Bruno.
Pesaro	29.55	750.6	29.60	751.9	37.8	3.2	81	SW	5.6	2.5			9		SW	0.276	7.0		Prof. Luigi Guidi.
Florence	29.29	744.0	29.56	750.7	51.1	10.6	88	SW			2		5		SW	0.921	23.4		Cav. F. Meucci.
Leghorn	29.49	749.1	29.58	751.3	56.1	13.4	77	SW	4.9	2.2			5			0.150	3.8		Prof. P. Monte.
Rome	29.52	749.8	29.70	754.3	60.1	15.6	65	WSW	28.0	12.5			1			0.043	1.1		Prof. P. S. Ferrari.
Lecce	29.59	751.6	29.85	758.1	61.0	16.1	87	SSW	25.5	11.4			8		SW	0	0		Prof. C. de Giorgi.
Cosenza	28.96	735.5	29.85	758.2	63.7	17.6	72	NW	0.7	0.3			9		NNW	0	0		Prof. D. Conti.
Cagliari	29.60	751.7	29.79	756.6	63.5	17.5	52	W			2		4		W	0	0		Prof. A. Pacinotti.
Palermo	29.63	752.6	29.88	758.9	66.2	19.0	61	WNW	11.9	5.3			5			0	0		Prof. G. Ciacciatore.
Syracuse	29.77	756.2	29.82	757.3	61.0	16.1	87	E	4.9	2.2			4		WSW	0	0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.24	742.6	29.75	755.7	59.0	15.0	85	SW	15.0	6.7			9k		SW	0.020	0.5		Prof. F. Brioschi.
Stelvio	21.81	554.0			19.4	— 7.0	83	W					10			11.811‖	300.0‖		P. F. Denza.
Valdobbia	21.56	547.5			19.6	— 6.9	86	E					10			0	0		

‖ Unmelted snow.

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I. M. Obs'y†	29.78	756.4	29.79	756.6	34.6	1.4	82	WSW	9.8	4.4			1n;ck			0.096	2.44	Clear	K. Sasaki.
Kioto	29.49	749.0	29.67	753.6	35.0	1.7	72						2ck;4s		W	0.065	1.65	Fair	
Nagasaki, I. M. Obs'y	29.73	755.1	29.94	760.5	40.6	4.8	70	W	14.5	6.5			8s			0.405	10.20	Cloudy	S. Takehayashi.
Tokei Obs'y, Yeddo	29.44	747.8	29.51	749.5	31.0	— 0.6	96	NW	2.0	0.9			ck		S	0.200	5.08	Fair	The Staff.
Wakayama	29.68	753.9	29.73	755.1	39.5	4.2	66	S	6.7	3.0			0			0	0	Clear	S. Iwahashi.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.53	752.6	29.81	757.2	78.9	26.1	77	E	32.0	14.8			10		ESE	0.67	17.0	Squally	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.82	757.5	30.09	764.2	63.8	17.7	65	NNW			2	3cs	0	SW		0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barreeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	29.16	740.7	29.16	740.7	24.1	— 4.4		NE			4					0.031	0.8		
Groningen	29.23	742.5	29.29	743.9	16.5	— 8.6		ENE			4					0.157	4.0		
Helder	29.26	743.2	29.26	743.2	20.1	— 6.6		NE			6					0.087	2.2		
Hellevoetsluis	29.17	740.9	29.17	740.9	20.7	— 6.3	95	ENE			5					0	0		
Utrecht	29.15	740.5	29.20	741.9	19.8	— 6.8	89	NE			3		10			0.154	3.9	Snowing	H. van der Brink

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direc-tion. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.59	751.6	29.65	753.2	19.0	— 7.2	90	E	5.6	2.5			5			0.012	0.3		
Christiania	29.63	752.6	29.80	756.8	— 5.6	—20.9	86	ESE	7	3			1			0	0		
Gjæsvær	29.84	758.0	29.87	758.6	16.0	— 8.9		NE			6		8						
Lodingen	29.85	758.3	29.90	759.5	11.7	—11.3	85	N			1		2			0	0		
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.90	759.5	30.06	763.6	52.9	11.6	78	N	3.1	1.4			5			0.079	2.0		Dr. J. A. Sampaio.
Campo Major	28.88	733.5	29.83	759.0	53.2	11.8	62	WSW	13.6	6.1			9	W		0.315	8.0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.07	763.7	30.16	766.0	63.5	17.5	54	SW	8.0	3.6			1			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.58	751.3	29.94	760.5	54.1	12.3	49	WSW	28.0	12.5			4			0.346	8.8		The Staff.
Ponta Delgada, Azores	29.97	761.3	30.04	763.1	54.0	12.2	76	Calm	0	0			10			0.055	1.4		
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.98	736.2	30.17	766.3	4.6	—15.2	100	Calm	0	0			0						Capt. Lasarew.
Archangel	29.01	736.9	29.03	737.4	— 0.8	—18.2	80	NNW	22	10			10					Snow-drift.	Capt. Sselliwerstow.
Astrakhan	30.26	768.6	30.18	766.5	34.7	1.5	64	SSW	11	5			10ks						Capt. Wisganow.
Barnaul	29.44	747.8	29.98	761.4	15.1	— 9.4	79	Calm	0	0			0						Meteorological Obs'y.
Dorpat	29.59	751.6	29.86	758.5	— 6.0	—21.1	86	W	4	2		5ck							Observatory.
Ekaterinburg	28.53	724.7	29.58	751.3	4.1	—15.5	57	SW	18	8			3s					Light clouds	Meteorological Obs'y.
Kasan	29.31	744.5	29.61	752.0	— 0.2	—17.9	74	SW	4	2			2						Observatory.
Kertch	29.95	760.7	29.97	761.2	38.8	3.8	77	SSE	4	2			10						Lagorio.
Kieff	29.20	741.6	29.89	759.3	5.9	—14.5	87	ESE	4	2			10n					Snowing	Observatory.
Krotkowo, N. 58°47', E. 48°34'																			Cand. Fatjanow.
Lugan	29.74	755.5	29.97	761.1	15.1	— 9.4	75	W	2	1			10					Blank	Meteorological Obs'y.
Moscow	29.17	740.8	29.79	756.6	— 7.6	—22.0	70	Calm	0	0			0						Meteorological Obs'y.
Nertchinsk	27.71	703.8	30.43	773.0	—31.2	—35.1	83						0						Meteorological Obs'y.
Nikolaiev	29.80	757.0	29.87	758.8	18.9	— 7.3	87	E	9	4			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.97	761.1	30.05	763.3	—12.6	—24.8	82	Calm	0	0			7s						Lieut. Iwanow.
Nukuss	30.22	767.6	30.47	773.9	31.6	— 0.2	92	NE	7	3			10kn						Dr. Dobrochotow.
Pekin, China	29.98	761.6	30.13	765.2	23.4	— 4.8	39	Calm	0	0			0						Physical Observatory.
St. Petersburg	29.71	754.7	29.73	755.1	— 6.7	—21.5	78	WNW	13	6			10sn					Light clouds	Central Physical Obs'y.
Tashkend, Laboratory																			Teich, A. M.
Tiflis	28.74	730.0	30.20	767.1	43.0	6.1	44	Calm	0	0			3s						Physical Observatory.
Warsaw	29.21	741.9	29.66	753.4	11.5	—11.4	78	ESE	11	5			10ks;n					Snowing	Astronomical Obs'y.
Wilna	29.42	747.2	29.89	759.1	— 0.6	—18.1	81	NE	2	1			7						Berg, Assistant.
Yeniseisk	29.89	759.1	30.21	767.2	2.1	—16.6	81	ESE	4	2			10						M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.72	754.9	29.0	— 1.7	100	NE			2		10k	S		0.02	0.5	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.82	757.4	34	1.1	90	NE			4		10						J. Youngclause.
North Unst, Shetland Isl'ds			29.73	755.1				NE			8		10			Blank			Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.56	750.8	29.67	753.5	54.7	12.6	52	NW	6.5	2.9			3	W		0.075	1.90		Antonio Rave, Director.
Bilbao, Met. Obs'y	29.49	749.1	29.55	750.6	53.8	12.1	47	W	11.0	4.93		4	3	W		0.012	0.3	Cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.65	676.8			35.2	1.8	91	W	14.1	6.30			9			0.295	7.5	Almost cov'd	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.52	698.9	29.80	756.8	41.4	5.2	78	SW	31.8	14.2		0	1			0.193	4.9	Light clouds	The Staff.
Murcia, Met. Obs'y. ‡	29.72	754.8	29.87	758.6	64.4	18.0	56	W	9.2	4.1		0	3			0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.70	729.0	29.61	752.2	40.6	4.8	88	W	7.4	3.3			10			0.732	18.6	Hailing	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.10	764.4	30.16	766.1	68.2	20.1	87	E	1.1	0.5		0	1k			0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.91	759.7	29.96	761.0	80.6	27.0	78	SE	1.1	0.5			1s			0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.98	761.5	30.08	764.0	58.6	14.8	74	W	21.6	9.6		0	6	WSW		0.239	6.1		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.01	762.3	30.10	764.6	75.2	21.0	92	E	11.2	5.00		5cs	3k	E	E	0.059	1.50	D. clouds	Enrique Gades, Chief Engineer.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.68	753.9	29.72	754.9	1.0	—17.2	89	NW			2		10			0	0		
Umea	29.74	755.3	29.79	756.6	— 5.4	—20.8	72	Calm			0		0			0	0		
Hernosand	29.68	753.9	29.81	757.2	3.7	—15.7	85	N			2		0			0.039	1.0		
Stockholm	29.61	752.1	29.79	756.6	—0.4	—18.0	89	W			2		4			0	0		
Wisby	29.66	753.4	29.72	754.9	19.8	— 6.8	94	SE			4		10			0.063	1.6	Snowing	
Sub-Series.																			
Upsala	29.67	753.7	29.76	755.9	— 5.6	—20.9	100	W	0	0			2			0	0		Nils Ekholm
SWISS SERIES.																			
Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	27.95	710.0	29.45	747.9	32.5	0.3	95	NW			1		10			0.134	3.4	Covered	The Observatory.
Zurich	27.76	705.0	29.48	748.7	31.3	— 0.4	94	E			1		10			0.244	6.2	Foggy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —17.6 mm.; Ther. —1°.2 cent.; Hum. +17 per cent																			
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.87	758.7	51.4	10.8	59	SW	20	9.0			10		SW	0	0		The Observatory.
Valona			29.80	756.8	64.8	18.2		S			3		5			0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.15	765.8	67.8	19.9	62	SW			2		3k		SW	0.01	0.3		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.28	769.1	30.37	771.4	13	—10.6	81	E	1	0.4			10s		Calm	0	0	Cloudy	
Alpena, Michigan	29.55	750.6	30.27	768.8	3	—16.1	73	W	2	0.9		0	0			0	0	Clear	
Attou Id., Alaska‡	29.43	747.5			23	— 5.0	86	N	5	2.2			10s		N	0	0	Cloudy	
Atlanta, Georgia	29.07	738.4	30.26	768.6	40	4.4	91	E	6	2.7			10s		Calm	2.00	50.8	Cloudy	
Atlantic City, New Jersey	30.31	769.9	30.33	770.4	26	— 3.3	100	NE	5	2.2			10n		Calm	0.01	0.3	Light snow.	
Augusta, Georgia	30.15	765.8	30.36	771.1	41	5.0	100	NE	3	1.3			10n		NE	0.77	19.6	Light rain	
Baltimore, Maryland	30.29	769.4	30.35	770.9	29	— 1.7	89	E	2	0 9			10s;fg		Calm	0.06	1.5	Cloudy	
Barnegat, New Jersey	30.32	770.1	30.34	770.6	25	— 3.9	100	N	5	2.2			10n		Calm	0.04	1.0	Heavy snow	
Benton, Montana	27.38	695.4			30	— 1.1	78	W	10	4.5			10s		Calm	0.10	2.5	Cloudy	
Bismarck. Dakota	28.07	713.0	29.92	760.0	26	— 3.3	88	Calm	0	0		5cs	0	NW		0	0	Fair	
Boise City, Idaho	27.51	698.7	30.47	773.9	30	— 1.1	78	W	2	0.9			10s		Calm	0	0	Cloudy	
Boston, Massachusetts	30.19	766.8	30.36	771.1	21	— 6.1	57	W	2	0.9		2cs	8s	Calm	W	0	0	Cloudy	
Brackettville, Texas	29.06	738.1	30.19	766.8	29	— 1.7	89	SW	2	0.9		0	0			0	0	Clear.	
Brownsville, Texas	30.20	767.1	30.25	768.3	39	3.9	91	N	6	2.7		10cs	0	Calm		0.03	0.8	Cloudy	
Buffalo, New York	29.48	748.8	30.24	768.1	16	— 8.9	83	SW	4	1.8		5ck	0	W		0	0	Fair	
Burlington, Vermont	30.04	763.0	30.36	771.1	16	— 8.9	83	S	3	1.3			10s		SW	0	0	Cloudy	
Cairo, Illinois	29.88	758.9	30.30	769.6	33	0 6	89	N	4	1.8			Fog		Calm	1.21	30.7	Threatening	
Campo, California	27.64	702.0	30.21	767.3	29	— 1.7	78	E	3	1.3		0	0			0	0	Clear.	
Camp Thomas, Arizona	27.48	698.0			25	— 3.9	75	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.30	769.6	30.32	770.1	32	0.0	89	NW	8	3.6			10n		Calm	0.06	1.5	Light rain	
Cape May, New Jersey	30.26	768.6	30.29	769.4	30	— 1.1	89	NE	3	1.3			10n		Calm	0.01	0.3	Light snow	
Castroville, Texas	29.44	747.8	30.19	766.8	36	2.2	80	NW	5	2.2			10s		Calm	0.03	0.8	Cloudy	
Cedar Keys, Florida	30.25	768.3	30.24	768.1	62	16.7	88	NE	8	3.6		1cs	0	Calm		0	0	Clear	
Champaign, Illinois	29.41	747.0	30.27	768.8	22	— 5.6	72	Calm	0	0			10s		NE	0.02	0.5	Cloudy	
Charleston, S. Carolina	30.24	768.1	30.30	769.6	45	7.2	84	NE	5	2.2			10n		Calm	0.11	2.8	Light rain	
Charlotte, N. Carolina	29.42	747.3	30.28	769.1	35	1.7	100	N	2	0.9			10s;fg		Calm	0.58	14.7	Cloudy	
Chattanooga, Tennessee	29.45	748.0	30.28	769.1	43	6.1	92	S	7	3.1			10n;fg		Calm	0.42	10.7	Light rain	
Cheyenne, Wyoming	24.19	614.4	30.13	765.3	30	— 1.1	57	NW	12	5.4		0	0			0	0	Clear	
Chicago, Illinois	29.53	750.0	30.29	769.4	12	—11.1	90	Calm	0	0			Fog		Calm	0	0	Dense fog	
Chincoteague, Virginia	30.30	769.6	30.33	770.4	31	— 0.6	100	NE	8	3.6			10n		NE	0.11	2.8	Light rain	
Cincinnati, Ohio	29.58	751.3	30.27	768.8	34	1.1	84	NE	3	1.3			10ks		Calm	Inap.	Inap.	Cloudy	
Cleveland, Ohio	29.50	749.3	30.28	769.1	25	— 3.9	87	W	3	1.3			10s		Calm	0	0	Cloudy	
Coleman City, Texas	28.42	721.7	30.20	767.1	30	— 1.1	78	N	12	5.4			10s		Calm	0	0	Cloudy	
Columbus, Ohio	29.36	745.7	30.25	768.3	31	— 0.6	89	NE	2	0.9			10s		Calm	0.10	2.5	Cloudy	
Concho, Texas	28.30	718.8	30.11	764.8	26	— 3.3	88	NW	2	0.9		0	0			0	0	Clear	
Corsicana, Texas	29.78	756.4	30.28	769.1	31	— 0.6	89	N	4	1.8			10s		Calm	0.12	3.0	Cloudy	
Davenport, Iowa	29.62	752.3	30.35	770.9	— 3	—19.4	83	Calm	0	0			10s		Calm	0	0	Cloudy	
Dayton, Washington T'y	28.66	728.0	30.43	772.9	33	0.6		SW	4	1.8		0	0			0.25	6.3	Clear	
Deadwood, Dakota	25.36	644.1			33	0.6	79	S	3	1.3		0	0			0	0	Clear	
Decatur, Texas	29.00	736.6	30.26	768.6	28	— 2.2	88	N	8	3.6			10s		Calm	0	0	Cloudy	
Delaware Breakwater, Del.	30.30	769.6	30.32	770.1	28	— 2.2	88	NW	5	2.2			10s		NW	Inap.	Inap.	Cloudy	
Denison, Texas	29.43	747.5	30.28	769.1	28	— 2.2	88	N	4	1.8			10s		Calm	0	0	Cloudy	
Denver, Colorado	24.88	631.9	30.10	764.5	24	— 4.4	61	S	4	1.8		0	0			0	0	Cloudy	
Des Moines, Iowa	29.36	745.7	30.36	771.1	— 3	—19.4	100	Calm	0	0			Fog			0	0	Clear	
Detroit, Michigan	29.54	750.3	30.28	769.1	10	—12.2	89	Calm	0	0		0	Sm'e		Calm	0	0	Dense fog	
Dodge City, Kansas	27.56	700.0	30.06	763.5	14	—10.0	46	NW	10	4.5		0	0			0	0	Clear	
Dubuque, Iowa	29.55	750.6	30.36	771.1	— 6	—21.1	82	Calm	0	0		5cs	Fog	Calm	Calm	0	0	Cloudy	
Duluth, Minnesota	29.41	747.0	30.15	765.8	17	— 8.3	83	SW	2	0.9			10s		Calm	0	0	Cloudy	
Eagle Pass, Texas	29.52	749.8	30.30	769.6	32	0.0	69	N	2	0.9		0	0			0	0	Clear	
Eagle Rock, Texas	25.42	645.7	30.07	763.8	13	—10.6	81	N	6	2.7			10s		Calm	0	0	Cloudy	
Eastport, Maine	30.21	767.3	30.29	769.4	11	—11.7	60	NW	18	8.0		5cs	0	W		0	0	Fair	
Edinburg, Texas					39	3.9	73	N			4	0	8ks		N	0	0	Fair	
El Paso, Texas	26.39	670.3			31	— 0.6	79	W	1	0.4		0	8s		NW	0	0	Cloudy	
Erie, Pennsylvania	29.47	748.5	30.23	767.8	23	— 5.0	86	S	4	1.8		5cs	Haze	Calm	Calm	0	0	Fair	
Escanaba, Michigan	29.55	750.6	30.29	769.4	3	—16.1	73	S	3	1.3		0	0			0	0	Clear	
Florence, Arizona	28.73	729.7	30.33	770.4	32	0.0	69	N	1	0.4		0	0			0	0	Clear	
Fort Apache, New Mexico	25.18	639.6	30.64	778.2	20	— 6.7	56	SW	2	0.9		0	0			0	0	Clear	
Fort Assinniboine, Montana	27.25	692.1			30	— 1.1	78	SW	11	4.9			10s		Calm	0	0	Cloudy	
Fort Bennett, Dakota	28.38	720.8			21	— 6.1	57	W	2	0.9		8k	0	W		0	0	Fair	
Fort Buford, Dakota	27.95	709.9	29.87	758.7	25	— 3.9	87	Calm	0	0			10s		NW	0	0	Cloudy	
Fort Custer, Montana	26.85	682.0			38	3.3	81	SW	12	5.4			10s		Calm	0	0	Cloudy	
Fort Davis, Texas	25.25	641.3	30.21	767.3	20	— 6.7	85	Calm	0	0		0	0			0	0	Clear	
Fort Elliott, Texas	27.38	695.4	29.84	757.9	18	— 7.8	53	NW	4	1.8		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.70	754.4	30.28	769.1	18	— 7.8	88	N	4	1.8			10s		Calm	0	0	Cloudy	
Fort Grant, Arizona	25.34	643.6	30.14	765.5	31	— 0.6	79	NE	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas	28.90	734.0	30.25	768.3	30	— 1.1	78	NW	8	3.6			10s		Calm	0	0	Cloudy	
Fort Keogh, Montana	27.53	699.2			25	— 3.9	75	Calm	0	0		10cs	0	Calm		0	0	Cloudy	
Fort Macon, North Carolina	30.26	768.6	30.27	768.8	38	3.3	100	N	8	3.6			10n		Calm	0.59	15.0	Light rain	
Fort Missoula, Montana	26.90	683.2			34	1.1	90	NE	2	0.9		5k	0	Calm		0	0	Fair	
Fort McKavett, Texas	27.94	709.7	30.01	762.2	26	— 3.3	63	W	5	2.2		0	0			0	0	Clear	
Fort Shaw, Montana	25.53	673.8			30	— 1.1	78	W	13	5.8		5cs	0	Calm		0	0	Fair	
Fort Sill, Indian Territory	28.97	735.8	30.15	765.8	29	— 1.7	78	N	8	3.6			10s		Calm	0	0	Cloudy	
Fort Stevenson, Dakota																			
Fort Verde, Arizona					24	— 4.4	48	N			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.44	722.4	30.09	764.3	34	1.1	90	N	8	3.6			10s		N	0.02	0.5	Cloudy	
Galveston, Texas	30.12	765.0	30.16	766.1	43	6.1	92	N	10	4.5			10s		N	0.15	3.8	Threatening	
Grand Haven, Michigan	30.57	776.5	30.30	769.6	2	—16.7	100	E	1	0.4			Fog		Calm	0	0	Foggy	
Hatteras, North Carolina	30.25	768.3	30.27	768.8	39	3.9	100	N	18	8.0			10n		Calm	0.13	3.3	Light rain	
Helena, Montana	25.89	657.6			33	0.6	70	SW	20	8.9		8ck	0	SW		0	0	Fair	
Henrietta, Texas	29.33	744.7	30.34	770.6	29	— 1.7	89	N	6	2.7			10s		Calm	0	0	Cloudy	
Indianapolis, Indiana	29.41	747.0	30 23	767.8	31	— 0.6	89	Calm	0	0			Fog		Calm	Inap.	Inap.	Dense fog	
Indianola, Texas	30.21	767.3	30.24	768.1	36	2.2	90	N	19	8.5			10s		N	0.04	1.0	Cloudy	
Jacksboro, Texas	29.04	737.6	30.24	768.1	30	— 1.1		N	8	3.6			10s		Calm	0	0	Cloudy	
Jacksonville, Florida	30.25	768.3	30.30	769.6	54	12.2	93	NE	4	1.8			Fog			0	0	Dense fog	
Keokuk, Iowa	29.61	752.1	30.32	770.1	17	— 8.3	75	Calm	0	0		0	5s;sm'e		Calm	0	0	Fair	
Key West, Florida	30.17	766.3	30.21	767.3	71	21.7	85	NE	7	3.1		1k	0	Calm		0	0	Clear	
Kittyhawk, North Carolina	30.28	769.1	30.30	769.6	35	1.7	90	N	14	6.3			10n		Calm	0.51	13.0	Light rain	
Knoxville, Tennessee	29.22	742.2	30.26	768.6	44	6.7	100	SW	4	1.8			10n		Calm	0.40	10.2	Light rain	
La Crosse, Wisconsin	29.47	748.5	30.31	769.9	— 1	—18.3	68	S	7	3.1		0	0			0	0	Clear	
La Mesilla, New Mexico	26.28	667.5	30.43	772.9	36	— 1.1	68	Calm	0	0		0	8s		N	0	0	Cloudy	
Laredo, Texas	29.83	757.7	30.18	766.6	42	5.6	83	N	1	0.4			10s		Calm	0	0	Cloudy	
Leavenworth, Kansas	29.39	746.5	30.29	769.4	28	— 2.2	88	Calm	0	0			10s		Calm	0.20	5.1	Cloudy	
Lewiston, Idaho	29.64	752.8	30.33	770.4	30	— 1.1	67	E	3	1.3		0	58		Calm	0	0	Fair	
Little Rock, Arkansas	29.95	760.7	30.28	769.1	38	3.3	91	NW	4	1.8			10n		Calm	0.47	11.9	Light rain	
Los Angeles, California	29.88	758.9	30.24	768.1	43	6.1	59	N	4	1.8		1c	0	Calm		0	0	Clear	
Louisville, Kentucky	29.63	752.6	30.22	767.6	36	2.2	90	NE	1	0.4			Fog		Calm	0.53	13.5	Dense fog	
Lynchburg, Virginia	29.57	751.1	30.29	769.4	32	0.0	89	SW	2	0.9			10s		Calm	0.06	1.5	Cloudy	
Madison, Wisconsin	29.90	759.4	30.32	770.1	— 2	—18.9	67	SW	2	0.9		0	0			0	0	Clear	
Marquette, Michigan	29.45	748.0	30.22	767.6	15	— 9.4	60	W	6	2.7		0	0			0	0	Clear	
Mason, Texas	28.57	725.7	30.44	773.2	32	0.0	79	N	10	4.5			10s		N	0	0	Cloudy	
Memphis, Tennessee	29.89	759.2	30.25	768.3	34	1.1	100	NW	6	2.7			10n		Calm	0.57	14.5	Light rain	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.49	749.0	30.30	769.6	9	—12.8	78	NW	7	3.1		0	2s		Calm	0	0	Fair	
Mobile, Alabama	30.06	763.5	30.14	765.5	62	16.7	94	S	11	4.9			10n;fog		Calm	0.15	3.8	Light rain	
Montgomery, Alabama	30.00	762.0	30.24	768.1	52	11.1	93	E	7	3.1			10s		Calm	0.18	4.6	Threatening	
Morgantown, W. Virginia	29.19	741.4	30.21	767.3	39	3.9	82	Calm	0	0			10n		E	0.10	2.5	Light rain	
Moorhead, Minnesota	28.95	735.3	29.96	761.0	20	— 6.7	70	S	16	7.2			10s		Calm	0	0	Cloudy	
Mt. Washington, N. H	23.71	602.2	30.07	763.8	7	—13.9	65	NW	30	13.4			10s		NW	0	0	Cloudy	
Nashville, Tennessee	29.66	753.4	30.21	767.3	43	6.1	92	NW	2	0.9			10n;fog		Calm	0.95	24.1	Light rain	
New Haven, Connecticut	30.22	767.6	30.34	770.6	21	— 6.1	71	NE	8	3.6			10s		Calm	0	0	Cloudy	
New London, Connecticut	30.31	769.9	30.37	771.4	26	— 3.3	75	Calm	0	0			10s		Calm	0	0	Cloudy	
New Orleans, Louisiana	30.04	763.0	30.10	764.5	64	17.8	94	S	5	2.2			10s		S	4.12	104.6	Clearing	
Newport, Rhode Island	30.31	769.9	30.36	771.1	28	— 2.2	88	NW	2	0.9			10n		Calm	0.01	0.3	Light snow	
New River, N. Carolina					36	2.2	100	N			2		10n		Calm			Light rain	
New Shoreham, Rhode I'd	30.32	770.1	30.35	770.9	32	0.0	79	N	2	0.9			10s		NW	0	0	Cloudy	
New York, New York	30.16	766.1	30.35	770.9	28	— 2.2	88	NW	1	0.4			10s;fg		Calm	0	0	Cloudy	
Norfolk, Virginia	30.26	768.6	30.32	770.1	33	0.6	89	N	4	1.8			Fog		Calm	0.13	3.3	Foggy	
North Platte, Nebraska	27.20	690.9	30.00	762.0	10	—12.2	79	NW	8	3.6		0	0			0	0	Clear	
Olympia, Washington T'y	30.39	771.9	30.43	772.9	39.0	3.9	95	S	1	0.4			Fog		Calm	0.47	11.9	Dense fog	
Omaha, Nebraska	29.07	738.4	30.29	769.4	10	—12.2	79	Calm	0	0		0	0			0	0	Clear	
Oswego, New York	29.87	758.7	30.22	767.6	19	— 7.2	85	S	8	3.6		Haze	0	Calm		0	0	Clear	
Pensacola, Florida	30.16	766.1	30.19	766.8	62	16.7	94	E	5	2.2		7k	Fog	W	E	0.41	10.4	Clearing	
Philadelphia, Pa	30.30	769.6	30.36	771.1	27	— 2.8	88	NE	2	0.9			10n		Calm	0.19	4.8	Light snow	
Phœnix, Arizona	29.13	739.9	31.08	789.4	30	— 1.1	78	N	2	0.9		0	0			0	0	Clear	
Pike's Peak, Colorado	17.79	451.9	30.00	762.0	10	—12.2	58	NE	26	11.6		0	0			0	0	Clear	
Pilot Point, Texas	29.44	747.8	30.34	770.6	29	— 1.7	67	N	8	3.6			10s		Calm	0.03	0.8	Cloudy	
Pioche, Nevada	24.20	614.7	29.97	761.2	27	— 2.8	64	Calm	0	0		10c	0	Calm		0	0	Cloudy	
Pittsburg, Pennsylvania	29.38	746.2	30.23	767.8	35	1.7	90	E	2	0.9			10s		E	0.03	0.8	Cloudy	
Port Huron, Michigan	29.56	750.8	30.30	769.6	4	—15.6	100	NE	1	0.4			Fog			0	0	Dense fog	
Portland, Maine	30.28	769.1	30.33	770.4	19	— 7.2	85	W	1	0.4			10s;fg		Calm	0	0	Cloudy	
Portland, Oregon	30.35	770.9	30.43	772.9	39.5	4.2	95	NW	2	0.9			Fog		Calm	0.36	9.1	Dense fog	
Portsmouth, N. Carolina					39	3.9	100	NE	12	5.4			10n		Calm	0.11	2.8	Light rain	
Prescott, Arizona	24.93	633.2	30.29	769.4	22	— 5.6	72	Calm	0	0		0	0			0	0	Clear	
Punta Rassa, Florida	30.20	767.1	30.22	767.6	65	18.3	84	NE	8	3.6		0	8ks		SE	0	0	Fair	
Red Bluff, California	29.94	760.5	30.31	769.6	41.0	5.0	91	NW	4	1.8		4ck	0	W		0	0	Fair	
Rio Grande City, Texas	30.10	764.5	30.33	770.4	41	5.0	74	N	6	2.7			10s		Calm	0	0	Cloudy	
Rochester, New York	29.56	750.8	30.23	767.8	18	— 7.8	68	SW	5	2.2		5c	4s	W	Calm	0	0	Cloudy	
Roseburg, Oregon	29.76	755.9	30.35	770.9	45.5	7.5	96	Calm	0	0			10s		Calm	0.13	3.3	Cloudy	
Sacramento, California	30.25	768.3	30.33	770.4	45	7.2	100	N	2	0.9			Fog			0	0	Dense fog	
St. Louis, Missouri	29.69	754.1	30.31	769.9	27	— 2.8	100	NW	3	1.3			10n;fg		Calm	0.12	3.0	Light rain	
St. Paul, Minnesota	29.26	743.2	30.18	766.6	4	—15.6	74	SE	4	1.8		2cs	0	Calm		0	0	Clear	
Salt Lake City, Utah	25.88	657.3	30.21	767.3	27	— 2.8	53	Calm	0	0		7c	0	Calm		0	0	Fair	
San Antonio, Texas	29.55	750.6	30.29	769.4	38	3.3	72	N	2	0.9			10s		Calm	0.04	1.0	Cloudy	
San Diego, California	30.20	767.1	30.28	769.1	46	7.8	54	NE	4	1.8		2c	0	W		0	0	Clear	
Sandusky, Ohio	29.57	751.1	30.29	769.4	24	— 4.4	74	NW	5	2.2			Fog		Calm	0	0	Dense fog	
Sandy Hook, New Jersey	30.33	770.4	30.36	771.1	27	— 2.8	88	Calm	0	0			10s		Calm	0	0	Cloudy	
San Francisco, California	30.24	768.1	30.30	769.6	49	9.4	85	Calm	0	0		7cs;ck	0	W		0	0	Fair	
Santa Fé, New Mexico	23.32	592.3	29.86	758.4	24	— 4.4	61	N	8	3.6		0	0			0	0	Clear	
Savannah, Georgia	30.23	767.8	30.32	770.1	45	7.2	92	N	5	2.2			10s		Calm	0.03	0.8	Threatening	
Shreveport, Louisiana	29.97	761.2	30.22	767.6	38	3.3	100	N	4	1.8			10n		Calm	0.32	8.1	Light rain	
Silver City, New Mexico	24.37	619.0	30.87	784.1	24	— 4.4	61	Calm	0	0		0	0			0	0	Clear	
Smithville, North Carolina	30.26	768.6	30.29	769.4	40	4.4	91	N	5	2.2			10n		Calm	0.43	10.9	Light rain	
Socorro, New Mexico	25.29	642.4	29.35	745.5	33	0.6	61	SW	3	1.3		0	0			0	0	Clear	
Springfield, Illinois	29.57	751.1	30.29	769.4	26.5	— 3.1	81	N	5	2.2			10s			Inap.	Inap.	Cloudy	
Springfield, Massachusetts	30.23	767.8	30.37	771.4	18	— 7.8	68	N	2	0.9			10s		Calm	0	0	Cloudy	
Stockton, Texas	27.16	689.8	30.16	766.1	23	— 5.0	86	W	8	3.6		0	0			0	0	Clear	
St. Vincent, Minnesota	28.94	735.1	29.77	756.1	22	— 5.6	100	S	12	5.4			10s		Calm	0	0	Cloudy	
Thatcher's Island, Mass	30.27	768.8	30.33	770.4	29	— 1.7	78	W	19	8.5			10s		W	0	0	Cloudy	
Toledo, Ohio	29.54	750.3	30.28	769.1	22	— 5.6	86	N	4	1.8			Fog		Calm	0	0	Dense fog	
Tucson, Arizona	27.75	704.8	30.30	769.6	32	0.0	59	SW	5	2.2		0	0			0	0	Clear	
Umatilla, Oregon	30.10	764.5	30.64	778.2	23	— 5.0	86	NW	4	1.8		0	0			0	0	Clear	
Uvalde, Texas	29.32	744.7	30.16	766.1	42	5.6	43	NW	4	1.8		10c	0	Calm		0	0	Cloudy	
Vicksburg, Mississippi	29.91	759.7	30.18	766.6	40	4.4	91	N	6	2.7			Fog		Calm	0.72	18.3	Dense fog	
Visalia, California	29.90	759.4	30.28	769.1	40	4.4	91	SE	2	0.9		2c	0	Calm		0	0	Fair	
Washington, D. C	30.22	767.6	30.34	770.6	28	— 2.2	88	SE	2	0.9			10s;fg		Calm	0.07	1.8	Cloudy	
Wickenburg, Arizona					30	— 1.1	78	N			1	0	0			0	0	Clear	
Wilmington, N. Carolina	30.28	769.1	30.33	770.4	39	3.9	91	N	5	2.2			10n		Calm	0.50	12.7	Light rain	
Winnemucca, Nevada	25.84	656.3	30.20	767.1	33	0.6	79	NE	4	1.8		10cs	0	Calm		0	0	Cloudy	
Wood's Holl, Mass	30.31	769.9	30.35	770.9	28	— 2.2	77	NW	5	2.2			10s		SW	0	0	Cloudy	
Yankton, Dakota	28.83	732.3	30.27	768.8	5	—15.0	75	SW	2	0.9		2c	0	Calm		0	0	Fair	
Yuma, Arizona	30.12	765.0	30.28	769.1	41	5.0	49	NE	3	1.3		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	21.98	558.3			49.0	9.4	75	Calm	0	0		1c	1s			0	0	Fair	Thomas Herran.
Buff Bay Town, Jam ica.‡	29.89	759.2	30.20	767.1	70	21.1	95	W				5k	8k						
Havana, Cuba, W. I	30.13	765.3	30.18	766.6	73	22 8	70	Calm	0	0		0	2ks		E	0	0	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	30.29	769.4	30.34	770.6	25.9	— 3.4		N			4		0			0.012	0.3		
Kingston, Jamaica, W. I	30.06	763.5	30.07	763.8	72.0	22.2	78	Calm	0	0		0	0			0.70	17.8	Fine	Maxwell Hall.
Navassa, W. I	29.98	761.5	30.06	763.5	76	24.4	75	NE	17	7.6		5k	8s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A	30.00	762.0	30.00	762.0	75	23.9	90	E			2		10n	E		0.060	1.52	Raining	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.94	760.5	78	25.6	89	Calm			0		Fog			0	0	Foggy	Francesco J. Cisneros.
Rivas, Nicaragua					72	22		NE			3		10k s		NE	0	0		Earl Flint.
Santiago de Cuba, W. I	30.05	763.5	30.08	764.0	72	22.2	75	NNE	6	2.7		0	0			0	0		Robert Mason.
St. Thomas, W. I																			G. O. Gellich.
Upernavik, Greenland	30.04	763.1	30.10	764.5	33.1	0 6		SSW			7		0			0.311	7.9		
York Factory, B. A	30.05	763.3	30.10	764.5	—29.0	—33.9		SW	6	2.7		2k	6s	S	SW	0	0	Threatening	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0— 10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
M.H. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, N. 35° 51′, E. 14° 31′	29.87	758.7	68	20.0	66	WSW			4		1	WNW						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. W. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.20	767.1	62 5	16.9		NNE			3		6	N						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 11° 26′, E. 80° 07′	29.94	760.5	79	26.1		ENE			4		5	SE				4	ENE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.92	760.0	80	26.7	62	WNW			3		3							D. clouds	Capt. R. D. King.
H. M. S. Falcon,																			Comm. W. H. C. Selby.
H. M. S. Fantome, St. John's, Antigua, W. I.	30.04	763.0	73	22.8		ENE			4		9	NE				3	NE	Drizzling	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Callao Bay, Peru	29.93	760.2	65	18.3	94	N			0–1		9							Foggy	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	29.83	757.7	64.5	18.1	80	SW			3		2					3	SSE	D. clouds	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 29° 02′, E. 121° 55′	30.27	768.8	43.6	6.4	52	ENE			1		0							Misty	Capt. R. H. Napier.
H. M. S. Malabar, Bombay, India	29.93	760.2	80	26.7	74	W			1–3		1	W				2	NE	Blue sky	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 38° 42′, W. 9° 06′	29.89	759.2	58	14.4	76	W			7		2	W						D. clouds	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, St. Kittis, Windward Id	30.00	762.0	78	25.6	73	NNE			2		2	NE						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 45° 56′	29.65	753.1	80	26.7	70	Calm			0		0					2	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis, N. 19° 49′, E. 38° 51′	30.03	762.7	80	26.7	70	Calm			0		0							Blue sky	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, India	30.01	762.2	68.5	20.3	65	S			3-4		3							D. clouds	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Britò Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	30.03	762.8	80.6	27.0	69	NE			3		1			0	0	2	SE	Blue sky	S. C da Silva Costa, Comd't.
Sado, Porto Bannana, L. Guinea	29.93	760.2	83.8	28.8	77	SW			5		5			0	0	1	SW	D. clouds	G. A de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, N. 33° 53,′ E. 23° 31′	30.08	763.9	66.9	19.4	87	S			2		0							Blue sky	

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.		Force	Amount and kind.		Direction							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mil.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mil.				
N. Yard, Pensacola, Fla	30.26	768.6	63	17.2	89	NE	4	1.8			10		NE	0	0			Foggy	
N. Yard, Portsmouth, N. H.	30.32	770.1	15	— 9.4	82	N	2	0.9		10c		NE		0	0			Cloudy	
Naval Hospital, Yokohama, Japan	29.38	746.2	32	0.0	95	Calm			0		2		W	0.20	5.1			Clear	
Adams, Chancy, Peru	30.12	765.0	70	21.1	95	Calm			0		10		W			Sm'h		Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.24	768.1	46	7.8	92	E			3		8		E	0	0			Cloudy	
Alert, Hong-Kong, China	30.09	764.3	64	17.8	48	Calm			0		0			0	0	Sm'h		Hazy	
Alliance, Pensacola, Fla	30.16	766.1	61	16.1	100	NE			2		10		SE	He	avy	Sm'h		Foggy	
Ashuelot, Tientsin, China	30.17	766.3	19	— 7.2	100	W			2		0							Clear	
Colorado, New York, N. Y.	30.34	770.6	27	— 2.8		NE	1	0.4			10		Calm	0	0			Misty	
Constitution, N. Yard, League I'd., Pa			25	— 3.9		Calm	0	0			0								
Franklin, Off N. Yard, Norfolk, Va	30.29	769.4	34	1.1		NE	7.2	3.2			10		NE	0.02	0.5			Cloudy	
Galena, N. 42° 36′, E. 3° 55′	29.59	751.6	59	15.0	88	WSW			4		5		WSW			Sm'h	WSW	Fair	
Independence, N. Yard, Mare I'd, Cal.	30.30	769.6	41	5.0	91	E	9.6	4.8			0			0	0			Clear	
Jamestown, Sitka, Alaska	30.04	763.0	42	5.6	91	SE			3		10			0.81	20.6	Sm'h		Rainy	
Kearsarge, Port Royal, Jamaica, W.I.	30.06	763.5	74	23.3	81	NNW			2		8		E			Sm'h		Fair	
Lackawanna, Ancon, Peru †	30.09	764.3	70	21.1	90	S			0-1		10		S	0	0			Cloudy	
Marion, Straits of Magellan	29.93	760.2	51	10.6	65	SW			3-4		5		WSW			Mod.	SW	Fair	
Michigan, Erie, Pennsylvania	30.15	765.8	19	— 7.2		NW			2		8		NW					Cloudy	
Minnesota, New York, N. Y.	30.37	771.4	34	1.1	79	Calm			0		10							Threatening	
Monocacy, Shanghai, China	30.23	767.8	36	2.2	90	W			2		0							Hazy	
New Hampshire, Port Royal, S. C.	30.38	771.6	49	9.4	78	NNE	8	3.6			10		Calm	0.03	0.8			Raining	
Nipsic, Villafranca, France	29.47	748.5	56	13.3	75	WNW			2		5					Long	SSW	D. clouds	
Onward, Chimbote Bay, Peru †	29.89	759.2	74	23.3	76	S			2		5		N			Long	N;W	Fair	
Palos, Shanghai, China	30.31	769.9	34	1.1	62	NW			1		0							Clear	
Passaic, Washington, D. C.	30.40	772.1	29	— 1.7	89	NE			1		10							Cloudy	
Pensacola, Mazatlan, Mexico	30.00	762.0	63	17.2	78	NNW			3		0			0	0			Clear	
Portsmouth, Washington, D. C.	30.34	770.6	28	— 2.2	100	NE			1		10							Hazy	
Powhatan, New York, N. Y.	30.35	770.9	28	— 2.2	77	Calm			0		10							Foggy	
Quinnebaug, N. 32° 58′, E. 16° 50′	30.02	762.5	68	20.0	74	SW			4		2		SW			Sm'h			
Richmond, Amoy, China	30.28	769.1	56	13.3	69	SE			3		0			0	0			Clear	
Saratoga, Baltimore, Md	30.30	769.6	29	— 1.7	100	NE			1		10		NE	Lt. s	now			Hazy	
Shenandoah, Montevideo, Urugnay .*	29.96	761.0	64	17.8	62	E			1		2					Sm'h		Fair	
St. Louis, League Island, Pa	30.38	771.6	24	— 4.4	100	Calm	0	0			10							Snowing	
Swatara, Kobe, Japan †	29.60	751.8	41	5.0	65	SW			5		2		Calm			Mod.	SW	Squally	
Tennessee, N. 17° 24′, W. 67° 40′	30.08	764.0	77	25.0	73	NE	10	4.5			5		NE	1.24	31.5	Sm'h		Fair	
Trenton, Villafranca, France *	29.46	748.3	56	13.3	69	WNW			2		5			12 h'r	s mod	Long	SW	Fair	
Vandalia, N. 17° 55′, W. 56° 33′	30.04	763.0	76	24.4	82	NE			4		8		NE			Long	NE	Fair	
Wabash, Boston, Massachusetts	30.40	772.1	20	— 6.7	70	NW	2	0.9			10		NW	0	0			Hazy	
Wachusetts, Panama, Panama *.	29.57	751.1	77	25.0	91	NW			3		8		N	0	0	Sm'h		Cloudy	
Wyoming, Naples, Italy	29.74	755.4	63	17.2	72	SSW			4		8		SW			Sm'h		Cloudy	

UNITED STATES NAVAL SERIES.

By authority of the Secretary of the Navy.

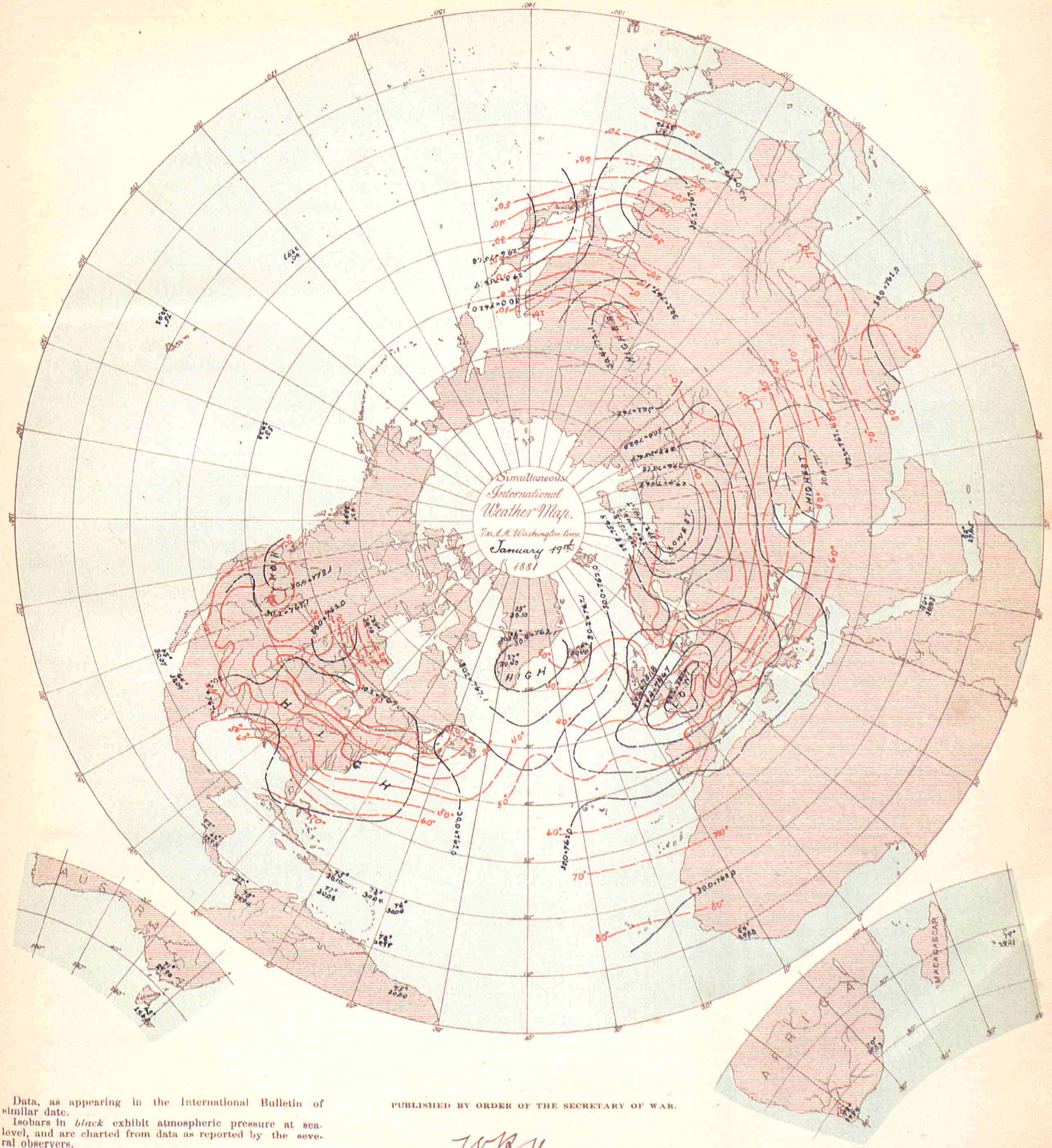
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡																			
S. 34° 49′, E. 23° 05′	30.02	762.5	70	21.1	66	S			3		8							Misty	Capt. C. J. Russell.
British Merchant, ‡																			
S. 42° 56′, E. 140° 01′	29.64	752.8	59.5	15.3	81	W			6		3							Misty	Capt. F. J. Molony.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 41° 07′, W. 16° 24′	29.81	757.2	50.5	10.3	79	NNW			6		5							D. clouds	Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
Chin Yang, ‡																			
N. 29° 18′, W. 180 30′	30.14	765.5	68	20.0	65	Calm			0		3							D. clouds	Capt. H. Youlden
S. S. Cipero,																			
N. 29° 55′, W. 41° 35′	29.70	754.4	64	17.8		WSW			1		4					2	SW	D. clouds	W. N. Lailey.
City of Agra, ‡																			
S. 55° 02′, W. 61° 50′	29.60	751.8	40.0	4.4	76	WSW			5		10							Overcast	Capt. T. Young.
Barque Commewyne, ‡																			Capt. W. Scott.
Barque Copponame,																			
N. 24° 40′, W. 21° 42′	30.15	765.8	71.8	22.1	74	SE			4		6							D. clouds	Capt. A. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 31° 14′, E. 36° 33′	29.85	758.2	77.5	25.3	88	S			3		5							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland,																			
N. 32° 05′, W. 22° 00′	30.08	764.0	63.5	17.5	78	SE			2		7cs		NW			5	NNE	D. clouds	Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡																			
N. 37° 13′, E. 3° 55′	29.89	759.2	61.5	16.4	83	WSW			6		3							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia,																			
N. 48° 13′, W. 32° 04′			48	8.9	92	N			6		2		NNE	Sho	wers	Long	NE	Fine	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic,																			
N. 48° 57′, W. 38° 49′ †	30.21	767.3	50	10.0		NE			3		2		NE			Long	E	Fair	Capt. J. W. Jennings.
S. S. Britanic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic,																			
N. 41° 40′, W. 50° 43′ †	29.93	760.2	35	1.7		N			5		10?		N	o	o	Mod.	N	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Köln,																			
N. 49° 22′, W. 28° 11′	29.80	756.9	45.5	7.5		N			5		10		NE	Hea	vy	Cross	N; NNE	Cloudy	
S. S. Leipzig ‡																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			
S. 15 05′, W. 31° 54′ ... *†	30.16	766.0	79.7	26 5	84	ENE			5		2							Blue sky	Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Philadelphia, Pa	30.14	765.5	26	— 3.3	88	NNE			5		10		NNE					Snowing	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 49° 40′, W. 33° 26′ †	30.02	762.5	45	7.2	92	ESE			5		2		E	0	0	Mod.	NE	Clear.	Capt. R. W. Sargent.
S. S. Ohio, ‡ Liverpool, England †*	29.58	751.3	35	1.7	90	ENE			5		10		ENE	Light	snow			Cloudy	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, N. 53° 20′, W. 4° 40′ †	29.53	750.0	32	0.0		E			7		10		E	Sn	ow	Very R'gh	ENE	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 24° 05′, W. 108° 50′ †	30.07	763.8	68	20.0	65	NNW			4		2		NNW	0	0	Short	NNW	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 32° 53′, E. 137° 39′ †	29.70	754.4	56	13.3	63	WNW			7		8		NW	0	0	High	W	Cloudy	Capt. H. Davison.
S. S. Gaelic, San Francisco, Cal. †*	30.45	773 4	51	10.6	93	W			2		2		W					Hazy	Capt. W. H. Kidley.
S. S. Oceanic, N. 44° 09′, W. 147° 10′	29.28	743.7	53	11.7	93	S			6		8		S	0.32	8.1	High	SE,SW	Stormy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia, Columbia river, near w. point, Oreg.	30.40	772.1	43	6.1	87	E			1									Dense fog	Capt. Frede Bolles
S. S. Oregon, Ft. Stevenson, Columbia R. †	30.47	773.9	42.0	5.6	96	NE			2		8		NE					Foggy	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, N. 35° 23′, W. 121° 03′ †	30.26	768.6	53	11.7	86	E			1		0					H'vy	W	Hazy	Capt. J. N. Ingalls.
S. S. Idaho, San Francisco, Cal. †	30.29	769.4	48	8.9	92	Calm			0		5		Calm					Fair	C. E. Lyons, 1st Officer
S. S. Orizaba.																			
S. S. Senator, N. 36° 20′, W. 122° 05′ †.	30.40	772.1	53	11.7	93	N			1		2		NW			Sm'h		Clear	Thos. Wallace.
S. S. State of California, San Francisco, Cal. †	30.32	770.1	48	8.9	?	NE			1		5		Calm					Fair	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal *†	30.24	768.0	46	7.8	100	Calm			0		5		Calm					Fair	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, S. 31° 51′, E. 151° 14′ †	29.95	760.7	74	23.3	90	Calm			0		0			0	0			Clear	Wm. H. Hawes, 2d Officer,
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, N. 29° 44′, W. 178° 15′ †.	29.97	761.2	60	15.6	76	WNW			6		5		W	0	0	R'gh	WNW	Fair	Capt. G. G. Berry.
S. S. City of Sidney, N. 19° 00, W. 158° 45′ †	30.02	762.5	75	23.9	77	ESE			3		5		ENE	0	0	Long	NW	Cloudy	Capt. H. C. Dearborn
S. S. City of Tokio, N. 34° 34′, E. 138° 25′ †	29.62	752.3	44	6.7	60	WNW			8		10		NW	0	0	R'gh	SW	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 33° 51′, W. 118° 55′ †	30.25	768.3	55	12.8	81	W			3		2		W	0	0	Mod.	W	Fair	Capt. R. R. Searle,
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, N. 9° 06′, W. 84° 24′ †	29.84	757.9	80	26.7	87	NE			2		2		NE	0	0			Clear	
S. S. Zealandia, N. 36° 57′, W. 125° 06′	30.27	768.8	57	13.9	81	S			6		8		SW			H'vy	W	Overcast	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland, ‡ N. 49° 35′, W. 15° 37′ †	29.57	751.1	49	9.4	64	E			7		8		ESE			H'vy	ENE	Fair	Capt. Sam'l Jackson,
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland, ‡ N. 42° 44′, W. 57° 56′	30.05	763.3	30	— 1.1	100	NW			6		2		NNW	0	0	Long	NNW	Fair	Capt. W. Geo. Randle,
S. S. Vaderland, ‡ N. 49° 59′, W. 19° 54′	29.94	760.5				E			6		10			Driz	zles	R'gh	E	Cloudy.	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, N. 40° 28′, W. 72° 27′ †	30.32	770.1	45	7.2		ENE			2		10			0	0	Long	SE	Threatening	Capt. A. Mehaffey.
Sch'r Addie Fuller, Brunswick, Ga.	30.27	768.8	54	12.2	80	Calm	0	0			Fog			0.17	4.3			Foggy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, ‡ Arroyo, P. R. †	30.25	768.3	79	26.1		NE			5		0			0	0	Sm'h		Fine	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	30.29	769.4	34	1.1	90	NNW	1	0.4			10n							Raining	
Ship Jumna																			Capt. James S. Gawin
Bark Sunbeam, ‡ Lisbon, Portugal †	29.92	760.0	66	18.9	100	SW			6		8		W	Mod	erate			Clearing	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 20, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.19	766.7	66.4	19.1	81	W			1		7			0	0	Very cloudy	Dr. Olivo.
Nemours			30.08	764.1	61.7	16.5	77	E			0		3			0	0	Pretty fair.	Raynard.
Algie s			30.02	762.6	57.2	14.0	80	W			3		10			0.201	5.1	Covered	Nicolas.
La Calle			30.01	762.2	65.8	18.8	54	WNW			6		5			0	0	Cloudy	Fonfréde.
Tunis			29.97	761.2															Jacques.
Sfax			30.08	764.0															Gau.
Said.a			30.08	763.9	58.6	14.8	48	W			2		3			0	0	Pretty fair.	Dumas.
Tebessa			29.84	757.9	59.4	15.2	27	NNW			1		7			0	0	Very cloudy	Watrin.
Gerville																			Lonchamp.
Laghouat			30.17	766.3	64.0	17.8	32	S			4		2			0	0	Fair	Herbin.
Biskra			30.10	764.6	68.0	20.0	66	NW			4		8			0	0	Very cloudy	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.04	763.0	30.13	765.3	59.3	15.2	61	W	16	7.2			2			0.20	5.1	Fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.80	756.9	74	23.3		SW			3		4k			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	28.81	731.8	29.36	745.8	44.4	6 9	76	NW			3		10			0.168	4.2	Rain & snow	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.50	723.9	29.28	743.7	33.8	1.0	90	W	13	5.8			4			0.028	0.7		Dr. Wiersbicki.
Eperies	28.38	720.8	29.28	743.7	30.9	— 0.6	94	Calm			0		10			0.366	9.30		Julius Mikolik.
Gratz‡	28.11	714.0	29.38	746.3	34.7	1.5	70	NE			4		10			0.079	2.0		Andreas Rospini.
Hermannstadt	27.82	706.6	29.25	742.9	39.6	4.2	84	SSE			4		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.08	713.2	29.45	748.1	32.5	0.3	71	SW			2		10			0.126	3.2		The Staff.
Lemberg	28.21	716.4	29.21	742.0	29.5	— 1.4	88	NW			1		10			0	0		Dr. T. Stanecki.
Pola	29.36	745.7	29.47	748.6	42.4	5.8	85	W			2		7			0	0		I. R. Hydrographic Office
Szathmar	28.84	732.4	29.28	743.7	33.1	0.6	96	SW			2		10			0.039	1.0		Beicht Peter, S. J.
Szegedin	29.12	739.7	29.41	747.1	27.5	— 2.5	94	SW			1		3			0	0		Karl Stancel.
Trieste	29.35	745.5	29.45	748.1	41.2	5.1	90	SW			2		10			0	0	Almost cl'dy	P. Busin.
Vienna	28.68	738.5	29.41	747.1	35.6	2.0	54	W			5		10			0.035	0.9		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.54	750.2	29.75	755.6	26.1	— 3.3	83	NW			2		0			0	0		Royal Observatory
Furnes																			M. E. de Cae.
Maeseyck	29.49	749.0	29.61	752.2	25.2	— 3.8	82	N			2		7			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 25, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.85	758.2	29.95	760.7	28.0	— 2.2	72	NNE	20	8.9			6			0.100	2.5	Squally	W. Boswell.
Armagh, Observatory	29.67	753.6	29.93	760.2	26.8	— 2.9	79	SW	1	0.4			7			Blank		D. clouds	S. Call.
Bidston, Liverpool Obs'y			29.85	758.2	27.2	— 2.7	76	SSE	5	2.2			1					Misty	John Hartnup.
Bolton, Sharples	29.29	744.0	29.85	758.2	25.5	— 3.6	90	N	10	4.5			0					Blue sky	Thomas Mackereth.
Bradford, Yorkshire	29.45	748.0	29.85	758.2	26.1	— 3.3	91	SE			1		7			0.03	0.8	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.94	760.5	29.96	761.0	81	27.2	70	NE			2		3					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			29.86	758.4	21.0	— 6.1	93	W			0.4		3					D. clouds	John McLaren.
Chatham, School M. E.	29.75	755.6	29.89	759.2	25.2	— 3.8	90	Calm			0		9					Misty	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.67	753.6	29.90	759.4	33.9	1.1	68	ENE			2		9					Snowing	The Staff.
Fort Napier, Natal	27.62	701.5	29.83	757.7	72.2	22.3	80	NE			1		6?					Overcast?	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.88	758.9	85	29.4	83	SE			1		5					D. clouds	C. E. Keane.
Galway, Queen's College			29.93	760.2	31	— 0.6	89	N			2		2					Blue sky	J. O'Donaghadue.
Gibraltar, Mediterranean	30.05	763.3	30.10	764.5	63.0	17.2	97	W			2		6					D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.73	755.1	29.93	760.2	28.2	— 2.1	100	NE			5		10					Snowing	D. G. MacLean.
Greenwich, Royal Obs'y	29.70	754.4	29.89	759.2	22.6	— 5.2	79	WSW			1		0					Foggy	The Staff.
Guernsey	29.69	754.1	29.92	760.0	36	2.2	85	WNW			1		7					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.87	758.7	29.91	759.7	25.3	— 3.7	50	WNW	4	1.8			5					D. clouds	The Met'g'l Office.
Leicester, Museum	29.56	750.8	29.81	757.2	38.2	3.4	92	SW			2		5					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.94	760.5	30.02	762.5	65.0	18.3	64	NW			3		4					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.01	762.2	69.8	21.0	79	E			0		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.33	745.0	29.88	758.9	24.4	— 4.2	81	ENE			1		8					Misty	Robert Pate.
Oxford, Radcliffe Obs'y	29.66	753.4	29.92	760.0	25.8	— 3.4	98	W			1		0					Misty	The Staff.
Plymouth	29.82	757.4	29.90	759.4	26.5	— 3.1	94	Calm			0		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.08	764.0	26.9	— 2.8	100	ENE	7	3.1			7					D. clouds	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.44	747.8	29.51	749.5	56.6	13.7	72	SW			3		5			Blank		D. clouds	Serg't W. H. Lyne.
Sheffield	29.60	751.8	29.90	759.4	27.2	— 2.7	96	S			1		8			Inap.	Inap.	Overcast	W. F. Cooper.
Silloth Rectory	29.86	758.4	29.89	759.2	26.3	— 3.2	55	NE			3		4			0	0	D. clouds	Rev. F. Redford, A. M.
Stonyhurst, Observatory			29.85	758.2	25.9	— 3.4	69	NE	16	7.2			0					Blue sky	Rev. S. J. Perry.
Strathfield Turgiss	29.65	753.1	29.88	758.9	25.7	— 3.5	96	N			1		0					Blue sky	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution			29.89	759.2	38	3.3	81	NE			2		10					Snowing	W. Newcombe.
Valencia, Observatory	29.95	760.7	29.97	761.2	34.9	1.6	72	E	8	3.6			6			Blank		D. clouds	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	29.92	760.0	29.97	761.2	8.6	—13.0		W	1	0.4		0	9s			0	0	Cloudy	Hon. J. Ferguson.
Chatham, N. B.*	29.74	755.4	29.81	757.2	2	—16.7	91	Calm	0	0		2c	8ks	Calm	Calm	0	0	Cloudy	G. A. Blair.
Charlottetown, P. E. Island	29.76	755.9	29.80	756.9	10	—12.2	92	SW	4	1.8		0	0			0	0	Clear	H. J. Cundall, C. E.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario	29.90	759.4	30.12	765.0	— 4.2	—20.1	100	W			1	0	0			0	0	Clear	James Smith, M. A.
Dalhousie, N. B	29.71	754.6	29.75	755.6	10.5	—11.9		W			1	0	2ks			0	0	Fair	H. A. Johnson.
Father Point, Quebec*	29.83	757.7	29.85	758.2	9	—12.8	89	N	9	4.0			10n		Calm	0	0	Cloudy	J. McWilliams.
Fredericton, N. B	29.83	757.7	29.90	759.4	5.1	—14.9	100	NW	6	2.7		0	0			0	0	Clear	Prof. Harrison.
Fort Garry, Manitoba*	29.32	744.7	30.24	768.1	6	—14.4	95	NW	8	3.6		0	0			0	0	Clear	James Stewart.
Granton, Ontario	28.92	734.6	30.12	765.0	12.6	—10.8	89	Calm			0	3cs	0			0	0	Clear	James Grant.
Halifax, N. S.*	29.77	756.1	29.91	759.7	17	— 8.3	97	W	3	1.3		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario	29.70	754.4	30.12	765.0	17.5	— 8.1	86	NW			1	8ck	0	W		0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.76	755.9	30.13	765.3	6	—14.4	86	Calm	0	0		10cs	0	Calm		0	0	Fair	S. Woods, M. A.
Little Glace Bay, N. S	29.77	756.1	29.81	757.2	10.4	—12.0	92	W	1	0.4		3k	0	W		0	0	Fair	C. H. Rigby.
Montreal, Quebec*	29.88	758.9	30.10	764.5	11	—11.7	69	SW	18	8.0		2ck	Sm'e	N		0	0	Fair	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	29.36	745.7	30.11	764.8	17	— 8.3	83	SE	2	0.9			10n		E	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.34	745.2	30.16	766.1	10.7	—11.8	69	NE			1		10k			0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.38	746.2	30.14	765.5	10	—12.2	79	SW	2	0.9		5ck	0	NW		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.44	747.8	30.14	765.5	13	—10.6	98	SW	3	1.3			Fog		SW	0	0	Foggy	M. Payne.
Quebec, Quebec*	29.69	754.1	30.05	763.3	4	—15.6	75	W			5	0	Haze			0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.64	752.8	30.16	766.1	0	—17.8	85	Calm	0	0		0	5s		W	0	0	Fair	W. H. McIntyre.
St. Andrews	29.86	758.4	29.91	759.7	14.0	—10.0	67	NW	6	2.7		0	0			0	0	Clear	
St. John's, N. B	29.73	755.1	29.97	761.2	13.0	—10.6	100	W	1	0.4		0	0			0	0	Clear	G. Murdock, C. E.
Saugeen, Ontario*	29.33	745.0	30.10	764.5	19	— 7.2	91	E	6	2.7			10ks			0	0	Cloudy	K. Stewart.
Stratford, Ontario	28.70	729.0	30.10	764.5	10.1	—12.2	92	Calm	0	0		1c	2s	NW		0	0	Clear	C. J. Macgregor, M. A.
Sydney, C. B*	29.79	756.7	29.84	757.9	11	—11.7	100	S	2	0.9		0	0			0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.72	754.9	30.13	765.3	21	— 6.1	58	NE	8	3.6			10ks			0	0	Cloudy	Magnetic Observatory.
Windsor, N. S	29.75	755.6	29.85	758.2	17.0	— 8.3	100	NW				0	0			0	0	Clear	
Woodstock, Ontario	28.95	735.3	30.12	765.0	10.1	—12.2	94	NW	3	1.3		0	1ks			0	0	Clear	Prof. Wolverton.
Yarmouth, N. S.*	29.90	759.4	29.97	761.2	27	— 2.8	82	NW	6	2.7		2k	0	W		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.96	761.0	30.13	765.3	25	— 3.9	100	W	1	0.4		0	0			0	0	Fair	John Delany.
St. Pierre, N. F			29.81	757.2	28.4	— 2.0		W			2					0	0		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.95	760.7	29.99	761.7	75.5	24.2	58	S	29.8	13.3		0	2ks			0	0		The Staff, for D. Gill.
Cape St. Francis Lt. House	30.00	762.0			72.0	22.2	71	E	10.7	4.8			10s			0	0	Overcast	John Duthie.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.98	761.6	30.01	762.2	41.0	5.0	55	SSE	5.1	2.3			0			0	0	Clear	M. Marc Dechevrens, S J.

STATIONS.	Barometer. Corrected for instru'tal error and temperature. Inch.	Barometer. Corrected for instru'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.21	665.7	29.93	760.2	55.0	12.8	80	NE			1					0	0	Clear	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.55	750.5	29.60	751.7	11 7	—11.3	85	NE	29	13		8							
Fanöe	29.74	755.5	29.76	756.0	11.5	—11.4	75	NE			6	5							
Godthaab, Greenland	30.53	775.5	30.58	776.6	28.0	— 2.2	75	ENE			2	3							
Stykkisholm, Iceland	30.43	773.0	30.48	774.1	23.0	— 5.0	98	E			2	8							
Thorshavn	30.22	767.6	30.26	768.5	31.1	— 0.5	79	NE	9	4		6						Snowing	
Vestervig	29.76	756.0	29.86	758.4	12.6	—10.8	90	NE			4	1							
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.36	745.8	30.03	762.8	37.0	2.8	83	W			2	0	nk		E	0.004	0.1		M. Labroue, Director.
Alençon	29.44	747.7	29.99	761 7	26.6	—3	92	N			2	0	2n		S	0.31	8.	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.54	750.3	29.82	757.3	26.6	—3.0		NW	13.9	6.2			kn						M. Klein, Commandant.
Avignon, Normal School	29.84	757.9	29.92	759.9	43.2	6.2	31	NNW			3	0				0	0	Very clear	M. Giraud, Director.
Bar-sur-Seine	29.26	743.1	29.85	758.1	27.3	—2.6	79	NW			2	10				0.335	8.5	Covered	M. Saillard, Director.
Beauvais, Normal School	29.58	751.3	29.86	758.4	30.7	—0.7	90	NW			1	8			N	0.345	8.75	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	28.92	734.6	29.86	758.4	26.4	—3.1	100	WSW			4	10n			WSW	0.39	10.	Covered	M. Gobin, Director.
Bordeaux, Observatory	29.78	756.5	30.06	763.4	36.5	2.5	75	NNW			1	8			W	0.343	8.7	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.32	744.8	29.91	759.6	31.1	—0.5	81	SSW			1	10n			SSW			Snowing	M. Postel, Director.
Brest, Naval Observatory	29.77	756.1	30.01	762.3	35.6	2'0	61	WSW			1	7			WSW	0	0		M. de Rermaree, Dir.
Caen, Normal School	29.80	756 9	29.88	759.0	33.4	0.8	88	N			1	5			NNW	0	0	Cloudy	M. Bitrix, Director.
Châlons-sur-Marne, N.Sch'l	29.47	748.6	29.81	757.1	29.5	—1.4		W			1	8			WNW	0.118	3.0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.21	742.0	29.76	755.8	27.0	—2.8	87	E			3	8			E	0	0	Covered	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.53	724.6	29.95	760.8	30.2	—1.0	71	NW			1	10			W	0.295	7.5		M. Alluard, Director.
Cluny, Normal School	29.00	736.7	29.88	759.0	30.6	—0.8	89	W			6	10		W	W			Snowing	M. de Villemontée, Dir.
Commercy, Normal School	28.85	732.7	29.75	755.7	23.2	—4.9	90	W			8	10kn		W	W			Snowing	Dr. Coulet, Director.
Gap, Normal School	27.19	690.6	29.83	757.6	28.4	—2	85	N			3				NE	0	0		M. Jeanginard, Director.
Grénasque, du Rhone	28.78	731.0	29.92	760.0	40.3	4.6	62	NW			4	5			NW	0	0		M. Kina, Director.
Grenoble, Normal School	29.04	737.7	29.84	757.8	28.2	—2.1		WNW			2	n				0.031	0.80		M. Ablard, Director.
Guéret, Normal School	28.24	717.3	29.91	759.7	26.6	—3	78	W			1	10			E	0.59	15.	Snowing	M. Rivoir, Director.
Lamballe, Normal School	29.52	749.7	29.80	756.9	34.2	1.2	78	W			1	1			W	0.374	9.5	Clear	M. Ollitrault, Director.
Lescar, Normal School	29.43	747.5	30.12	765.1	40.6	4.8	97	S				10			W	0.67	17.	Covered	M. Chauvin, Director.
Lorient, Naval Observatory	29.95	760.8	30.06	763.4	39.6	4.2	49	SSE			2			E	Calm	0.197	5.0	Clear	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.84	732.6	29.91	759.8	30.0	—1.1	65	NW			3	n		WNW	NW	0.039	1.0		M. André, Director.
Mans, Normal School	29.64	752.8	29.96	760.9	29.8	—1.2	94	NW			4	0				0.24	6.	Clear	M. Piboen, Director.
Marseille, Observatory	29.60	751.9	29.88	758.9	44.8	7.1	54	WNW			3-4	3			NW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.63	625.5	29.85	758.5	29.3	—1.5	50	SW	9.4	4.2		1		S		0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.83	757.7	29.94	760.5	42.6	5.9	62	NW			6	2			WSW	0.059	1.5	Rain, sleet, snow	M. Galxin, Director.
Nancy, Normal School	28.94	735.1	29.75	755.7	22.6	—5.2	80	SW			2	8kn			SW	0.244	6.2	Snowing	M. Hasse.
Nantes, Observatory	29.94	760.5	30.10	764.6	34.2	1.2	78	WNW			2	0				0	0	Clear	M. Larocque, Dir.
Nice	29.70	754.3	29.73	755.1	45.2	9.0	34	NW			8	1		NW	NW	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.93	760.1	30.03	762.8	44.1	6.7	76	N	22.4	10.0		10			NW	0.031	0.8		Dr. Fines.
Pic-du-Midi, Plantade	22.25	565.1			10.4	—12.0						10			NW	2.358	59.9	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.86	733.1	29.97	761.1	36.5	2.5	57				1	0				0	0	Clear	M. Taillieu.
Puy de Dôme Obs'y, Summit	24.78	629.4			13.8	—10.1	97	W			8	10				0.409	10.4	Snow and fog	M. Alluard, Director.
Rochefort, Naval Obs'y	30.00	761.9	30.03	762.7	42.4	5.8	67	NNW			2	5			NNW	0.39	10.	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.84	758.0	30.07	763.7	34.9	1.6	62	WNW			1	0				0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.76	705.2	30.02	762.4	28.8	—1.8	68	W			2	5			W	0	0	Fair	M. Richard, Director.
Rouen, Normal School	29.81	757.1	29.89	759.3	34.2	1.2	81	NW			1	2			NW	0.012	0.3	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	29.81	757.2	29.97	761.2	32.4	0.2	100	N			1	1			N	0.453	11.5	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.69	754.0	29.85	758 2	30.2	—1.0	82	NW			2	9			NW				M. Renou, Director.
Toulouse, Observatory	29.35	745.4	30.07	763.8	37.9	3.3	93	NW			2	5				0	0	Cloudy	M. Baillaud, Director.
Tours	29.77	756.2	29.97	761.2				NE			3	0				0.102	2.6	Clear	M. de Tastes.
Versailles, Observatory	29.37	746.1	29.87	758.6	28.4	—2.0	87	NW			2	8				0.116	2.95	Almost cov.	Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.66	728.0	29.51	749.5	23.7	—4.6	93	NW			7	7k		W		0.102	2.6	Snowing	Prof. Dr. Hoh.
Berlin	29.07	738.4	29.25	743.0	19.4	—7.0	88	N			3	10				0.311	7.9		Prof. Dr. Arndt.
Breslau	28.73	729.8	29.25	743 0	36.7	2.6	70	SW			2	8				0	0		Royal University Obs'y.
Carlsruhe	29.17	741.0	29.62	752.3	22.3	—5.4	86	N			0	10				0.177	4.5	Snowing	Albert Senz.
Cassel	28.89	733.9	29.49	749.0	20.5	—5.4	84	N			6	10		N		0.244	6.20	Snowing	Dr. H. Möhl.
Frankfort on the Main	29.26	743.1	29.64	752.9	24.4	—4.2	63	NW			2	5				0.122	3.1		Physical Society.
Friedrichshafen	28.09	713.5	29.56	750.9	32.9	0.5	50	W			8	10		W		0.091	2.3	Snowing	Chief Telegrapher Wilhelm.
Hamburg	29.47	748.6	29.54	750.4	18.9	—7.3	89	NNE			8	10				0.118	3.0		Dr. R. Kleeman.
Kiel	29.52	749.9	29.54	750.3	18.9	—7.3	100	NNE			6	10				0.006	0.16	Snowing	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	28.92	734.5	29.36	745.7	19.8	—5.8	73	WNW			4	8				0.067	1.7	Snowing	Prof. Dr. Bruhns.
Magdeburg	29.09	738.9	29.33	745.0	18.1	—7.7	86	WNW			5	10ks				0.252	6.4		Dr. Assmans.
Memel	29.50	749.2	29.54	750.3	5.9	—14.5	96	ENE			4	10n							Reinbrecht & Issermann.
Munich	27.61	701.2	29.43	747.6	31.6	—0.2	49	W			5	6		W		0.075	1.9		Central Station.
Neufahrwasser	29.39	746.5	29.41	746.9	16.2	—8.8	88	E			3	5				0.358	9.1		A Lothes.
Neustadt, Palatinate	29.01	736.9	29.53	750.0	25.2	—3.8		W			2	10				0.35	9.		Dicknether.
Stuttgart	28.50	723.8	29.43	747.5	23.9	—4.5	61	SW			4	10				0.028	0.7		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.01	711.4	29.52	749.8	30.6	—0.8	82	W			8	9		W		0.075	1.9		Prof. Kemlein.
Wustrow	29.43	747.5	29.45	748.1	21.9	—5.6	100	NE			7	10				0.394	10.0		Profs. Brandes & Reimer.

‖ Observation taken 23 minutes late.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r.	Mtrs p. sec.	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.40	746.7	29.75	755.6	65.7	18.7		SW			5.0		0					Clear	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.98	761.6	30.04	762.9	78.7	25.9	31	WSW	6.0	2.7			0			0	0	Blue sky	
Deesa	29.51	749.6	29.99	761.8	80.4	26.9	18	NW	9.4	4.2			0			0	0	Blue sky	
Bombay	29.90	759.4	29.94	760.4	82.4	28.0	67	NW	11.0	4.9			0			0	0	Blue sky	
Poona, Yarrowda	28.07	713.1	29.91	759.7	85.8	29.9	32	WNW	3.0	1.3			2		N	0	0	D. clouds	
Belgaum	27.39	695.7	29.91	759.6	81.5	27.5	32	ENE	5.0	2.2			7	SE	S	0	0	D. clouds	
Lahore	29.30	744.1	30.06	763.6	68.7	20.4	27	Calm	1.2	0.5			0			0	0	Blue sky	
Roorkee	29.13	739.8	30.06	763.5	64.3	17.9	41	NW	2.3	1.0			1			0	0		
Agra	29.50	749.3	30.08	764.0	73.3	22.9	20	W	3.0	1.3			0			0	0		
Nagpur	28.96	735.5	30.01	762.2	79.5	26.4	23	Calm	2.3	1.0			0			0	0	Blue sky	
Jubbulpore	28.67	728.2	30.07	763.7	72.8	22.7	22	Calm	1.1	0.5			0			0	0	Blue sky	
Lucknow	29.69	754.1	30.08	764.0	67.5	19.7	35	Calm	1.8	0.8			0			0	0	Blue sky	
Allahabad	29.75	755.7	30.08	763.9	65.2	18.4	53	Calm	1.2	0.5			0			0	0	Blue sky	
Patna	29.84	758.0	30.04	762.9	65.0	18.3	55	W	0.7	0.3			0			0	0	Blue sky	
Hazaribagh	28.00	711.2	30.08	764.1	64.0	17.8	32	NNW	5.4	2.4			0			0	0	Blue sky	
Cuttack	29.95	760.8	30.04	763.0	72.4	22.4	48	Calm	0.4	0.2			0			0	0	Blue sky	
Calcutta, Alipore	30.02	762.4	30.04	762.9	68.3	20.2	51	N	1.5	0.7			0			0	0	Blue sky	
Goalpara	29.60	751.9	30.02	762.4	69.5	20.8	54	Calm	1.1	0.5			0			0	0	Blue sky	
Chittagong	29.92	759.8	30.01	762.2	70.6	21.4	57	NW	2.8	1.2			0			0	0	Blue sky	
Sibsagar	29.70	754.3	30.05	763.2	61.7	16.5	84	ENE	1.3	0.6			0			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.04	737.5	29.46	748.3	33.6	0.9	96	Calm	0	0			10			0.374	9.5		Prof. Giovanni Clodig.
Milan	28.98	736.0	29.52	749.8	26.6	— 3.0	96	WSW	1.8	0.8			8			0	0		Prof. Schiaparelli.
Padua	29.36	745.7	29.47	748.5	31.1	— 0.5	94	W	12.5	5.6			1	W		0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.66	728.0	29.61	752.0	40.3	4.6	33	NW	1.3	0.6			3			0	0		Prof. P. F. Denza.
Genoa	29.37	746.1	29.57	751.1	48.9	9.4	14	NW	9.8	4.4			2	W		0	0		Prof. G. M. Garibaldi.
Mondovi	27.66	702.5	29.66	753.3	38.8	3.8	26	W			8		3			0	0		Prof. D. C. Bruno.
Pesaro	29.50	749.4	29.56	750.7	39.9	4.4	68	W	18.6	8.3			10	SW		0.728	18.5		Prof. Luigi Guidi.
Florence	29.26	743.3	29.53	750.0	50.0	10.0	35	SW			8		3			0.323	8.2		Cav. F. Meucci.
Leghorn	29.51	749.5	29.60	751.7	50.2	10.1	45	W	24.8	11.1			5			0	0		Prof. P. Monte.
Rome	29.55	750.6	29.73	755.1	55.2	12.9	43	W	27.3	12.1			5			0.079	2.0		Prof. P. S. Ferrari.
Lecce	29.54	750.4	29.80	756.9	57.0	13.9	52	WSW	14.3	6.4			5	SW		0	0		Prof. C. de Giorgi.
Cosenza	29.00	736.6	29.89	759.3	54.0	12.2	74	WNW	4.9	2.2			10	W		c.811	20.6		Prof. D. Conti.
Cagliari	29.72	754.9	29.91	759.8	54.7	12.6	52	NW			4		10			0	0		Prof. A. Pacinotti.
Palermo	29.69	754.2	29.94	760.5	59.4	15.5	46	WNW	23.0	10.3			10			0	0		Prof. G. Ciacciatore.
Syracuse	29.92	759.9	29.96	761.0	61.7	16.5	57	WSW	19.9	8.9			6	WSW		0	0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.23	742.4	29.75	755.7	53.6	12.0	54	WSW	34.2	15.3			10k	W		0.161	4.1		Prof. F. Brioschi.
Stelvio	21.85	555.0			7.3	—13.7	72	SE					10			0	0		P. F. Denza.
Valdobbia	21.49	544.8			6.8	—14.0	96	E					10			‖7.874	‖200.0		
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y†	30.01	762.2	30.03	762.7	28.6	— 1.9	85	NNE	1.2	0.5			0			0.100	2.54	Clear	K. Sasaki.
Kioto	29.79	756.6	29.97	761.2	29.8	— 1.2	72						0			0.004	0.10	Clear	
Nagasaki, I. M. Obs'y	29.89	759.2	30.10	764.5	41.5	5.3	69	W	5.8	2.6			7s			0.090	2.29	Cloudy	S. Takehayashi.
Tokei Obs'y, Yeddo	29.67	753.6	29.75	755.6	29.8	— 1.2	86	W	3.5	1.6		0	0			0	0	Clear	The Staff.
Wakayama	29.95	760.7	30.01	762.2	34.1	1.2	61	NW	4.9	2.2			0			0.055	1.40	Clear	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.49	749.0	29.68	753.8	77.6	25.3	84	E	46.5	20.8			10		E	0.22	5.6	Drizzling	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.78	756.4	30.05	763.2	62.8	17.1	56	NNE			2	0	0			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barreeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.77	756.1	29.77	756.1	29.5	— 1.4		NNE			4					0.094	2.4		
Groningen	29.67	753.5	29.72	754.9	21.0	— 6.1		NNE			5					0.094	2.4		
Helder	29.73	755.1	29.73	755.1	23.4	— 4.8		NNE			5					0.063	1.6		
Hellevoetsluis	29.77	756.1	29.77	756.1	24.8	— 4.0	95	NE			2					0	0		
Utrecht	29.69	754.2	29.74	755.4	25.2	— 3.8	81	NNE			4		5			0.008	0.2	Cloudy	H. van der Brink

‖ Unmelted snow.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.96	761.0	30.02	762.6	15.8	— 9.0	38	E	4.5	2.0	.....	.....	2	.....	.....	0	0	.....	
Christiania	29.84	757.8	30.00	761.9	9.7	—12.4	58	NNE	11	5	.....	.....	0	.....	.....	0	0	.....	
Gjæsvær	29.59	751.5	29.61	752.1	21.9	— 5.6	.....	NE	.....	.....	4	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.82	757.4	29.87	758.6	23.0	— 5.0	80	NW	.....	.....	1	.....	10	.....	.....	0.063	1.6	Light snow.	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.71	754.6	29.87	758.7	52.2	11.2	87	E	22.4	10.0	.....	.....	6	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.12	739 7	30.15	765.8	50.0	10.0	86	SSW	4.9	2.2	.....	.....	9	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.97	761.2	30.06	763.4	64.9	18.3	82	SW	14.3	6.4	.....	.....	10	.....	.....	0.087	2.2	Raining	Cand. D. A. de Cunha.
Lisbon, Observatory	29.81	757.2	30.18	766.5	53.6	12.0	74	SSE	3.1	1.4	.....	.....	9	W	.....	0.106	2.7	.....	The Staff.
Ponta Delgada, Azores	29.79	756.6	29.86	758.4	57.2	14.0	82	ENE	6.9	3.1	.....	.....	10	.....	.....	0.035	0.9	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.14	740.1	30.35	770.9	— 2.2	—19.0	100	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	28.93	734.7	28.95	735.2	2.1	—16.6	84	W	13	6	.....	.....	10	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	29.99	761.8	29.91	759.7	34.5	1.4	74	ESE	7	3	.....	.....	10cp	.....	.....	Blank		Heavy cl'ds.	Capt. Wisganow.
Barnaul	29.90	759.4	30.47	773.8	— 0.9	—18.3	85	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.47	748.5	29.74	755.5	— 9.8	—23.2	83	WSW	2	1	.....	.....	0	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	28.80	731.4	29.86	758.4	0.1	—17.7	56	WSW	2	1	.....	ck	9cs	.....	.....	.....	.....	Light clouds	Meteorological Obs'y.
Kasan	29.62	752.3	29.93	760.1	— 8.0	—22.2	73	SW	4	2	.....	.....	0	.....	.....	.....	.....	.....	Observatory.
Kertch	29.45	747.9	29.47	748.4	44.6	7.0	94	S	9	4	.....	.....	10	.....	.....	.....	.....	.....	Lagorio.
Kieff	28.72	729.4	29.40	746.7	16.5	— 8.6	91	SE	11	5	.....	.....	10n	.....	.....	.....	.....	.....	Observatory.
Krotkowo, N. 58°47′, E. 48°34′	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.33	745.0	29.54	750.4	34.5	1.4	74	SSE	2	1	.....	.....	10	.....	.....	Blank		.....	Meteorological Obs'y.
Moscow	29.20	741.7	29.82	757.5	— 9.8	—23.2	75	S	4	2	.....	.....	10s	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.90	708.7	30.63	777.9	—27.6	—33.1	83	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	29.35	745.4	29.42	747.2	34.7	— 1.5	98	S	4	2	.....	.....	10n	.....	.....	.....	.....	Foggy	1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	30.00	762.1	30.09	764.3	—14.1	—25.6	82	Calm	0	0	.....	40k	.....	.....	.....	.....	.....	.....	Lieut. Iwanow.
Nukuss	29.98	761.4	30.22	767.5	40.6	4.8	68	E	9	4	.....	.....	6ks	.....	.....	.....	.....	.....	Dr. Dobrochotow.
Pekin, China	30.06	763.6	30.28	769.2	14.4	— 9.8	84	Calm	0	0	.....	.....	3k	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.58	751.4	29.60	751.8	— 0.9	—18.3	89	WSW	7	3	.....	.....	2cs;s	.....	.....	.....	.....	Light clouds	Central Physical Obs'y.
Tashkend, Laboratory	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.52	724.5	29.97	761.3	43.0	6.1	61	NW	13	6	.....	.....	8ks	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	28.82	732.1	29.26	743.3	21.0	— 6.1	87	ENE	2	1	.....	.....	10n	.....	.....	.....	.....	Snowing	Astronomical Obs'y.
Wilna	29.02	737.1	29.47	748.6	8.6	—13.0	82	ENE	4	2	.....	.....	10	.....	.....	.....	.....	Heavy cld's	Berg, Assistant.
Yeniseisk	29.84	758.0	30.15	765.9	14.2	— 9.9	80	SE	11	5	.....	.....	0	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.96	761.0	28.0	— 2.2	100	NE	.....	.....	4	.....	10n	S	.....	0.24	6.1	Snowing	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.13	765.3	34	1.1	79	NE	.....	.....	4	3	3	NE	.....	.....	.....	.....	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	30.07	763.8	.....	.....	.....	N	.....	.....	4	4	7	N	.....	Blank		.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.90	759.4	30.01	762.2	48.9	9.4	51	WNW	12.5	5.6	.....	.....	0	.....	.....	0.009	0.22	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.13	765 2	30.19	766.7	40.5	4.7	86	NW	6.2	2.78	.....	.....	10	.....	.....	0.244	6.2	Snowing	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.12	688.8	.....	.....	35.2	1.8	67	SW	1.2	0.56	.....	.....	6	.....	.....	0	0	Cloudy	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.87	707.8	30.17	766.2	44.2	6.8	53	NW	13.4	6.0	.....	0	6	.....	.....	0.024	0.6	Cloudy	The Staff.
Murcia, Met. Obs'y. ‡	29.96	761.0	30.11	764.8	60.1	15.6	60	ESE	0.7	0.3	.....	3	3	SE	.....	0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.19	741.5	30.11	764.8	46.4	8.0	77	ESE	0	0	.....	.....	0	.....	.....	0.067	1.7	Clear	R. Gil Villanueva; Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.93	760.1	29.99	761.8	67.6	19.8	89	SE	1.8	0.8	.....	1c	0	NW	.....	0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.95	760.7	30.00	762.0	79.4	26.3	72	NE	0	0	.....	.....	2s	.....	.....	0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.11	764.7	30.21	767.2	58.1	14.5	78	Calm	0	0	.....	.....	10	.....	W	0.039	1.0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.96	761.0	30.05	763.3	70.5	21.4	89	SE	2.7	1.20	.....	4c	3k	SE	SE	0	0	Clear	Enrique Gades, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.58	751.2	29.61	752.2	13.3	—10.4	86	NW	.....	.....	4	.....	10	.....	.....	0	0	.....	
Umea	29.75	755.7	29.80	757.0	11.8	—11.2	71	N	.....	.....	4	.....	10	.....	.....	0	0	.....	
Hernosand	29.82	757.4	29.87	758.7	10.2	—12.1	67	N	.....	.....	4	.....	10	.....	.....	0	0	.....	
Stockholm	29.63	752.7	29.81	757.2	1.8	—16.8	90	NW	.....	.....	2	.....	0	.....	.....	0	0	.....	
Wisby	29.61	752.0	29.67	753.5	17.6	— 8.0	77	ENE	.....	.....	2	.....	5	.....	.....	0.083	2.1	Snowing	
SUB-SERIES.																			
Upsala	.....	.....	.....	.....	— 5.4	—20.8	72	NW	6.0	2.7	.....	.....	0	.....	.....	0.024	0.6	.....	Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.35	720.2	29.86	758.5	27.7	— 2.4	79	SW	.....	.....	6	.....	10	.....	.....	0.059	1.5	Covered	The Observatory.
Zurich	27.93	709.4	29.66	753.3	28.6	— 1.9	78	W	.....	.....	7	.....	10	.....	.....	0.047	1.2	Foggy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —7.2 mm.; Ther. —4°.9 cent.; Hum. +1 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.60	751.7	60.3	15.7	68	SW	19	8.5	.....	.....	6	.....	SW	0	0	.....	The Observatory.
Valona	.....	.....	29.79	756.6	58.5	14.7	.....	SW	.....	.....	3	.....	10	.....	.....	0	0	Covered	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.14	765.5	68.0	20.0	61	SW	.....	.....	1	30	.....	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.09	764.3	30.18	766.6	8	—13.3	78	NE	2	0.9			10ks		NE	0	0	Cloudy	
Alpena, Michigan	29.34	745.2	30.02	762.5	22	— 5.6	72	SE	8	3.6			8s		W	0	0	Cloudy	
Attou Id., Alaska‡	29.26	743.2			23	— 5.0	100	SW	27	12.1			10n		N	0.23	5.8	Cloudy	
Atlanta, Georgia	28.69	728.7	29.84	757.9	44	6.7	100	E	11	4.9			10n		Calm	3.07	78.0	Light rain	
Atlantic City, New Jersey	30.13	765.3	30.15	765.8	22	— 5.6	93	N	6	2.7		Haze	Haze	Calm	Calm	0.09	2.3	Light haze	
Augusta, Georgia	29.80	756.9	30.00	762.0	46	7.8	92	NE	4	1.8			10n		Calm	2.74	69.6	Light rain	
Baltimore, Maryland	30.09	764.3	30.14	765.5	22	— 5.6	86	NW	4	1.8		Haze	Fog	Calm	Calm	0	0	Light fog	
Barnegat, New Jersey	30.10	764.5	30.13	765.3	21	— 6.1	86	NW	8	3.6		0	Fog		Calm	0.12	3.0	Clear	
Benton, Montana	27.65	702.3			21	— 6.1	71	W	9	4.0		0	0			0.01	0.3	Clear	
Bismarck, Dakota	28.42	721.7	30.27	768.8	15	— 9.4	82	NW	4	1.8		0	0			0	0	Clear	
Boise City, Idaho	27.69	703.3	30.65	778.5	20	— 6.7	85	NW	2	0.9		0	0			0.18	4.6	Clear	
Boston, Massachusetts	29.93	760.2	30.10	764.5	18	— 7.8	68	W	7	3.1		0	0			0.12	3.0	Clear	
Brackettville, Texas	28.77	730.7	29.88	758.9	28	— 2.2	88	NW	3	1.3		0	0			0	0	Clear	
Brownsville, Texas																			
Buffalo, New York	29.36	745.7	30.11	764.8	19	— 7.2	69	W	3	1.3		10ck	Sm'e	W		0	0	Cloudy	
Burlington, Vermont	29.89	759.2	30.21	767.3	6	—14.4	76	SE	2	0.9		0	0			0	0	Clear	
Cairo, Illinois	29.44	747.8	29.84	757.9	34	1.1	100	N	3	1.3			10n		Calm	0.26	6.6	Light rain	
Campo, California	27.55	699.8	30.12	765.0	28	— 2.2	88	W	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.36	694.9			26	— 3.3	75	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.10	764.5	30.11	764.8	36	2.2	53	NE	6	2.7			Fog		Calm	0.20	5.1	Dense fog	
Cape May, New Jersey	30.09	764.3	30.12	765.0	25	— 3.9	87	N	10	4.5		0	0			0.07	1.8	Clear	
Castroville, Texas	29.19	741.4	29.94	760.5	28	— 2.2	88	NW	3	1.3		0	0			0	0	Clear	
Cedar Keys, Florida	29.93	760.2	29.96	761.0	63	17.2	89	SE	10	4.5		0	2ks		SW	0	0	Clear	
Champaign, Illinois	29.04	737.6	29.90	759.4	30	— 1.1	78	NE	6	2.7			Fog		Calm	0	0	Foggy	
Charleston, S. Carolina	29.95	760.7	30.01	762.2	49	9.4	93	N	5	2.2			10n		Calm	0.05	1.3	Light rain	
Charlotte, N. Carolina	29.16	740.7	30.00	762.0	40	4.4	100	E	6	2.7			10n;fg		Calm	0.23	5.8	Light rain	
Chattanooga, Tennessee	29.03	737.3	29.83	757.7	46	7.8	100	NE	5	2.2			10n;fg		Calm	0.45	11.4	Light rain	
Cheyenne, Wyoming	24.15	613.4	30.09	764.3	17	— 8.3	100	N	14	6.3			10n		Calm	0.03	0.8	Light snow	
Chicago, Illinois	29.24	742.7	29.98	761.5	18	— 7.8	84	Calm	0	0			Fog		Calm	0	0	Dense fog	
Chincoteague, Virginia	30.12	765.0	30.14	765.5	27	— 2.8	100	NW	6	2.7			Fog		Calm	Inap.	Inap.	Dense fog	
Cincinnati, Ohio	29.27	743.4	29.93	760.2	40	4.4	87	E	4	1.8			10n;fg		Calm	Inap.	Inap.	Light rain	
Cleveland, Ohio	29.30	744.2	30.06	763.5	27	— 2.8	94	SE	3	1.3			10s;fg		Calm	0	0	Cloudy	
Coleman City, Texas	28.12	714.2	29.85	758.2	32	0.0	50	NW	10	4.5			10s		NW	0.03	0.8	Cloudy	
Columbus, Ohio	29.10	739.1	29.96	761.0	35	1.7	80	NE	6	2.7			10s		Calm	0.02	0.5	Cloudy	
Concho, Texas	28.00	711.2	29.75	755.6	32	0.0	89	SW	7	3.1		0	0			0	0	Clear	
Corsicana, Texas	29.52	749.8	30.01	762.2	34	1.1	79	Calm	0	0			10s		Calm	0.18	4.6	Cloudy	
Davenport, Iowa	29.31	744.5	30.01	762.2	6	—14.4	88	NE	4	1.8			Fog		Calm	0	0	Dense fog	
Dayton, Washington T'y	28.83	732.3	30.65	778.5	25	— 3.9	100	SE	3	1.3		0	5s		SE	0	0	Fair	
Deadwood, Dakota	25.57	649.5			20	— 6.7	70	W	5	2.2		5c	0	W		0.05	1.3	Fair	
Decatur, Texas	28.71	729.2	29.92	760.0	33	0.6	89	Calm	0	0			10s		Calm	0.22	5.6	Cloudy	
Delaware Breakwater, Del.	30.12	765.0	30.15	765.8	26	— 3.3	88	N	6	2.7		0	0			Inap.	Inap.	Clear	
Denison, Texas	29.08	738.6	29.90	759.4	33	0.6	89	W	4	1.8			10s		Calm	0.27	6.9	Cloudy	
Denver, Colorado	24.95	633.7	30.17	766.3	25	— 3.9	87	NE	12	5.4			10n		Calm	0.04	1.0	Light snow	
Des Moines, Iowa	29.03	737.3	29.94	760.5	33	0.6	89	N	4	1.8			10s		Calm	0	0	Cloudy	
Detroit, Michigan	29.34	745.2	30.06	763.5	12	—11.1	100	Calm	0	0			Fog		Calm	0	0	Foggy	
Dodge City, Kansas	27.34	694.4	29.70	754.4	32	0.0	59	N	32	14.3			10s		Calm	0	0	Cloudy	
Dubuque, Iowa	29.21	741.9	29.98	761.5	8	—13.3	100	Calm	0	0			Fog		Calm	0	0	Dense fog	
Duluth, Minnesota	29.21	741.9	29.92	760.0	27	— 2.8	88	SW	2	0.9			10s		Calm	0.01	0.3	Cloudy	
Eagle Pass, Texas	29.21	741.9	29.97	761.2	41	5.0	57	SW	2	0.9		0	0			0	0	Clear	
Eagle Rock, Texas	25.72	653.3	30.37	771.4	— 1	—18.3	68	N	5	2.2		0	0			0.07	1.8	Clear	
Eastport, Maine	29.85	758.2	29.92	760.0	16	— 8.9	66	W	14	6.3		0	0			0	0	Clear	
Edinburg, Texas					41	5.0	57	N			1	0	2ks		Calm	0	0	Fair	
El Paso, Texas	26.25	666.7			36	2.2	45	N	7	3.1		0	0			0	0	Clear	
Erie, Pennsylvania	29.35	745.5	30.10	764.5	28	— 2.2	88	SE	2	0.9			10s;fg		Calm	0	0	Cloudy	
Escanaba, Michigan	29.21	741.9	29.89	759.2	23	— 5.0	73	S	2	0.9			10s		Calm	0	0	Cloudy	
Florence, Arizona	28.62	726.9	30.22	767.6	37	2.8	63	NE	1	0.4		0	8s		W	0	0	Fair	
Fort Apache, New Mexico	25.06	636.5	30.51	774.9	23	— 5.0	47	NE	2	0.9		5ck	2s	W	Calm	0	0	Fair	
Fort Assiniboine, Montana	27.58	700.5			9	—12.8	57	NW	20	8.9		5k		NW		0	0	Fair	
Fort Bennett, Dakota	28.65	727.7			29	— 1.7	67	N	24	10.7			10n		Calm	Inap.	Inap.	Light hail	
Fort Buford, Dakota	28.32	719.3	30.35	770.9	12	—11.1	80	W	20	8.9		5cs	0	NW		0	0	Fair	
Fort Custer, Montana	27.27	692.6			10	—12.2	51	S	3	1.3		0	0			0	0	Clear	
Fort Davis, Texas	25.14	638.5	30.10	764.5	41	5.0	41	S	8	3.6		0	0			0	0	Clear	
Fort Elliott, Texas	27.04	686.8	29.38	746.2	28	— 2.2	54	N	20	8.9		0	0			0.40	10.2	Clear	
Fort Gibson, Indian T'y	29.26	743.2	29.81	757.2	34	1.1	90	N	4	1.8			10s		Calm	0.26	6.6	Cloudy	
Fort Grant, Arizona	25.23	640.8	30.03	762.7	34	1.1	52	NE	4	1.8		5cs	0	Calm		0	0	Fair	
Fort Griffin, Texas	28.57	725.7	29.88	758.9	34	1.1	61	W	6	2.7			10s		Calm	0.05	1.3	Cloudy	
Fort Keogh, Montana	27.91	708.9			12	—11.1	80	SW	12	5.4		0	0			0	0	Clear	
Fort Macon, North Carolina	30.06	763.5	30.07	763.8	39	3.9	91	NE	15	6.7			10n		NE	0.45	11.4	Light rain	
Fort Missoula, Montana	27.28	692.9			1	—17.2	100	Calm	0	0		0	0			0	0	Clear	
Fort McKavett, Texas	27.66	702.6	29.65	753.1	32	0.0	69	SW	7	3.1		0	0			0	0	Clear	
Fort Shaw, Montana	26.82	681.2			17	— 8.3	83	W	10	4.5		0	0			Inap.	Inap.	Clear	
Fort Sill, Indian Territory	28.65	727.7	29.79	756.7	35	1.7	80	Calm	0	0			10s		Calm	0.13	3.3	Cloudy	
Fort Stevenson, Dakota																			
Fort Verde, Arizona					27	— 2.8	76	NW			1	5cs	5s	W	NW	0	0	Cloudy	
Fredericksburg, Texas	28.18	715.8	29.78	756.4	38	3.3	72	W	11	4.9		0	0			0	0	Clear	
Galveston, Texas	29.95	760.7	29.99	761.7	39	3.9	91	W	8	3.6		0	2s		N	0.01	0.3	Clear	
Grand Haven, Michigan	29.32	744.7	30.02	762.5	11	—11.7	80	NE	2	0.9		0	0			0	0	Clear	
Hatteras, North Carolina	30.03	762.7	30.05	763.3	39	3.9	100	N	18	8.0			10s		Calm	0.41	10.4	Cloudy	
Helena, Montana	26.29	667.8			9	—12.8	78	SW	2	0.9		0	0			0.06	1.5	Clear	
Henrietta, Texas	28.89	733.8	29.86	758.4	32	0.0	100	NW	6	2.7			10s		Calm	0.12	3.0	Cloudy	
Indianapolis, Indiana	29.06	738.1	29.86	758.4	35	1.7	90	NE	5	2.2			10n;fg		Calm	0.01	0.3	Light rain	
Indianola, Texas	30.01	762.2	30.05	763.3	36	2.2	80	Calm	0	0		0	0			0.01	0.3	Clear	
Jacksboro, Texas	28.74	730.0	29.91	759.7	35	1.7	90	Calm	0	0			10s		Calm	0.15	3.8	Cloudy	
Jacksonville, Florida	29.94	760.5	29.98	761.5	59	15.0	88	NE	5	2.2		5cs	2s	W	Calm	0	0	Cloudy	
Keokuk, Iowa	29.29	744.0	29.93	760.2	25	— 3.9	75	NE	1	0.4			10s		Calm	0	0	Cloudy	
Key West, Florida	29.96	761.0	30.00	762.0	72	22.2	85	S	6	2.7		0	5ks		S	0.60	15.2	Fair	
Kittyhawk, North Carolina	30.00	762.0	30.02	762.5	36	2.2	90	NE	15	6.7			10s		Calm	0.14	3.6	Cloudy	
Knoxville, Tennessee	28.85	732.8	29.86	758.4	46	7.8	100	NE	4	1.8			Fog		Calm	0.07	1.8	Dense fog	
La Crosse, Wisconsin	29.18	741.1	29.96	761.0	19	— 7.2	69	S	7	3.1		2ck	2s	W	Calm	0	0	Fair	
La Mesilla, New Mexico	26.14	663.9	30.29	769.1	24	— 4.4	74	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.58	751.3	29.94	760.5	37	2.8	81	N	1	0.4		0	0			0	0	Clear	
Leavenworth, Kansas	29.00	736.6	29.87	758.7	33	0.6	89	Calm	0	0			10s			0.01	0.3	Cloudy	
Lewiston, Idaho	29.98	761.5	30.70	779.8	24	— 4.4	72	E	3	1.3		0	5s		E	0	0	Fair	
Little Rock, Arkansas	29.49	749.0	29.81	757.2	38	3.3	91	NW	2	0.9			10s		Calm	0.72	18.3	Cloudy	
Los Angeles, California	29.83	757.7	30.18	766 6	43	6.1	83	NW	3	1.3		0	4s		Calm	0	0	Fair	
Louisville, Kentucky	29.29	744.0	29.86	758.4	36	2.2	100	NE	5	2.2			Fog		Calm	0.04	1.0	Light rain	
Lynchburg, Virginia	29.40	746.7	30.10	764.5	35	1.7	100	Calm	0	0			10n;fg		Calm	0.16	4.1	Light rain	
Madison, Wisconsin	28.91	734.3	29.96	761.0	15	— 9.4	82	W	10	4.5		0	0			0	0	Clear	
Marquette, Michigan	29.13	739.9	29.87	758.7	27	— 2.8	76	E	3	1.3			10s		Calm	0	0	Cloudy	
Mason, Texas	28.28	718.3	30.09	764.3	38	3.3	72	W	14	6.3		0	0			0	0	Clear	
Memphis, Tennessee	29.40	746.7	29.75	755.6	34	1.1	100	NW	2	0.9			10n		Calm	1.60	40.6	Light rain	

STATIONS.	Barometer. Corrected for instrumental error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.17	740.9	29.94	760.5	20	— 6.7	70	SW	1	0.4	.....	1ck	2s	Calm	Calm	0	0	Fair	
Mobile, Alabama	29.67	753.6	29.74	755.4	61	16.1	94	S	19	8.5	.....	.....	10n;fg	.....	Calm	2.75	69.9	Heavy rain	
Montgomery, Alabama	29.56	750.8	29.78	756.4	63	17.2	94	SE	6	2.7	.....	.....	10n	.....	Calm	0.47	11.9	Light rain	
Morgantown, W. Virginia	28.98	736.1	29.99	761.7	38	3.3	72	NE	1	0.4	.....	.....	10s;fg	.....	Calm	Inap.	Inap.	Cloudy	
Moorhead, Minnesota	29.10	739.1	30.11	764.8	25	— 3.9	94	N	20	8.9	.....	.....	10s	.....	N	0	0	Cloudy	
Mt. Washington, N. H	23.46	595.9	29.82	757.4	6	—14.4	52	NW	56	25.0	.....	0	0	.....	.....	0	0	Clear	
Nashville, Tennessee	29.34	745.2	29.77	756.1	42	5.6	91	N	1	0.4	.....	.....	10n;fg	.....	Calm	0.22	5.6	Light rain	
New Haven, Connecticut	30.00	762.0	30.13	765.3	18	— 7.8	68	N	8	3.6	.....	0	0	.....	.....	Inap.	Inap.	Clear	
New London, Connecticut	30.07	763.8	30.12	765.0	21	— 6.1	57	NW	4	1.8	.....	0	0	.....	.....	0.01	0.3	Clear	
New Orleans, Louisiana	29.79	756.7	29.85	758.2	55	12.8	87	W	14	6.3	.....	.....	10s	.....	W	1.66	42.2	Cloudy	
Newport, Rhode Island	30.03	762.7	30.08	764.0	25	— 3.9	75	N	9	4.0	.....	0	0	.....	.....	0.03	0.8	Clear	
New River, N. Carolina	.....	.....	.....	.....	38	3.3	100	NE	.....	.....	4	.....	10n	.....	Calm	.....	.....	Light rain	
New Shoreham, Rhode I'd	30.06	763.5	30.09	764.3	27	— 2.8	76	N	7	3.1	.....	0	0	.....	.....	0	0	Clear	
New York, New York	29.96	761.0	30.15	765.8	27	— 2.8	100	NW	3	1.3	.....	0	2s;fg	.....	Calm	0	0	Fair	
Norfolk, Virginia	30.06	763.5	30.12	765.0	34	1.1	79	SE	4	1.8	.....	.....	Fog	.....	Calm	0.25	6.3	Dense fog	
North Platte, Nebraska	27.20	690.9	29.89	759.2	28	— 2.2	78	N	28	12.5	.....	.....	10s	.....	Calm	0	0	Cloudy	
Olympia, Washington T'y	30.55	776.0	30.59	777.0	41.0	5.0	82	NE	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Omaha, Nebraska	28.83	732.3	29.99	761.7	22	— 5.6	86	N	16	7.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Oswego, New York	29.80	756.9	30.14	765.5	22	— 5.6	72	S	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Pensacola, Florida	29.77	756.1	29.80	756.9	64	17.8	94	SE	16	7.2	.....	.....	10n	.....	S	0.21	5.3	Light rain	
Philadelphia, Pa	30.09	764.3	30.15	765.8	23	— 5.0	86	N	6	2.7	.....	0	Fog	.....	Calm	Inap.	Inap.	Clear	
Phœnix, Arizona	29.00	736.6	30.93	785.6	31	— 0.6	69	E	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.55	445.8	29.76	755.9	5	—15.0	75	SW	9	4.0	.....	.....	Fog	.....	SW	0	0	Dense fog	
Pilot Point, Texas	29.12	739.6	30.01	762.2	33	0.6	100	W	4	1.8	.....	.....	10s	.....	Calm	0.19	4.8	Cloudy	
Ploche, Nevada	24.75	613.4	29.92	760.0	28	— 3.3	63	N	10	4.5	.....	8c	0	W	.....	0	0	Fair	
Pittsburg, Pennsylvania	29.18	741.1	30.02	762.5	36	2.2	80	E	4	1.8	.....	.....	10s	.....	NE	0	0	Cloudy	
Port Huron, Michigan	29.38	746.2	30.11	764.8	6	—14.4	76	S	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Portland, Maine	29.99	761.7	30.04	763.0	18	— 7.8	68	W	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Portland, Oregon	30.50	774.7	30.58	776.7	35	1.7	75	N	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Portsmouth, N. Carolina	.....	.....	.....	.....	39	3.9	82	N	22	9.8	.....	.....	10s	.....	Calm	0.11	2.8	Cloudy	
Prescott, Arizona	24.80	629.9	30 16	766.1	27	— 2.8	76	Calm	0	0	.....	2c	0	W	.....	0	0	Clear	
Punta Rassa, Florida	29.97	761.2	29.98	761.5	67	19.4	84	SE	8	3.6	.....	5cs	0	.....	.....	0	0	Fair	
Red Bluff, California	29.98	761 5	30.34	770.6	42.5	5.8	83	N	6	2.7	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Rio Grande City, Texas	29.87	758.7	30.10	764.5	34	1.1	70	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Rochester, New York	29.47	748.5	30.13	765.3	20	— 6.7	70	SW	3	1.3	.....	5k	4s	SW	W	0	0	Cloudy	
Roseburg, Oregon	29.89	759.2	30.49	774.4	43	6.1	92	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Sacramento, California	30.22	767.6	30.30	769.6	45	7.2	92	N	2	0.9	.....	0	2s	.....	Calm	0.05	1.3	Clear	
St. Louis, Missouri	29.28	743.7	29.88	758.9	30	— 1.1	100	N	7	3.1	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
St. Paul, Minnesota	29.04	737.6	29.90	759.4	29	— 1.7	89	Calm	0	0	.....	.....	10s	.....	Calm	0.06	1.5	Cloudy	
Salt Lake City, Utah	25.92	658.4	30.25	768.3	30	— 1.1	57	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
San Antonio, Texas	29.30	744.2	30.04	763.0	31	— 0.6	89	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
San Diego, California	30.16	766.1	30.23	767.8	48	8.9	85	E	2	0.9	.....	8c	0	W	.....	0	0	Fair	
Sandusky, Ohio	29.34	745.2	30.04	763.0	30	— 1.1	78	E	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Sandy Hook, New Jersey	30.10	764.5	30.14	765.5	24	— 4.4	74	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
San Francisco, California	30.23	767.8	30.30	769.6	51	10.6	79	N	3	1.3	.....	1k	0	NW	.....	0.05	1.3	Clear	
Santa Fé, New Mexico	23.18	588.8	29.72	754.9	26	— 3.3	63	Calm	0	0	.....	10cs	0	Calm	.....	0	0	Cloudy	
Savannah, Georgia	29.90	759.4	30.00	762.0	51	10.6	93	E	3	1.3	.....	.....	Fog	.....	Calm	0	0	Dense fog	
Shreveport, Louisiana	29.64	752.8	29.90	759.4	35	1.7	90	W	6	2.7	.....	.....	10s	.....	Calm	0.48	12.2	Cloudy	
Silver City, New Mexico	24.26	616.2	30.66	778.7	31	— 0.6	58	N	1	0.4	.....	0	2s	.....	Calm	0	0	Clear	
Smithville, North Carolina	30.00	762.0	30.04	763.0	44	6.7	100	N	10	4.5	.....	.....	10n	.....	Calm	0.75	19.1	Light rain	
Socorro, New Mexico	25.28	642.1	29.34	745.2	19	— 7.2	54	NE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.23	742.4	29.92	760.0	32	0.0	89	N	8	3.6	.....	.....	10s	.....	.....	0	0	Threatening	
Springfield, Massachusetts	29.99	761.7	30.14	765.5	4	—15.6	74	W	2	0.9	.....	0	0	.....	.....	0.02	0.5	Clear	
Stockton, Texas	26.92	683.8	29.92	760 0	31	— 0.6	69	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.27	743.4	30.13	765.3	12	—11.1	80	NW	14	6.3	.....	0	0	.....	.....	0	0	Clear	
Thatcher's Island, Mass	30.01	762.2	30.07	763.8	22	— 5.6	72	NW	11	4.9	.....	0	0	.....	.....	0	0	Clear	
Toledo, Ohio	29.33	745.0	30.05	763.5	24	— 4.4	87	N	8	3.6	.....	.....	Fog	.....	Calm	0	0	Dense fog	
Tucson, Arizona	27.65	702.3	30.20	767.1	33	0.6	61	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	30.47	773.9	31.04	788.4	13	—10.6	100	Calm	0	0	.....	.....	Fog	.....	Calm	0	0	Dense fog	
Uvalde, Texas	28.90	735.6	29.84	757.9	35	1.7	45	W	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Vicksburg, Mississippi	29.58	751.3	29.85	758.2	42	5.6	91	W	12	5.4	.....	.....	10n	.....	Calm	1.32	33.5	Light rain	
Visalia, California	29.88	758.9	30.27	768.8	41	5.0	100	SE	3	1.3	.....	.....	Fog	.....	Calm	0	0	Dense fog	
Washington, D. C	30.02	762.5	30.14	765.5	23	— 5.0	100	NW	1	0.4	.....	.....	Fog	.....	Calm	0	0	Dense fog	
Wickenburg, Arizona	.....	.....	.....	.....	32	0.0	69	W	.....	.....	1	2c	5s	Calm	Calm	0	0	Cloudy	
Wilmington, N. Carolina	30.00	762.0	30.05	763.3	43	6.1	92	E	7	3.1	.....	.....	10n	.....	Calm	0.84	21.3	Light rain	
Winnemucca, Nevada	25.94	658.9	30.30	769.6	29	— 1.7	78	NE	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass	30.03	762.7	30.07	763.8	22	— 5.6	72	N	8	3.6	.....	0	0	.....	.....	0.02	0.5	Clear	
Yankton, Dakota	28.78	731.0	30.15	765.8	26	— 3.3	75	N	21	9.4	.....	.....	10s	.....	N	0	0	Cloudy	
Yuma, Arizona	29.98	761.5	30.13	765.3	41	5.0	57	NE	2	0.9	.....	2c	0	Calm	.....	0	0	Fair	
Sub-Series.																			
Bogota, U. S. Columbia	21.95	557.5	.....	.....	51.0	10.6	76	Calm	0	0	.....	5cs;ck	0	.....	.....	0	0	Fair	Thomas Herran.
Buff Bay Town, Jam ica‡	29.78	756.4	30.09	764.3	65	18.3	88	E	.....	.....	.....	.....	2k	.....	.....	.....	.....	.....	
Havana, Cuba, W. I	29.96	761.0	30.01	762.2	71	21.7	79	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	Charles Hasselbrink.
Jakobshavn, Greenland	30.45	773.4	30.51	774.9	29.5	— 1.4	.....	W	.....	.....	2	.....	8	.....	.....	0	0	.....	
Kingston, Jamaica, W. I	29.98	761.5	29.99	761.7	68.5	20.3	82	N	1	0.4	.....	0	0	.....	.....	0	0	Fine	Maxwell Hall.
Navassa, W. I	29.92	760.0	30.00	762.0	76	24.4	73	NE	10.2	4.6	.....	5k	5s	E	NE	0	0	Cloudy	F. M. Everett.
Paramaribo, S. A	29.99	761.7	29.99	761.7	76	24.4	91	E	.....	.....	4	5ck	5k	E	.....	0.830	21.08	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.95	760.7	79	26.1	85	S	.....	.....	1	.....	10ks	.....	S	0 17	4.3	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	72	22	.....	NE	.....	.....	2	0	3ks	.....	NE	0	0	.....	Earl Flint.
Santiago de Cuba, W. I	29.98	761.5	30.01	762.2	73	22.8	75	NW	.....	.....	.....	0	0	.....	.....	0	0	.....	Robert Mason.
St. Thomas, W. I	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	30.48	774.3	30.54	775.7	14.2	— 9.9	.....	S	.....	.....	6	.....	4	.....	.....	0.157	4.0	.....	
York Factory, B. A	30.22	767.6	30.28	769.1	—33.0	—36.1	.....	S	12	5.4	.....	3k	2s	W	SW	0.04	1.0	Cloudy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandra, N. 35° 51′, E. 14° 31′	30.04	763.0	66	18.9	68	W			3-4		3	WSW						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. S. Hope.
H. M. S Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. J. F. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.95	760.7	63	17.2		SW			2 4		9	SW						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 32′, E. 81° 22′	29.87	758.7	79	26.1		ENE			4		9	S				4	ENE	Raining	Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.87	758.7	81	27.2	70	NW			4		1							Squally	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 11° 45″ W. 77° 50′	29.93	760.2	67.5	19.7	95	ESE			1		10					2	S	Foggy	Comm. E. E. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	29.95	760.7	63.5	17.5	88	WSW			6		2	SW				4	WSW	D. clouds	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 29° 00′, E. 121° 59′	30.11	764.8	47.5	8.6	74	SSE			3		0							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 18° 40′, E. 71° 45′	29.94	760.5	80	26.7	74	N			1-2		3	NE				2	N	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 38° 42′, W. 9° 06′	30.12	765.0	54	12.2	87	E			1		7	W						D. clouds	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, St. Kittis, Windward Id.	29.97	761.2	77	25.0	77	NE			3		2							D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 56′	29.78	756.4	78	25.6	69	ESE			1		0					1	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis, N. 16° 00′, E 41° 14′	30.06	763.5	80	26.7	74	SSE			1		0							Blue sky	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane,
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	30.13	765.2	61.5	16.4	85	N			2–3		0							Blue sky	Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollar.

GERMAN NAVAL SERIES.

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

PORTUGUESE NAVAL SERIES.

Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Rio Lima, Porto Praya, C. Verd Id's.	30.04	763.1	80.8	27.1	73	NNE			2		6			0	0	1	SE	Blue sky	S. C. da Silva Costa, Cond't.
Sado, Cabinda, Lower Guinea	29.94	760.4	83.7	28.7	77	WSW			3		5			0	0	3	WSW	D. clouds	G. A. de Brito Capello, Cond t.
Tamega																			

SWEDISH NAVAL SERIES.

Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.

H. M. Frigate Vanadis, N. 34° 43′, E. 21° 12′	30.01	762.2	63.7	17.6	81	WNW			4		0							Blue sky	

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	29.85	758.2	65	18.3	89	S	10	4.5			10		S	0.23	3.8			Cloudy	
N. Yard, Portsmouth, N. H.	30.05	763.3	14	—10.0	100	NW	3	1.3			0			0	0			Clear.	
Naval Hospital, Yokohama, Japan	29.53	750.0	36.5	2.5	55	WSW			3		0			0.80	20.3			Clear	
Adams, Ancon, Peru	30.07	763.8	69	20.6	95	Calm			0		10					Sm'h		Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.24	768.1	45	7.2	84	Calm			0		0			0	0			Clear	
Alert, Hong-Kong, China *.	30.06	763.8	64	17.5	43	Calm			0		0			0	0	Sm'h		Hazy	
Alliance, N. 28° 40′, W. 85° 17′	29.92	760.0	72	22.2	90	SSE			2		8		SE	0	0	Sm'h		Cloudy	
Ashuelot, Tientsin, China	30.16	766.1	17	— 8.3	100	NE			2		0							Clear.	
Colorado, New York, N. Y.	30.21	767.3	25	— 3.9	87	NE	2	0.9			0			0	0			Clear	
Constitution, N. Yard, League I'd., Pa			13	—10.6		Calm	0	0			10							Foggy	
Franklin, Off N. Yard, Norfolk, Va	30.09	764.3	36	2.2	61	ENE	7.2	3.2			10		ENE	0	0			Cloudy.	
Galena, Villafranca, France	29.64	752.8	50	10.0	72	WSW			4		0					Sm'h		Clear.	
Independence, N. Yard, Mare I'd, Cal.	30.28	769.1	41	5.0	91	E	1.2	0.5			0			0	0			Clear.	
Jamestown, Sitka, Alaska *	30.10	764.5	48	8.9	56	E			6		8		SE	0.49	12.4			Squally	
Kearsarge, Port Royal, Jamaica, W.I.	29.99	761.7	72	22.2	85	N			2		1					Sm'h		Fair.	
Lackawanna, Ancon, Peru †.	30.07	763.8	68	20.0	95	S			0-1		10		S	0	0			Cloudy	
Marion, Straits of Magellan	29.88	758.9	53	11.7	61	WSW			4		5		WSW	0	0	Sm'h		Fair.	
Michigan, Erie, Pennsylvania	30.09	764.3	18	— 7.8		NE			1		10							Cloudy	
Minnesota, New York, N. Y.	30.15	765.8	28	— 2.2		NNE			1		2							Hazy.	
Monocacy, Shanghai, China	30.05	763.3	42	5.6	58	SSE			2		0							Clear.	
New Hampshire, Port Royal, S. C.	30.00	762.0	54	12.2	87	NE	5	2.2			10		Calm	0	0			Overcast	
Nipsic, Villafranca, France	29.70	754.4	50	10.0	26	WNW			6		2		W			Long	SSW	D. clouds	
Onward, Chimbote Bay, Peru †	29.87	758.7	69	20.6	85	S			4		2		NNW			Long	N;W	Clear	
Palos, Shanghai, China	30.13	765.3	42	5.6	83	SSE			1		0							Clear.	
Passaic, Washington, D. C.	30.21	767 3	25	— 3.9	75	N			1		8		N					Foggy	
Pensacola, Mazatlan, Mexico	30.04	763.0	62	16.7	72	NNW			2		0					Long	W	Clear.	
Portsmouth, Washington, D. C.	30.14	765.5	23	— 5.0	100	Calm			0		10							Foggy	
Powhatan, New York, N. Y.	30.15	765.8	24	— 4.4	87	NNE			2									Hazy	
Quinnebaug, Tripoli, Tripoli	30.08	764.0	69	20.6	80	ENE			1		1					Sm'h			
Richmond, N. 23° 45′, E. 117° 46′	30.21	767.3	59	15.0	65	SE			2		0			0	0			Clear	
Saratoga, Baltimore, Md	30.12	765.0	21	— 6.1	100	NW			1		2		Calm	Mod	erate			Foggy	
Shenandoah, Montevideo, Uruguay *	30.00	762.0	61	16.1	61	SSW			5		5		SSW			R'gh	SSW	Fair	
St. Louis, League Island, Pa	30.19	766.8	9	—12.8	?	Calm	0	0			0			0	0			Foggy	
Swatara, Kobe, Japan †.	29.86	758.4	35	1.7	70	W			3		0					Mod.	W	Blue sky	
Tennessee, N. 16° 54′, W. 70° 16′	30.03	762.7	77	25.0	69	ENE	17	7.6			2		E	0	0	Sm'h		Clear.	
Trenton, Villafranca, France *	29.68	753.9	51	10.6	26	SW			2-6		2			1 h'r	light	Sm'h		Squally	
Vandalia, N. 15° 56′, W. 57° 14′	29.99	761.7	76	24.4	86	ESE			3		8		ESE			Long	NE	Fair	
Wabash, Boston, Massachusetts	30.08	764.0	18	— 7.8	68	NW	4	1.8			0			0	0			Hazy	
Wachusetts, Panama, Panama *.	29.53	750.0	76	24.4	91	NW			3		2		N	0	0	Sm'h		Fair.	
Wyoming, Naples, Italy	29.75	755.6	57	13.9	63	SW			4		5		WSW			Sm'h		Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡ S. 34° 57′, E. 19° 46′	30.10	764.5	66.8	19.3	70	SSE			6		1							Blue sky	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 39° 55′, W. 16° 54′	30.02	762.5	57.5	14.2	70	SE			4		5							D. clouds	Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
British Merchant, ‡ S. 39° 17′, E. 142° 29′	30.11	764.8	58	14.4	84	WSW			6		4							Misty	Capt. E. J. Molony.
Chin Yang, ‡ N. 29° 08, W. 20° 26′	30.05	763.3	70	21.1	80	SSW			5		7							D. clouds	Capt. N. Youlden.
S. S. Cipero, N. 27° 15′, W. 43° 35′			65	18.3		W			4		7					4	W	Showery	Capt. W. N. Lafley.
City of Agra, ‡ S. 53° 05′, W. 57° 00′	29.16	740.7	43.3	6.3	83	WSW			5		7							D. clouds	Capt. T. Young.
Barque Commewyne ‡																			Capt. W. Scott.
Barque Coppename, N. 23° 05′, W. 23° 25′	30.11	764.8	72.3	22.4	73	ESE			3		8							D. clouds	Capt. Jas. Buchan.
Denbighshire																			Capt. H. Y. Murdoch.
Barque Dochra, ‡ S. 31° 54′, E. 34° 36′	30.02	762.5	76	24.4	86	ENE			3		10							Drizzling	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 31° 40′, W. 22° 54′	29.89	759.2	68	20.0	96	SSW			6	c	4k	NW						Misty	Capt. H. W. Dyke.
Barque Meriola																			Capt E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 36° 59′, E. 0° 50′	30.07	763.8	58.5	14.7	88	W			4		10							Overcast	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
Moravian																			
S. S. Peruvian																			Capt. W. H. Smith, R.N.R.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia, N. 49° 36′, W. 26° 13′	30.05	763.3	50	10.0	86	ENE			6		2		NE	0	0	R'gh	NE	Fair	Capt. W. H. P. Hains.
WHITE STAR LINE. *Jemay, Imrie & Co.*																			
S. S. Adriatic, N. 46° 29′, W. 47° 00′ †	30.04	763.0	32	0.0		N			5		2		N			Cross	N;ENE	Misty	Capt. J. W. Jennings.
S. S. Britanic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, N. 43° 52′, W. 43° 34′ †	29.86	758.4	55	12.8		ESE			6		10?		E	0	0	H'vy	SE	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Undütsch.
S. S. Hermann																			Capt. H. Maur.
S. S. Köln, N. 49° 34′, W. 22° 59′	30.20	767.1	48.2	9.0		ENE			6		7		ENE	Hea	vy	Cross	ENE	Fair	
S. S. Leipzig ‡																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolph Fredholm, ‡ S. 12° 24′, W. 31° 31′ *†	30.16	766.0	80.6	27.	81	ENE.			4		3							Blue sky	Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Sköterbraud

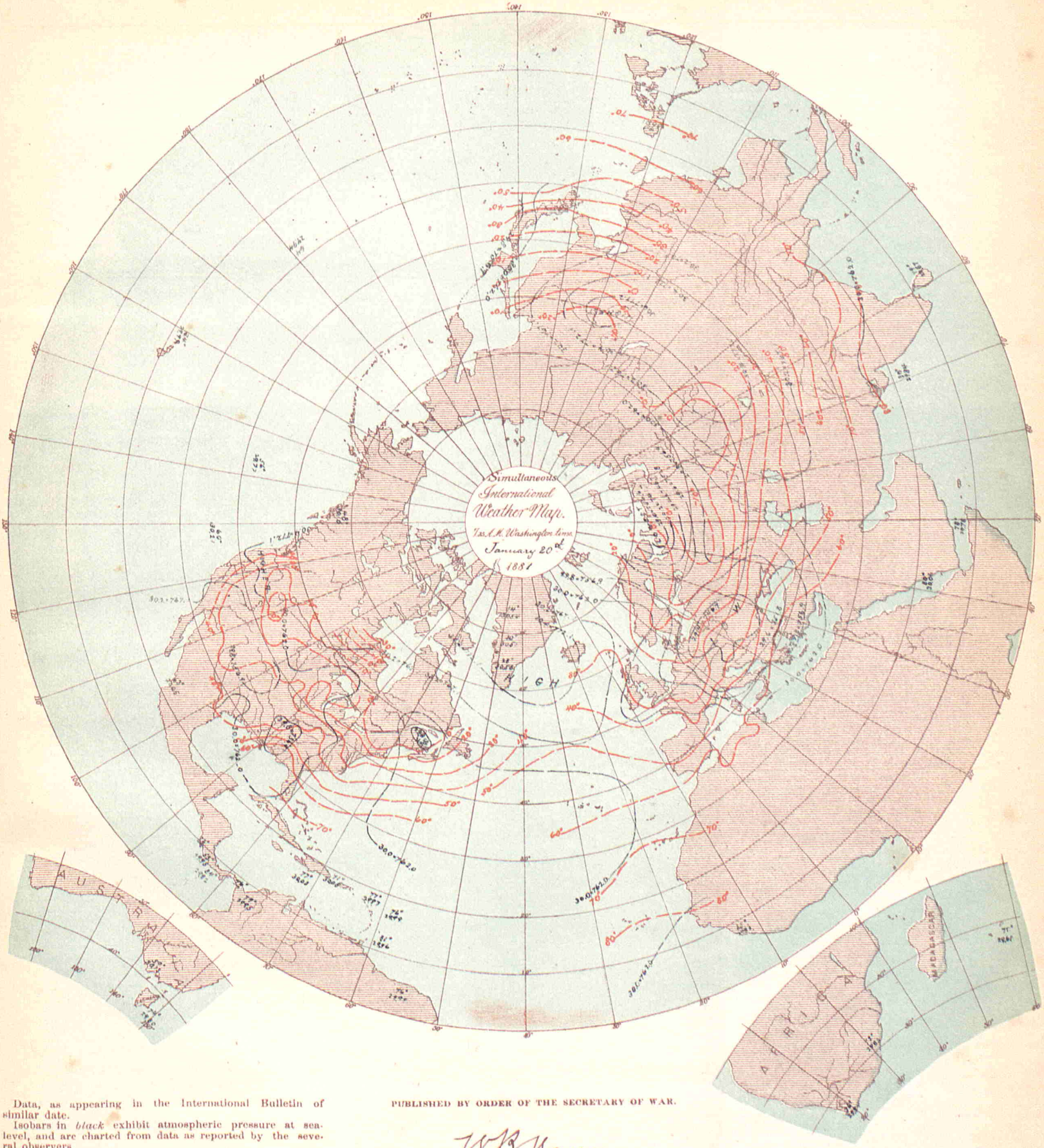
UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. Philadelphia, Pa	30.09	764.3	20	— 6.7	85	Calm			0		10							Hazy	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 50° 27′, W. 29° 34′ †	30.20	767.1	47	8.3	92	ENE			6		8		E	Light		High	NE	Cloudy	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 51° 29′, W. 9° 00′ *†	29.96	761.0	35	1.7	90	N			3		5		N	Light		Sm'll	NE	Fair	Wm. Shakford, 1st Off'r.
S. S. Pennsylvania, Liverpool, England †	29.73	755.1	26	— 3.3		Calm			0		Fog			0	0			Foggy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, Mazatlan, Mexico †	29.98	761.5	64	17.8	78	NNW			2		0			0	0	Sm'll	SE	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 31° 55′, E. 135° 14′ †	30.01	762.2	57	13.9	63	WNW			5		2		NW	0	0	High	WNW	Clear	Capt. H. Davison.
S. S. Gaelic, San Francisco, Cal. *†	30.46	773.7	52	11.1	86	W			2		5		E					Fair	Capt. W. H. Kidley.
S. S. Oceanic, N. 44° 06′, W. 141° 00′	29.77	756.1	56	13.3	87	S			6		1		S	0.40	10.2	Mod.	Con.	Fine	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, N. 43° 30′, W. 124° 28′ †	30.40	772.1	50.0	10.0	82	SE			1		0					Sm'h	SW	Pleasant	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, N. 33° 53′, W. 118° 44′ †	30.14	765.5	54	12.2	87	E			3		8		E			Mod.	W	Fair	Capt. J. N. Ingalls.
S. S. Idaho, San Francisco, Cal †	30.29	769.4	50	10.0	79	NW			2		2		NW					Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, San Francisco, Cal †	30.48	774.2	50	10.0	86	N			1		2		NW			Sm'h		Clear	Thos. Wallace.
S. S. State of California, San Francisco, Cal †	30.31	769.9	50	10.0	93	SE			2		0							Clear	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal *†	30.24	768.0	49	9.4	85	NNW			1		2							Fair	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W	29.84	757.9	86	30.0	92	SE			4		10		SE	Rain				Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 34° 45′, W. 120° 48′ †	30.31	769.9	57	13.9	69	E			2		2		S			Sm'h	W	Clear	Capt. D. S. Austin.
S. S. City of Peking, N. 29° 57′, E. 177° 58′ †	29.94	760.5	64	17.8	83	SW			6		8		W	0	0	Mod.	WNW	Cloudy	Capt. G. G. Berry.
S. S. City of Sidney, Honolulu, Sandwich I'd †	29.99	761.7	74	23.3	72	NE			2		2		NE	0	0	Sm'h		Clear	Capt. H. C. Dearborn.
S. S. City of Tokio, Yokohama, Japan †	29.74	755.4	33	0.6	70	NW			2		8		NW	0	0			Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 36° 42′, W. 122° 15′ †	30.25	768.3	56	13.3	63	N			3		10		NNW	0	0	Mod.	NW	Cloudy	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, N. 7° 07′, W. 81° 00′ †	29.82	757.4	84	28.9	75	NE			5		0			0	0	Sm'll	SE	Clear	
S. S. Zealandia, N. 35° 19′, W. 129° 37′	30.21	767.3	60	15.6	94	WSW			2		10		W			H'vy	W	Overcast	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland, ‡ N. 49° 50′, W. 9° 10′ †	29.86	758.4	45	7.2	76	NW			6		8		E			Mod.	NE	Fair	Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland, ‡ N. 44° 26′, W. 51° 39′	29.97	761.2	32	0.0	90	NNW			3		8		NNE	0	0	Sm'h	WNW	Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 49° 45′, W. 26° 20′	30.25	768.3				NE			6		5		NE	0	0	Long	NE	Fair	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby Bentley, N. 39° 12′, E. 73° 49′ †	30.09	764.3	40	4.4		NW			2		0			0	0	Long	E	Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, Brunswick, Ga	29.98	761.5	56	13.3	81	Calm	0	0			Fog			0	0			Foggy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, ‡ Ponce, Porto Rico †	30.26	768.6	77	25.0		NE			2		2			Showers		Sm'h		Fair	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va. †	30.14	765.5	35	1.7	80	NE	1	0.4			10n			0	0			Cloudy	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Spain †	30.10	764.5	59	15.0	94	Calm			0		10		W	Moderate				Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 21, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.15	765.9	67.1	19.5	83	S			1		2			0	0	Fair	Dr. Ollive.
Nemours			30.11	764.8	64.4	18.0	69	E			0		0			0	0	Clear.	Raynard.
Algie s			30.16	766.0	56.8	13.8	76	ENE			3		9			0	0	Covered	Nicolas.
La Calle			30.14	765.6	58.3	14.6	91	W			2		4			0	0	Cloudy	Fonfréde.
Tunis			30.12	765.1															Jacques.
Sfax			30.22	767.6															Gau.
Said.a			30.14	765.5	65.3	18.5	46	E			3		1			0	0	Very fair	Dumas.
Tebessa			29.97	751.3	50.4	10.2	65	W			2		5			0	0	Cloudy	Watrin.
Gerville																			Lonchamp.
Laghouat			30.24	768.0	59.4	15.2	54	SW			4		0			0	0	Clear.	Herbin.
Biskra			30.20	767.0	65.8	18.8	68	E			1		0			0	0	Clear.	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.95	760.7	30.04	763.0	56.8	13.8	74	SSE	12	5.4			2			0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.80	756.9	75	23.9		SW			3		5k			0.02	0.5		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.48	748.8	30.06	763.5	30.2	— 1.0	81	S			2		2			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.02	737.1	29.84	758.0	15.4	— 9.2	97	WNW	15.4	6.9			10			0.016	0.4		Dr. Wiersbicki.
Eperies	28.78	730.9	29.71	754.5	23.7	— 4.6	65	NW			3		10			0	0		Julius Mikolik.
Gratz‡	28.69	728.7	30.02	762.4	25.9	— 3.4	65	N			5		0			0	0		Andreas Rospini.
Hermannstadt	28.22	716.7	29.72	755.0	24.1	— 4.4	88	NW			4		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.72	729.5	30.19	766.7	16.0	— 8.9	97	WNW			3		4			0	0		The Staff.
Lemberg	28.62	727.0	29.67	753.5	22.3	— 5.4	76	NW			2		10			0.024	0.6		Dr. T. Stanecki.
Polt	29.88	758.9	30.00	761.9	37.6	3.1	28	WNW			2		2			0	0		I. R. Hydrographic Office
Szathmar	29.25	743.0	29.70	754.4	27.0	— 2.8	92	W			3		10			0.610	15.5		Beicht Peter, S. J.
Szegedin	29.60	751.7	29.89	759.3	23.7	— 4.6	79	NW			1		3			0	0		Karl Stancel.
Trieste	29.94	760.5	30.04	763.1	36.0	2.2	65	Calm			0		0			0	0	Clear.	P. Busin.
Vienna	29.22	742.1	29.98	761.5	21.2	— 6.0	64	W			6		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	30.05	763.3	30.27	768.9	17.8	— 7.9	98	Calm			0		0			0	0		Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck	30.15	765.8	30.28	769.0	15.1	— 9.4	100	N			2		0			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 27, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.32	770.1	30.43	772.9	20.0	— 6.7	70	NW	12	5.4			2			0	0	Blue sky	W. Boswell.
Armagh, Observatory	30.14	765.5	30.39	771.9	25.1	— 3.8	87	NE	7	3.1			5					D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.32	770.1	27.1	— 2.7	76	ENE	11	4.9			3					Foggy	John Hartnup.
Bolton, Sharples	29.76	755.9	30.33	770.4	25.0	— 3.9	100	ENE	10	4.5			2					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.89	759.2	30.28	769.1	25.5	— 3.6	88	NE			1		7			0.03	0.8	D. clouds	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	30.00	762.0	30.03	762.7	80	26.7	70	NE			2		3					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			30.25	768.3	19.4	— 7.0	84	E			0.4		1					Blue sky	John McLaren.
Chatham, School M. E.	30.11	764.8	30.25	768.3	26.2	— 3.2	90	E			1		1					D. clouds	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.77	756.1	30.00	762.0	30.9	— 0.6	96	E			7		10					Snowing	The Staff.
Fort Napier, Natal	27.65	702.3	29.87	758.7	61.1	16.2	95	SE			1		10					Overcast	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	85	29.4	92	NE			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			30.26	768.6	25	— 3.9	100	N			2		2					Blue sky	J. O'Donaghadue.
Gibraltar, Mediterranean	29.95	760.7	30.01	762.2	60.3	15.7	95	SW			4		8					Gloomy	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.20	767.1	30.41	772.4	26.0	— 3.3	58	NE			2		6					D. clouds	D. G. MacLean.
Greenwich, Royal Obs'y	30.06	763.5	30.24	768.1	28.8	— 1.8	78	E			2		0					Blue sky	The Staff.
Guernsey	29.73	755.1	29.96	761.0	34	1.1	84	NE			5		6					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.21	767.3	30.25	768.3	28.0	— 2.2	59	ENE	20	8.9			0					Misty	The Met'g'l Office.
Leicester, Museum	30.03	762.7	30.30	769.6	22.0	— 5.6	100	NE			2		10					Misty	J. E. Carryer.
Malta, Mediterranean	30.04	763.0	30.12	765.0	60.0	15.6	50	NW			2		2					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			29.92	760.0	75.0	23.9	81	SW			3		8					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.74	755.4	30.30	769.6	22.0	— 5.6	95	NNE			3		0					Blue sky	Robert Pate.
Oxford, Radcliffe Obs'y	30.00	762.0	30.26	768.6	26.1	— 3.3	97	NE			1		0					Blue sky	The Staff.
Plymouth	29.95	760.7	30.03	762.7	28.8	— 1.8	92	ENE			5		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.41	772.4	33.1	0.6	100	NW	15	6.7			8					D. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.62	752.3	29.68	753.9	51.2	10.7	71	WSW			3		10			Blank		Gloomy	Serg't W. H. Lyne.
Sheffield			30.33	770.4	26.7	— 2.9	98	ENE			1		7			0	0	Foggy	W. F. Cooper.
Silloth Rectory	30.36	771.1	30.39	771.9	24.0	— 4.4	42	Calm			0		0			0	0	Blue sky	Rev. F. Redford, A. M.
Stonyhurst, Observatory			30.33	770.4	24.3	— 4.3	70	E	1	0.4			0					Blue sky	Rev. S. J. Perry.
Strathfield Turgiss	29.98	761.5	30.21	767.3	25.4	— 3.7	99	E			1		0					Blue sky	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution			30.04	763.0	32	0.0	47	NE			6		6					D. clouds	W. Newcombe.
Valencia, Observatory	30.17	766.3	30.20	767.1	29.3	— 1.5	72	NE	22	9.8			4					Misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	30.16	766.1	30.20	767.1	— 8.5	—22.5		Calm	0	0		0	0			0	0	Clear	Hon. J. Ferguson.
Chatham, N. B.*	30.05	763.3	30.12	765.0	— 8	—22.2	96	Calm	0	0		0	0			0	0	Clear	G. A. Blair.
Charlottetown, P. E. Island	30.02	762.5	30.06	763.5	8	—13.3	100	NW	6	2.7		0	0			0	0	Clear	H. J. Cundall, C. E.
Chicontime, Quebec					— 7.7	—22.1		NW			1	0	1ks			0	0	Clear	Rev. V. A. Huart.
Cornwall, Ontario	29.69	754.1	29.90	759.4	12.3	—10.9	86	E			3		10s			0	0	Cloudy	James Smith, M. A.
Dalhousie, N. B	30.10	764.5	30.13	765.3	— 5.5	—20.8		W			1	0	0			0	0	Clear	H. A. Johnson.
Father Point, Quebec*	30.12	765.0	30.14	765.5	—11	—23.9	67	SW	3	1.3		0	2n		Calm	0	0	Clear	J. McWilliams.
Fredericton, N. B	30.07	763.8	30.14	765.5	— 9.9	—23.3	100	W	2	0.9		1ck	0	W		0	0	Clear	Prof. Harrison.
Fort Garry, Manitoba*	29.57	751.1	30.49	774.4	6	—14.4	100	N	16	7.2		5k	5n	N	N	0	0	Cloudy	James Stewart.
Granton, Ontario	28.42	721.9	29.57	751.1	25.2	— 3.8	97	NE			3		10n			0	0	Cloudy	James Grant.
Halifax, N. S.*	29.93	760.2	30.07	763.8	14	—10.0	96	NW	2	0.9		5c	0	NW		0	0	Fair	A. Allison.
Hamilton, Ontario	29.21	741.9	29.62	752.3	29.7	— 1.3	93	NE			4	10k	0			0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.42	747.3	29.78	756.4	19	— 7.2	97	NE	12	5.4		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S	29.98	761.5	30.02	762.5	14.0	—10.0	93	NW	1	0.4		6k	0	NW		0	0	Fair	C. H. Rigby.
Montreal, Quebec*	29.77	756.1	29.99	761.7	11	—11.7	80	NE	18	8.0		Haze	2s			0	0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.04	737.6	29.76	755.9	26	— 3.3	82	E	12	5.4			10n		NE	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	28.97	735.8	29.77	756.1	22.4	— 5.3	50	W			2		9ks			0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	28.82	732.0	29.53	750.0	28	— 2.2	100	NE	16	7.2			10n			0.10	2.5	Light rain	H. Morgan.
Port Stanley, Ontario	28.85	732.8	29.51	749.5	31	— 0.6	93	E	18	8.0			10n		E	0	0	Light snow	M. Payne.
Quebec, Quebec*	29.74	755.4	30.09	764.3	7	—13.9	100	Calm			0		Fog			0	0	Foggy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.45	748.0	29.94	760.5	22	— 5.6	81	Calm	0	0			10n			0	0	Cloudy	W. H. McIntyre.
St. Andrews	30.02	762.5	30.08	764.0	13	—10.6	85	N	2	0.9		0	0			0	0	Clear	
St. John's, N. B	29.91	759.7	30.09	764.3	11.0	—11.7	100	W	1	0.4		0	0			0	0	Clear	G. Murdock, C. E.
Saugeen, Ontario*	28.92	734.6	29.66	753.4	25	— 3.9	99	SE	19	8.5			10ks			0	0	Cloudy	K. Stewart.
Stratford, Ontario	28.22	716.8	29.55	750.6	23.3	— 4.8	95	E	12	5.4			10s			0	0	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.99	761.7	30.04	763.0	14	—10.0	85	NW	5	2.2		2k	0			0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.27	743.4	29.67	753.6	26	— 3.3	92	NE	27	12.1			10n			0.03	0.8	Light snow	Magnetic Observatory.
Windsor, N. S	29.94	760.5	30.05	763.3	5.0	—15.0	100	NW				1cs	0	NW		0	0	Clear	
Woodstock, Ontario	28.45	722.6	29.55	750.6	26.5	— 3.1	94	NE	33	14.8			10s			Inap.	Inap.	Snowing	Prof. Wolverton.
Yarmouth, N. S.*	29.96	761.0	30.03	762.7	21	— 6.1	77	NE	3	1.3		5ck	0	W		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.62	752.3	29.79	756.7	25	— 3.9	100	SE	1	0.4		10k	10s			0.40	10.2	Cloudy	John Delany.
St. Pierre, N. F			29.78	756.4	23.7	— 4.6		NW			2					0	0		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.91	759.7	29.94	760.5	79.0	26.1	63	SSE	25.4	11.4		0	1			0	0	Vapory	The Staff, for D. Gill.
Cape St. Francis Lt. House	30.02	752.5			74.0	23.3	67	SSE	4.4	2.0			98			0	0	Cloudy	John Duthie.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.45	773.5	30.48	774.2	28.8	— 1.8	72	N	5.1	2.3			0			0	0	Clear	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.18	665.0	29.90	759.4	60.8	16.0	89	NE			2	4d				0	0	Fair	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.98	761.4	30.02	762.6	20.1	—5.6	60	NNW	13	6			1						
Fanöe	30.10	764.5	30.12	765.0	22.5	—5.3	73	W			4		1						
Godthaab, Greenland	30.45	773.5	30.50	774.6	26.6	—3.0	44	S			4		7						
Stykkisholm, Iceland	30.46	773.6	30.50	774.7	29.5	—1.4	96	E			2		8						
Thorshavn	30.37	771.3	30.40	772.2	33.6	0.9	84	N	11	5			7						
Vestervig	29.97	761.2	30.06	763.6	27.0	—2.8	83	NW			2		2						
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.35	745.6	30.02	762.6	37.4	3	83	SSE			1	ck				0	0		M. Labroue, Director.
Alençon	29.54	750.3	30.09	764.3	31.3	—0.4	92	NE			1		1on		SW	0.047	1.2	Misty	M. Nicot, Director.
Arras, Engineer School	29.93	760.2	30.21	767.2	21.6	—5.8		SE	3.4	1.5			0					Clear	M. Klein, Commandant.
Avignon, Normal School	30.09	764.2	30.17	766.2	33.1	0.6	81	NNE			1				W	0	0	Light clouds	M. Girand, Director.
Bar-sur-Seine	29.56	750.8	30.15	765.8	27.5	—2.5	96	SE			1		5cn			0.039	1.0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.89	759.3	30.17	766.4	24.3	—4.3	93	E			1		10			0.20	5.	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.21	741.9	30.15	765.9	26.8	—2.9	100	ENE			1		5n		W	0.08	2.	Cloudy	M. Gobin, Director.
Bordeaux, Observatory	29.72	755.0	30.00	761.9	42.1	5.6	65	S			1		2		W	0	0	Slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.43	747.6	30.02	762.5	29.1	—1.6	96	SE			1		10n		SE			Snowing	M. Postel, Director.
Brest, Naval Observatory	29.72	755.0	29.97	761.1	39.2	4.0	80	NNE			1		1		N	0	0		M. de Rermaree, Dir.
Caen, Normal School	29.91	759.8	30.00	762.0	33.1	0.6	100	S			1		10		S	0	0	Covered	M. Bétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.87	758.7	30.21	767.3	23.9	—4.5		SE			1		2			0	0	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.71	754.5	30.26	768.5	22.3	—5.4	90	SSE			1		0			0	0	Clear	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.60	726.4	30.00	762.1	37.0	2.8	55	NE			1		5		W	0.098	2.5		M. Alluard, Director.
Cluny, Normal School	29.18	741.2	30.06	763.6	28.8	—1.8	89	S			2		10	Calm	Calm			Snowing	M. de Villemontée, Dir.
Commercy, Normal School	29.23	742.5	30.17	766.2	15.8	—9		W			1		kn	W	W	0	0		Dr. Coulet, Director.
Gap, Normal School	27.54	699.5	30.23	767.7	26.6	—3	84	NE			1		k		NE	0	0		M. Jeangirard, Director.
Gréasque, du Rhone	29.02	737.2	30.17	766.2	40.3	4.6	32	NW			1		5		SW	0	0		M. Kina, Director.
Grenoble, Normal School	29.16	740.6	29.97	761.3	26.6	—3		SE			1	ck			S	0.382	9.70		M. Ablard, Director.
Guéret, Normal School	28.35	720.0	30.00	761.9	35.6	2	59	SW			1		10		E	0.08	2.	Snowing	M. Rivoir, Director.
Lamballe, Normal School	29.68	753.8	29.97	761.1	32.0	0	86	NW			1		8		NW	0	0	Light fog	M. Ollitrault, Director.
Lescar, Normal School	29.37	746.0	30.07	763.7	39.9	4.4	93	N			1		5		W	0	0	Cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.90	759.5	30.00	762.1	35.6	2.0	67	ENE			1		0			0	0	Clear	Lt. T Carré, Director.
Lyon Obs'y, Park Station	29.02	737.1	30.10	764.6	27.5	—2.5	74	SE			1	10ck			SW	0.039	1.0	Snowing	M. André, Director.
Mans, Normal School	29.73	755.2	30.06	763.4	30.4	—0.9	94	E			3		8		E	0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.84	758.0	30.12	765.0	44.1	6.7	63	NW			2		2		WNW	0.028	0.70		M. Stephan, Director.
Montlouis l'instituteur	24.68	626.8	29.91	759.8	21.2	—6.0	56	NW	7.4	3.3			7	W		0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.02	762.4	30.13	765.3	36.1	2.3	61	NW			1		0			0	0	Clear	M. Galzin, Director.
Nancy, Normal School	29.40	746.8	30.24	768.0	16.2	—8.8	97	SSW			1		0			0	0	Clear	M. Hasse.
Nantes, Observatory	29.90	759.5	30.06	763.6	28.0	—2.2	96	W			1		10			0	0	Gloomy	M. Larocque, Dir.
Nice	30.01	762.2	30.04	763.1	48.6	9.2	42	W			4		1	W	W	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.92	759.9	30.02	762.6	40.3	4.6	71	SE	5.6	2.5			6			0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.27	565.7			18.3	—7.6							5		W	0.669	17.0	Cloudy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.05	737.8	30.17	766.2	34.9	1.6	74	N			1		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	24 95	633.6			19.2	—7.1	95	WSW			4		10			0.264	6.7	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.93	760.1	29.96	760.9	36.9	2.7	89	SSE			1		8		SSE	0.08	2.	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.75	755.6	29.97	761.3	35.2	1.8	93	NNE			1		8		SE	0	0	Very cloudy	M. Mouillot, Director.
Rodez, Normal School	27.86	707.7	30.11	764.7	31.3	—0.4	89	E			1		10			0	0	Covered	M. Richard, Director.
Rouen, Normal School	30.03	762.8	30.12	765.0	28.0	—2.2	87	SE			3		2		E	0	0	Slightly cld'y	M. Platrier, Director.
Saint Lô, Normal School	29.80	758.4	30.02	762.4	32.0	0	20	S			1		10			0.08	2.	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.96	760.9	30.12	765.1	27.7	—2.4	83	ENE			3		10		ESE				M. Renou, Director.
Toulouse, Observatory	29.32	744.6	30.04	763.0	37.6	3.1	65	SSE			3		2			0	0	Slightly cl'dy	M. Bailland, Director.
Tours	29.81	757.2	30.01	762.2	33.8	1.0	88	SE			1		10			0.055	1.4	Covered	M. de Tastes.
Versailles, Observatory	29.60	751.9	30.10	764.4	25.5	—3.6	91	SE			3					0.008	0.19		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.29	744.0	30.16	766.0	20.3	— 6.5	68	NW			4		28			0	0		Prof. Dr. Hoh.
Berlin	29.89	759.3	30.08	764.0	18.0	— 7.8	79	NW			4		2			0.205	5.2		Prof. Dr. Arndt.
Breslau	29.43	747.6	29.97	761.1	12.6	—10.8	76	NW			4		10			0.054	1.38		Royal University Obs'y.
Carlsruhe	29.85	758.2	30.32	770.1	16.2	— 8.8	65	ESE			0		0			0	0		Albert Senz.
Cassel	29.58	751.2	30.19	766.7	17.2	— 8.2	85	NE			2		4	NE		0.033	0.84	Snowing	Dr. H. Möhl.
Frankfort on the Main	29.97	761.2	30.37	771.3	19.4	— 7.0	57	W			0		1			0	0		Physical Society.
Friedrichshafen	28.70	729.0	30.25	768.3	18.7	— 7.4	42	NE			3		10	W		0	0		Chief Telegrapher Wilhelm.
Hamburg	30.12	765.1	30.19	766.9	11.7	—11.3	82	NW			3		3			0.102	2.6		Dr. R. Kloeman.
Kiel	30.12	765.0	30.13	765.4	16.5	— 8.6	86	W			2		4			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.72	764.9	30.18	766.6	13.2	—10.2	90	NW			3		8			0.039	1.0		Prof. Dr. Bruhns.
Magdeburg	29.92	760.0	30.17	766.2	12.0	—11.1	79	WNW			6		10s	NW		0.047	1.2		Dr. Assmans.
Memel	29.81	757.1	29.85	758.3	—6.0	—21.1	79	E			2		9					Foggy	Reinbrecht & Issermann.
Munich	28.28	718.3	30.15	765.8	15.6	— 9.1	62	W			2		4	S		0.012	0.3		Central Station.
Neufahrwasser	29.88	759.0	29.90	759.4	23.5	— 4.7	74	NW			3		7			0.098	2.5		A Lothes.
Neustadt, Palatinate	29.64	752.9	30.17	766.4	18.5	— 7.5		NW			2		0			0	0		Dicknether.
Stuttgart	29.23	742.4	30.19	766.9	18.5	— 7.5	49	N			1		0			0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.60	726.5	30.14	765.5	15.1	— 9.4	82	NW			2		4	W		0	0		Prof. Kemlein.
Wustrow	30.07	763.7	30.09	764.3	19.0	— 7.2	90	N			4		8s			0	0		Profs. Brandes & Reimer.

‖ Observation taken 25 minutes late.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.43	747.6	29.83	757.6	59.2	15.1		W			3.0		0					Clear.	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.00	761.9	30.05	763.2	75.5	24.2	53	SW	5.0	2.2			0			0	0	Blue sky	
Deesa	29.50	749.4	29.98	761.4	83.0	28.3	18	WSW	8.6	3.8			0			0	0	Blue sky	
Bombay	29.91	759.7	29.95	760.7	83.6	28.7	60	WNW	8.0	3.6			0			0	0	Blue sky	
Poona, Yarrowda	28.09	713.4	29.93	760.3	83.2	28.4	26	ENE	9.0	4.0			4		W	0	0	D.clouds	
Belgaum	27.40	696.1	29.93	760.3	79.8	26.6	35	NNE	6.0	2.7			4	NW	E	0	0	D. clouds	
Lahore	29.32	744.6	30.09	764.2	65.6	18.7	36	Calm	1.6	0.7			0			0	0	Blue sky	
Roorkee	29.16	740.8	30.10	764.5	65.4	18.6	38	NW	1.5	0.7			0			0	0		
Agra	29.52	749.7	30.10	764.4	74.3	23.5	27	W	1.8	0.8			0			0	0		
Nagpur	28.98	736.0	30.03	762.7	80.2	26.8	23	NE	2.7	1.2			0			0	0	Blue sky	
Jubbulpore	28.68	728.6	30.10	764.5	65.1	18.4	55	Calm	1.8	0.8			0			0	0	Blue sky	
Lucknow	29.70	754.5	30.10	764.4	66.3	19.1	34	Calm	0.9	0.4			0			0	0	Blue sky	
Allahabad	29.78	756.4	30.11	764.7	64.1	17.8	54	Calm	1.1	0.5			0			0	0	Blue sky	
Patna	29.90	759.3	30.09	764.2	63.9	17.7	62	W	1.1	0.5			0			0	0	Blue sky	
Hazaribagh	28.02	711.6	30.11	764.7	62.3	16.8	30	NNW	6.6	3.0			0			0	0	Blue sky	
Cuttack	29.96	761.0	30.05	763.2	72.1	22.3	54	Calm	1.0	0.4			0			0	0	Blue sky	
Calcutta, Alipore	30.03	762.7	30.05	763.3	67.2	19.6	44	N	1.0	0.4			0			0	0	Blue sky	
Goalpara	29.63	752.7	30.05	763.2	69.4	20.8	60	E	1.5	0.7			0			0	0	Blue sky	
Chittagong	29.93	760.3	30.03	762.7	70.8	21.6	52	WNW	2.4	1.1			0			0	0	Blue sky	
Sibsagar	29.73	755.1	30.08	764.1	62.7	17.1	86	NE	1.2	0.5			2			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.61	752.0	30.04	762.9	34.7	1.5	69	Calm	0	0			0			0.024	0.6		Prof. Giovanni Clodig.
Milan	29.49	749.1	30.04	763.0	35.4	1.9	60	SW	4.9	2.2			2	W		0	0		Prof. Schiaparelli.
Padua	29.93	760.2	30.04	763.1	37.0	2.8	69	NNW	10.5	4.7			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.12	739.7	30.07	763.8	29.3	— 1.5	35	SW	1.3	0.6			0			0	0		Prof. P. F. Denza.
Genoa	29.87	758.6	30.06	763.6	43.2	6.2	16	W	1.8	0.8			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.06	712.8	30.08	763.9	29.8	— 1.2	31	E			4		0			0	0		Prof. D. C. Bruno.
Pesaro	30.03	762.8	30.08	764.1	36.7	2.6	54	W	16.8	7.5			0			0	0		Prof. Luigi Guidi.
Florence	29.82	757.3	30.08	764.0	38.1	3.4	33	WSW			2					0	0		Cav. F. Meucci.
Leghorn	30.01	762.2	30.10	764.4	42.8	6.0	24	NNW	11.2	5.0			3	S		0.118	3.0		Prof. P. Monte.
Rome	29.89	759.1	30.06	763.6	45.0	7.2	30	WNW	13.0	5.8			0			0.06	1.7		Prof. P. S. Ferrari.
Lecce	29.67	753.7	29.93	760.2	46.9	8.3	34	NW	28.6	12.8			7	NW		0.008	0.2		Prof. C. de Giorgi.
Cosenza	29.08	738.5	29.98	761.5	44.6	7.0	71	WNW	20.6	9.2			10	NW		0.378	9.6		Prof. D. Conti.
Cagliari	29.96	760.9	30.15	765.8	51.4	10.8	25	NW			4		3	W		0.063	1.6		Prof. A. Pacinotti.
Palermo	29.89	759.1	30.13	765.4	52.7	11.5	42	NW	23.0	10.3			2	NW		0.059	1.5		Prof. G. Ciaccíatore.
Syracuse	30.02	762.4	30.07	763.7	58.3	14.6	38	WSW	11.2	5.0			3	WNW		0	0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.48	748.7	30.02	762.5	44.6	7.0	44	W	4.9	2.2			3k	W		0	0		Prof. F. Brioschi.
Stelvio	21.96	557.7			— 0.6	—18.1	66	SE					0			0	0		P. F. Denza.
Valdobbia	21.84	554.7			4.1	—15.5	91	N					10			2.756‖	70.0‖		
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y†	29.81	757.2	29.83	757.7	29.6	— 1.3	74	NNW	2.6	1.2			0			0.356	9.04	Clear.	K. Sasaki.
Kioto	29.48	748.8	29.66	753.3	34.2	1.2	80						10s;ck			0.138	3.51	Cloudy	
Nagasaki, I. M. Obs'y	29.81	757.2	30.02	762.5	33.2	0.7	77	W	15.2	6.8			4n			0.090	2.29	Snowing	S. Takehayashi.
Tokei Obs'y, Yeddo	29.44	747.8	29.51	749.5	34.0	1.1	96	NNW	6.3	2.8			10n			0.285	7.24	Rainy	The Staff.
Wakayama	29.65	753.1	29.70	754.4	36.7	2.6	71	NW	4.9	2.2			0			0.007	0.18	Clear	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.66	753.4	29.85	758.2	76.8	24.9	88	NNE	26.5	11.8			10		N	0.90	22.9	Showery	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.64	752.8	29.90	759.5	63.4	17.4	57	N			2	2cs	0			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.28	769.1	30.28	769.1	22.5	— 5.3		ESE			3					0.055	1.4		
Groningen	30.21	767.2	30.26	768.6	19.4	— 7.0		SW			1					0	0		
Helder	30.21	767.2	30.21	767.2	23.5	— 4.7		ENE			1					0	0		
Hellevoetsluis	30.28	769.0	30.28	769.0	18.5	— 7.5	97	Calm			0					0	0		
Utrecht	30.26	768.5	30.30	769.7	13.3	—10.4	90	N			2		5			0	0	Cloudy	H. van der Brink

‖ Unmelted snow.

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

NORWEGIAN SERIES.

Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.

Bergen	30.11	764.8	30.17	766.4	23.0	— 5.0	81	Calm	0	0			9			0	0		
Christiania	29.76	755.9	29.91	759.8	28.2	— 2.1	55	WSW	7	3			10			0	0		
Gjæsvær	29.57	751.1	29.60	751.7	17.8	— 7.9		NE			2		10						
Lodingen	29.67	753.5	29.71	754.7	25.7	— 3.5	73	W			2		10			0.091	2.3	Light snow.	

PORTUGUESE SERIES.

Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Angra, Azores	29.73	755.2	29.89	759.3	52.5	11.4	93	E	6.9	3.1			7			1.575	40.0		Dr. J. A. Sampaio.
Campo Major	28.72	729.6	29.74	755.4	46.4	8.0	100	NNE	7.4	3.3			10			1.882	47.8	Raining	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.93	760.2	30.02	762.4	69.1	20.6	68	W	16.1	7.2			1			0.008	0.2		Capt. D. A. de Cunha.
Lisbon, Observatory	29.39	746.5	29.75	755.6	55.4	13.0	99	SSW	8.7	3.9			10			3.170	80.5		The Staff.
Ponta Delgada, Azores	29.75	755.6	29.82	757.4	57.6	14.2	86	ENE	18.1	8.1			10			0.787	20.0		

RUSSIAN SERIES.

Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.

Akmolinski	28.98	736.2	30.19	766.8	— 0.8	—18.2	100	Calm	0	0		3c							Capt. Lasarew.
Archangel	29.26	743.2	29.28	743.7	—15.2	—26.2	82	NW	4	2			0						Capt. Sseliwerstow.
Astrakhan	29.58	751.4	29.50	749.3	39 9	4.4	84	SSW	2	1			10sn						Capt. Wisganow.
Barnaul	29.78	756.5	30.35	770.9	— 4.0	—20.0	86	Calm	0	0			0						Meteorological Obs'y.
Dorpat	29.39	746.4	29.66	753.3	— 3.3	—19.6	87	W	7	3			0						Observatory.
Ekaterinburg	28.55	725.2	29.60	751.8	3.2	—16.0	74	SSE	11	5			10						Meteorological Obs'y.
Kasan	28.78	731.1	29.07	738.3	14.5	— 9.7	90	N	2	1			10					Light snow.	Observatory.
Kertch	29.48	748.7	29.50	749.2	43.7	6.5	72	WSW	4	2			2						Lagorio.
Kieff	28.83	732.2	29.50	749.4	13.1	—10.5	83	NNW	13	6		c;ck	10cs;ks;n.					Snowing	Observatory.
Krotkowo, N. 58°47', E. 48°34'																			Cand. Fatjanow.
Lugan	28.89	733.9	29.10	739.2	29.3	— 1.5	82	WNW	45	20			10			Blank			Meteorological Obs'y.
Moscow	28.81	731.8	29.42	747.2	— 1.3	—18.5	72	N	7.8	3.5			0						Meteorological Obs'y.
Nertchinsk	27.86	707.6	30.60	777.3	—31.4	—35.2	82						0						Meteorological Obs'y.
Nikolaiev	29.46	748.2	29.53	750.0	34.0	1.1	87	SW	13	6			10n					Snowing	1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.86	758.5	29.95	760.7	— 9.4	—23.0	81	Calm	0	0			10n						Lieut. Iwanow.
Nukuss	29.74	755.5	29.98	761.6	41.0	5.0	94	S	9	4			10n						Dr. Dobrochotow.
Pekin, China	30.28	769.0	30.42	772.6	16.5	— 8.6	46	NE	4	2			0						Physical Observatory.
St. Petersburg	29.48	748.8	29.50	749.2	1.4	—17.0	84	WNW	9	4			10s						Central Physical Obs'y.
Tashkend, Laboratory																			Teich, A. M.
Tiflis	28.35	720.2	29.79	756.6	45.9	7.7	72	N	18	8			10ks						Physical Observatory.
Warsaw	29.37	745.9	29.83	757.6	9.1	—12.7	61	N	13	6		10ck							Astronomical Obs'y.
Wilna	29.31	744.4	29.78	756.3	— 0.2	—17.9	79	NW	2	1			2						Berg, Assistant.
Yeniseisk	29.77	756.2	30.09	764.3	4.8	—15.1	81	SW	4	2			10						M. O. Marks.

SCOTTISH SERIES.

Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.

Leith, Restalrig Park			30.44	773.2	26.0	— 3.3	98	NE			2		2k	S		0.04	1.0	Fine	Andrew Gibb.
Monach Lt. House, Hebrides			30.49	774.4	34	1.1	79	E			3	0	0						J. Youngclause.
North Unst, Shetland Isl'ds			30.28	769.1				N			4		10			Blank	Blank		Robert Burnet.

SPANISH SERIES.

Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.

Barcelona, Met. Obs'y ‡	29.92	760.0	30.03	762.7	47.8	8.8	62	W	0.4	0.2			9			0	0	Covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.86	758.4	29.92	759.9	44.2	6.8	82	SE	3.3	1.48			10			0.169	4.3	Covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.89	682.9			36.9	2.7	59	SE	5.5	2.47			10			0	0	Covered	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.71	703.8	30.06	763.4	33.1	0.6	98	NE	8.0	3.6			10			0.492	12.5	Covered	The Staff.
Murcia, Met. Obs'y. ‡	29.88	759.0	30.04	762.9	50.9	10.5	93	W	1.3	0.6		3	3			0.059	1.5	Covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.76	730.4	29.66	753.3	46.9	8.3	75	NE	0	0			10			0	0	Covered	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	29.86	758.3	29.92	760.0	69.7	20.9	91	SW	3.6	1.6		0	6ks;n	WSW	WSW	0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.96	761.1	30.02	762.4	78.7	25.9	75	SE	5.1	2.3			9kn		E	0	0	Covered	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.90	759.5	30.00	762.0	60.1	15.6	84	S	13.8	6.2			10		SW	0.078	2.0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.97	761.1	30.06	763.4	72.0	22.2	88	S	0	0		30s	2	S	S	0.079	2.00	Clear	Enrique Gadea, Chief Engineer.

SWEDISH SERIES.

Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.

Haparanda	29.71	754.6	29.75	755.6	7.5	—13.6	92	NW			2		0			0	0		
Umea	29.72	755.0	29.78	756.3	15.1	— 9.4	94	N			4		8			0.039	1.0		
Hernosand	29.80	757.0	29.85	758.3	19.2	— 7.1	75	Calm			0		5			0	0		
Stockholm	29.63	752.5	29.80	757.0	10.0	—12.2	93	NNW			2		9			0	0		
Wisby	29.73	755.2	29.79	756.7	20.5	— 6.4	79	NW			2		3			0.035	0.9		
SUB-SERIES.																			
Upsala	29.71	754.6	29.80	756.8	12.2	—11.0	76	NW	5.6	2.5			9		N	0	0		Nils Ekholm

SWISS SERIES.

Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.

Geneva	28.67	728.3	30.19	766.7	26.6	— 3.0	76	SW			1		9			0.035	0.9	Covered	The Observatory.
Zurich	28.48	723.4	30.23	767 9	21.9	— 5.6	76	NE			1		4			0	0	Lightly cl'dy	The Observatory.

At Geneva the corresponding departures from the normal values are: Bar. +0.8 mm.; Ther. —4°.7 cent.; Hum. —2 per cent.

TURKISH SERIES.

Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.

Constantinople			29.63	752.6	54.9	12.7	50	WNW	7	3.0			10		SW	0	0		The Observatory.
Valona			29.86	758.4	49.6	9.8		W			3		10			0	0	Covered	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.98	761.6	73.9	23.3	50	SW			3	7c		SW		0	0		Prof. C. V. A. van Dyck.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

Albany, New York	29.84	757.9	29.93	760.2	18	— 7.8	84	NE	2	0.9			10s		Calm	0	0	Cloudy	
Alpena, Michigan	29.10	739.1	29.77	756.1	25	— 3.9	87	NE	9	4.0			10s		Calm	0	0	Cloudy	
Attou Id., Alaska‡	29.26	743.2			23	— 5.0	100	NW	20	8.9			10n		N	0.57	14.5	Cloudy	
Atlanta, Georgia	28.51	724.1	29.66	753.4	39	3.9	71	W	20	8.9			10s		Calm	0.75	19.1	Cloudy	
Atlantic City, New Jersey	29.49	749.0	29.51	749.5	39	3.9	100	E	36	16.1			10n		E	0.80	20.3	Heavy rain.	
Augusta, Georgia	29.54	750.3	29.74	755.4	45	7.2	76	NW	12	5.4			10s		W	1.02	25.9	Threatening	
Baltimore, Maryland	29.33	745.0	29.38	746.2	36	2.2	100	NE	16	7.2			10n		E	0.74	18.8	Light rain.	
Barnegat, New Jersey	29.53	750.0	29.56	750.8	38	3.3	100	E	36	16.1			10n		E	0.45	11.4	Light rain	
Benton, Montana	27.82	706.6			8	—13.3	78	NW	1	0.4		0	0			0	0	Clear	
Bismarck, Dakota	28.52	724.4	30.38	771.6	12	—11.1	81	NW	34	15.3			10s		Calm	0	0	Cloudy	
Boise City, Idaho	27.81	706.4	30.77	781.5	22	— 5.6	86	Calm	0	0			10s		Calm	0	0	Cloudy	
Boston, Massachusetts	29.82	757.4	29.99	761.7	23	— 5.0	73	N	5	2.2			10s		Calm	0	0	Cloudy	
Brackettville, Texas	28.96	735.6	30.06	763.5	38	3.3	91	NW	8	3.6		2ck	0	NW		0	0	Fair	
Brownsville, Texas	30.01	762.2	30.06	763.5	47	8.3	85	NE	8	3.6		8c	0	Calm		0	0	Fair	
Buffalo, New York	28.83	732.3	29.53	750.0	32	0.0	95	NE	20	8.9			10n		Calm	0.15	3.8	Light rain	
Burlington, Vermont	29.72	754.9	30.03	762.7	11	—11.7	80	E	5	2.2		5ck	5s	NW	S	0	0	Cloudy	
Cairo, Illinois	29.42	747.3	29.82	757.4	33	0.6	89	W	10	4.5			10s		W	1.67	39.9	Cloudy	
Campo, California	27.49	698.2	30.06	763.5	41	5.0	53	E	8	3.6		0	0			0	0	Clear	
Camp Thomas, Arizona	27.32	693.9			31	— 0.6	58	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	29.34	745.2	29.35	745.5	56	13.3	94	S	24	10.7			Fog		Calm	0.84	21.3	Dense fog	
Cape May, New Jersey	29.36	745.7	29.39	746.5	44	6.7	92	E	30	13.4			10n		Calm	1.48	37.6	Light rain	
Castroville, Texas	29.31	744.5	30.04	763.0	38	3.3	72	NW	8	3.6		8c	0	NW		0	0	Cloudy	
Cedar Keys, Florida	29.82	757.4	29.85	758.2	59	15.0	71	W	17	7.6		1k	0	Calm		0.38	9.7	Clear	
Champaign, Illinois	28.82	732.0	29.64	752.8	25	— 3.9	75	NW	25	11.2			10s		NW	0	0	Cloudy	
Charleston, S. Carolina	29.61	752.1	29.66	753.4	50	10.0	72	SW	14	6.3		0	2s		SW	0.47	11.9	Clear	
Charlotte, N. Carolina	28.64	727.4	29.44	747.8	40	4.4	91	SW	8	3.6			10s		SW	1.91	48.5	Cloudy	
Chattanooga, Tennessee	28.86	733.0	29.67	753.6	37	2.8	81	W	14	6.3			10n		W	0.99	25.1	Light rain	
Cheyenne, Wyoming	24.11	612.4	30.05	763.3	14	—10.0	82	NW	20	8.9		0	0			Inap.	Inap.	Clear	
Chicago, Illinois	28.90	734.0	29.60	751.8	31	— 0.6	89	NE	16	7.2		0	8s		NE	0	0	Fair	
Chincoteague, Virginia	29.36	745.7	29.37	746.0	48	8.9	100	SE	39	17.4			10n		SE	0.64	16.3	Light rain	
Cincinnati, Ohio	28.78	731.0	29.42	747.3	37	2.8	90	SW	8	3.6			10n		SW	1.16	29.5	Light snow.	
Cleveland, Ohio	28.66	728.0	29.38	746.2	33	0.6	89	NE	7	3.1			10n;fg		Calm	0.12	3.0	Light rain	
Coleman City, Texas	28.34	719.8	30.10	764.5	33	0.6	70	NW	22	9.8		5ck	5s	NW	Calm	0.03	0.8	Cloudy	
Columbus, Ohio	28.50	723.9	29.33	745.0	35	1 7	90	SW	10	4.5			10s		W	0.70	17.8	Cloudy	
Concho, Texas	28.21	716.5	29.94	760.5	40	4.4	39	W	7	3.1		0	8ks		W	0	0	Cloudy	
Corsicana, Texas	29.64	752.8	30.13	765.3	36	2.2	90	Calm	0	0		0	8s		Calm	0	0	Cloudy	
Davenport, Iowa	29.13	739.9	29.79	756.7	27	— 2.8	76	NW	11	4.9			10s		Calm	0	0	Cloudy	
Dayton, Washington T'y	29.08	738.6	30.94	785.9	22	— 5.6	100	SW	4	1.8			10s		Calm	0	0	Cloudy	
Deadwood, Dakota	25.58	649.7			15	— 9.4	82	NE	4	1.8			10n		Calm	0.56	14.2	Heavy snow	
Decatur, Texas	28.90	734.0	30.13	765.3	33	0.6	70	NW	22	9.8			10s		Calm	Inap.	Inap.	Cloudy	
Delaware Breakwater, Del.	29.36	745.7	29.38	746.2	40	4.4	91	NE	41	18.3			10n		NE	0.79	20.1	Light rain	
Denison, Texas	29.27	743.4	30.11	764.8	32	0.0	89	N	8	3.6			10s		Calm	0.01	0.3	Cloudy	
Denver, Colorado	24.91	632.7	30.13	765.3	22	— 5.6	58	NW	2	0.9			10s		Calm	0.02	0.5	Cloudy	
Des Moines, Iowa	29.05	737.9	29.99	761.7	20	— 6.7	85	N	12	5.4			10s		Calm	0.08	2.0	Cloudy	
Detroit, Michigan	28.78	731.0	29.46	748.3	29	— 1.7	95	NE	12	5.4			10n		Calm	0.02	0.5	Light sleet	
Dodge City, Kansas	27.51	698.7	29.97	761.2	19	— 7.2	39	NW	15	6.7		0	0			0	0	Clear	
Dubuque, Iowa	29.08	738.6	29.80	756.9	28	— 2.2	88	NW	11	4.9			10s		Calm	0	0	Cloudy	
Duluth, Minnesota	29.28	743.7	29.99	761.7	24	— 4.4	87	N	14	6.3			10n		N	Inap.	Inap.	Light snow.	
Eagle Pass, Texas	29.39	746.5	30.17	766.3	35	1.7	80	N	2	0.9		0	0			0	0	Clear	
Eagle Rock, Texas	25.73	653.5	30.38	771.6	3	—16.1	73	Calm	0	0			10s		Calm	0	0	Cloudy	
Eastport, Maine	30.00	762.0	30.07	763.8	16	— 8.9	66	N	10	4.5		2ck	0	W		0	0	Fair	
Edinburg, Texas					45	7.2	92	N			4	0	5k		Calm	0	0	Fair	
El Paso, Texas	26.29	667.8			35	1.7	53	E	8	3.6			10s		E	0	0	Cloudy	
Erie, Pennsylvania	28.73	729.7	29.44	747.8	34	1.1	90	Calm	0	0			10n		Calm	0.26	6.6	Light rain	
Escanaba, Michigan	29.14	740.1	29.82	757.4	25	— 3.9	87	N	11	4.9			10n		Calm	0.14	3.6	Light snow.	
Florence, Arizona	28.57	725.7	30.17	766.3	39	3.9	64	N	1	0.4		0	0			0	0	Clear	
Fort Apache, New Mexico	25.04	636.0	30.48	774.2	23	— 5.0	47	W	22	9.8		0	0			0	0	Clear	
Fort Assinniboine, Montana	27.68	703.1			4	—15.6	74	SW	6	2.7		0	0			0	0	Clear	
Fort Bennett, Dakota	28.68	728.5			16	— 8.9	83	N	22	9.8			10s		Calm	0	0	Cloudy	
Fort Buford, Dakota	28.48	723.4	30.51	774.9	16	— 8.9	83	NW	12	5.4		0	5s		N	0.04	1.0	Fair	
Fort Custer, Montana	27.41	696.2			20	— 6.7	85	W	10	4.5			10s		Calm	0	0	Cloudy	
Fort Davis, Texas	25.22	640.6	30.18	766.6	26	— 3.3	75	NE	16	7.2			10ks		N	0	0	Cloudy	
Fort Elliott, Texas	27.34	694.4	29.77	756.1	22	— 5.6	58	NW	16	7.2			10s		NW	0	0	Cloudy	
Fort Gibson, Indian T'y	29.50	749.3	30.06	763.5	28	— 2.2	77	N	12	5.4		0	0			0.30	7.6	Clear	
Fort Grant, Arizona	25.13	638.3	29.93	760.2	34	1.1	34	NE	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas	28.80	731.5	30.12	765.0	35	1.7	70	NW	16	7.2			10s		Calm	0	0	Cloudy	
Fort Keogh, Montana	27.99	710.9			22	— 5.6	86	N	14	6.3			10s		N	0	0	Cloudy	
Fort Macon, North Carolina	29.49	749.0	29.50	749.3	53	11.7	83	SW	19	8.5		5c	2s	W	Calm	1.59	40.0	Fair	
Fort Missoula, Montana	27.39	695.7			3	—16.1	73	Calm	0	0			10s		Calm	0	0	Cloudy	
Fort McKavett, Texas	27.84	707.1	29.86	758.4	33	0.6	70	NE	14	6.3			10ks		N	0	0	Cloudy	
Fort Shaw, Montana	26.93	684.0			9	—12.8	78	W	6	2.7		0	0			0	0	Clear	
Fort Sill, Indian Territory	28.90	734.0	30.07	763.8	32	0.0	79	NW	13	5.8			10s		Calm	0	0	Cloudy	
Fort Stevenson, Dakota																			
Fort Verde, Arizona					30	— 1.1	47	N			4	0	0			0	0	Clear	
Fredericksburg, Texas	28.34	719.8	29.97	761.2	36	2.2	80	N	20	8.9		10k	0	N		0	0	Cloudy	
Galveston, Texas	30.00	762.0	30.05	763.3	42	5.6	74	N	17	7.6			10s		N	0	0	Cloudy	
Grand Haven, Michigan	28.94	735.1	29.60	751.8	24	— 4.4	87	N	8	3.6			10s		Calm	0	0	Cloudy	
Hatteras, North Carolina	29.43	747.5	29.45	748.0	47	8.3	85	SW	28	12.5		0	2s		Calm	1.25	31.7	Fair	
Helena, Montana	26.32	668.5			0	—17.8	100	SW	2	0.9		0	0			0	0	Clear	
Henrietta, Texas	29.14	740.1	30.14	765.5	32	0.0	89	NW	12	5.4			10s		Calm	0	0	Cloudy	
Indianapolis, Indiana	28.67	728.2	29.45	748.0	29	— 1.7	84	NW	1	0.4			10s		NW	0.73	18.5	Cloudy	
Indianola, Texas	30.08	764.0	30.11	764.8	41	5.0	74	N	20	8.9		2cs	0	NW		0	0	Fair	
Jacksboro, Texas	28.96	735.6	30.15	765.8	35	1.7	90	NW	12	5.4			10s		NW	0.02	0.5	Cloudy	
Jacksonville, Florida	29.76	755.9	29.81	757.2	56	13.3	69	SW	12	5.4		0	0			0.28	7.1	Clear	
Keokuk, Iowa	29.16	740.7	29.83	757.7	27	— 2.8	82	NW	9	4.0			10s		Calm	0	0	Cloudy	
Key West, Florida	29.88	758.9	29.92	760.0	72	22.2	90	W	5	2.2		5k	0	W		0	0	Fair	
Kittyhawk, North Carolina	29.41	747.0	29.44	747.8	52	11.1	100	SW	22	9.8		0	5ks		SW	1.43	36.3	Clear	
Knoxville, Tennessee	28.58	725.9	29.58	751.3	37	2.8	81	SW	14	6.3			9s		SW	0.87	22.1	Cloudy	
La Crosse, Wisconsin	29.09	738.9	29.85	758.2	25	— 3.9	87	N	11	4.9			10s		Calm	0	0	Threatening	
La Mesilla, New Mexico	26.16	664.4	30.30	769.6	34	1.1	70	N	5	2.2			10s		Calm	0	0	Cloudy	
Laredo, Texas	29.70	754.4	30.06	763.5	43	6.1	75	N	4	1.8		8ck	0	W		0	0	Fair	
Leavenworth, Kansas	29.14	740.1	30.05	763.3	16	— 8.9	66	NW	12	5.4		0	1s			0	0	Clear	
Lewiston, Idaho	30.03	762.7	30.75	781.0	25	— 3.9	48	E	4	1.8		0	2s		E	0	0	Clear	
Little Rock, Arkansas	29.61	752.1	29.94	760.5	37	2.8	90	NW	8	3.6			10s		NW	0.19	4.8	Cloudy	
Los Angeles, California	29.78	756.4	30.13	765.3	51	10.6	79	NE	3	1.3		0	0			0	0	Clear	
Louisville, Kentucky	28.95	735.3	29.50	749.3	38	3.3	91	W	8	3.6			10n		Calm	1.52	38.6	Light snow.	
Lynchburg, Virginia	28.71	729.2	29.39	746.5	34	1.1	90	W	3	1.3			10n		Calm	1.88	47.8	Light rain	
Madison, Wisconsin	28.71	729.2	29.72	754.9	25	— 3.9	75	NW	15	6.7			10s		Calm	Inap.	Inap.	Cloudy	
Marquette, Michigan	29.12	739.6	29.85	758.2	27	— 2.8	88	NE	12	5.4			10n		Calm	0.10	2.5	Light snow	
Mason, Texas	28.46	722.9	30.30	769.6	36	2.2	71	NW	20	8.9			10s		NW	0	0	Cloudy	
Memphis, Tennessee	29.53	750.0	29.88	758.9	35	1.7	89	W	4	1.8			10s		Calm	0.43	10.9	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	28.94	735.1	29.69	754.1	26	— 3.3	88	W	15	6.7			10s		Calm	0	0	Cloudy	
Mobile, Alabama	29.81	757.2	29.89	759.2	43	6.1	67	NW	14	6.3		2c	2s	NW	Calm	0.37	9.4	Fair	
Montgomery, Alabama	29.62	752.3	29.86	758.4	40	4.4	82	W	14	6.3			10ks		W	0.22	5.6	Cloudy	
Morgantown, W. Virginia	28.36	720.3	29.33	745.0	40	4.4	65	SE	12	5.4			10n		Calm	0.67	17.0	Light rain	
Moorhead, Minnesota	29.16	740.7	30.21	767.3	12	—11.1	90	N	20	8.9			10n		N	0.01	0.3	Light snow.	
Mt. Washington, N. H.	23.54	597.5	29.90	759.4	18	— 7.8	68	NW	2	0.9		8c	5s	W	W	0	0	Fair	
Nashville, Tennessee	29.15	740.4	29.70	754.4	34	1.1	90	W	10	4.5			10n		W	0.91	23.1	Light snow.	
New Haven, Connecticut	29.74	755.4	29.86	758.4	20	— 6.7	78	NE	15	6.7			10n		NE	0.02	0.5	Light sleet.	
New London, Connecticut	29.84	757.9	29.89	759.2	26	— 3.3	75	W	8	3.6			10s		Calm	0	0	Cloudy	
New Orleans, Louisiana	29.92	760.0	29.94	760.5	46	7.8	92	N	10	4.5		5c	0	NW		0.01	0.3	Fair	
Newport, Rhode Island	29.86	758.4	29.92	760.0	30	— 1.1	78	NE	8	3.6			10s		Calm	0	0	Cloudy	
New River, N. Carolina					49	9.4	93	SW			4	5k	2ks	W	Calm			Cloudy	
New Shoreham, Rhode I'd	29.87	758.7	29.90	759.4	33	0.6	89	NE	26	11.6			10s		NE	0	0	Cloudy	
New York, New York	29.52	749.8	29.70	754.4	28	— 2.2	100	NE	22	9.8			10n		Calm	0.17	4.3	Sleeting	
Norfolk, Virginia	29.31	744.5	29.36	745.7	57	13.9	87	SW	18	8.0			10ks		SW	0.77	19.6	Threatening	
North Platte, Nebraska	27.20	690.9	29.96	761.0	17	— 8.3	67	N	20	8.9		10c	0	NW		0	0	Cloudy	
Olympia, Washington T'y	30.54	775.7	29.58	751.3	33.0	0.6	95	E	2	0.9			Fog		Calm	0	0	Dense fog	
Omaha, Nebraska	28.88	733.5	29.08	738.6	12	—11.1	100	N	18	8.0			10n		N	Inap.	Inap.	Light snow.	
Oswego, New York	29.41	747.0	29.74	755.4	31	— 0.6	63	SE	12	5.4			10s		Calm	0	0	Cloudy	
Pensacola, Florida	29.90	759.4	29.93	760.2	47	8.3	62	NW	8	3.6			10ks		NW	0.33	8.4	Cloudy	
Philadelphia, Pa	29.50	749.3	29.55	750.6	33	0.6	100	NE			4		10n		NE	0.24	6.1	Light rain	
Phœnix, Arizona	29.03	737.3	30.95	786.1	34	1.1	70	N	4	1.8		0	0			0	0	Clear	
Pike's Peak, Colorado	17.36	440.9	29.57	751.1	—20	—28.9	100	NE	30	13.4			10n		NE	0.56	14.2	Light snow.	
Pilot Point, Texas	29.31	744.5	30.20	767.1	33	0.6	79	NW	12	5.4		Haze	8s		Calm	0.02	0.5	Cloudy	
Pioche, Nevada	24.28	616.7	30.05	763.3	16	— 8.9	57	NW	14	6.3		0	0			0	0	Clear	
Pittsburg, Pennsylvania	28.57	725.7	29.36	745.7	38	3.3	91	E	6	2.7			10n		E	0.87	22.1	Light rain	
Port Huron, Michigan	28.89	733.8	29.56	750.8	26	— 3.3	88	NE	22	9.8			10n		Calm	Inap.	Inap.	Light snow.	
Portland, Maine	29.98	761.5	30.04	763.0	22	— 5.6	72	N	6	2.7			10s		Calm	0	0	Cloudy	
Portland, Oregon	30.55	776.0	30.63	778.0	38	3.3	54	SE	4	1.8		10cs	0	NW		0	0	Cloudy	
Portsmouth, N. Carolina					42	5.6	83	W	18	8.0		5k	0	W		0.67	17.0	Fair	
Prescott, Arizona	24.83	630.7	30.19	766.8	23	— 5.0	60	NE	3	1.3		0	0			0	0	Clear	
Punta Rassa, Florida	29.86	758.4	29.88	758.9	67	19.4	74	NW	12	5.4		20k	0	W		0.16	4.1	Fair	
Red Bluff, California	30.07	763.8	30.44	773.2	44.5	6.9	49	N	7	3.1		5c	0	Calm		0	0	Fair	
Rio Grande City, Texas	29.96	761.0	30.19	766.8	42	5.6	74	NW	5	2.2		5cs	5s	Calm	Calm	0	0	Cloudy	
Rochester, New York	29.02	737.1	29.64	752.8	27	— 2.8	88	E	12	5.4			10n		SE	0.02	0.5	Light snow.	
Roseburg, Oregon	29.98	761.5	30.58	776.7	35	1.7	95	NE	3	1.3			Fog		Calm	0	0	Dense fog	
Sacramento, California	30.27	768.8	30.34	770.6	43	6.1	92	N	4	1.8		2c	0	Calm		0	0	Clear	
St. Louis, Missouri	29.19	741.4	29.79	756.7	28	— 2.2	88	NW	17	7.6			10s		Calm	Inap.	Inap.	Cloudy	
St. Paul, Minnesota	29.04	737.6	29.90	759.4	25	— 3.9	87	NW	6	2.7			10n		NW	0.05	1.3	Light snow.	
Salt Lake City, Utah	26.03	661.2	30.36	771.1	23	— 5.0	34	NW	14	6.3		0	0			0	0	Clear	
San Antonio, Texas	29.42	747.3	30.16	766.1	40	4.4	73	NW	2	0.9			10s		Calm	0	0	Cloudy	
San Diego, California	30.08	764.0	30.15	765.8	55	12.8	28	NE	12	5.4		0	0			0	0	Clear	
Sandusky, Ohio	28.71	729.2	29.38	746.2	33	0.6	89	NE	24	10.7			10n		Calm	0.25	6.3	Light rain	
Sandy Hook, New Jersey	29.63	752.6	29.67	753.6	32	0.0	100	NE			6		10n		Calm	0.12	3.0	Light rain	
San Francisco, California	30.26	768.6	30.33	770.4	52	11.1	54	N	5	2.2		0	0			0	0	Clear	
Santa Fé, New Mexico	23.26	590.8	29.80	756.9	5	—15.0	75	Calm	0	0		0	0			0.22	5.6	Clear	
Savannah, Georgia	29.64	752.8	29.74	755.4	52	11.1	54	W	13	5.8		0	5ks		W	0.20	5.1	Fair	
Shreveport, Louisiana	29.78	756.4	30.04	763.0	37	2.8	90	W	7	3.1			10s		Calm	Inap.	Inap.	Cloudy	
Silver City, New Mexico	24.22	615.2	30.61	777.5	29	— 1.7	56	W	4	1.8		0	0			0	0	Clear	
Smithville, North Carolina	29.54	750.3	29.57	751.1	51	10.6	86	SW	24	10.7		8k	1ks	SW	Calm	0.53	13.5	Cloudy	
Socorro, New Mexico	25.31	642.9	29.37	746.0	22	— 5.6	58	NW	3	1.3		1c	0	W		0	0	Clear	
Springfield, Illinois	29.05	738.1	29.75	755.6	30	— 1.1	78	NW	15	6.7			10s			0	0	Cloudy	
Springfield, Massachusetts	29.81	757.2	29.95	760.7	20	— 6.7	70	N	5	2.2			10s		Calm	0	0	Cloudy	
Stockton, Texas	27.10	688.3	30.10	764.5	31	— 0.6	79	N	12	5.4			10s		N	0	0	Cloudy	
St. Vincent, Minnesota	29.49	749.0	30.37	771.4	9	—12.8	100	NW	20	8.9			10s		Calm	0	0	Cloudy	
Thatcher's Island, Mass	29.94	760.5	29.99	761.7	36	2.2	80	E	25	11.2			10s		E	0	0	Cloudy	
Toledo, Ohio	28.73	729.7	29.41	747.0	30	— 1.1	100	N	10	7.2			10n		Calm	0.01	0.3	Sleeting	
Tucson, Arizona	27.56	700.0	30.11	764.8	32	0.0	59	SE	2	0.9		0	0			0	0	Clear	
Umatilla, Oregon	30.63	778.0	31.20	792.5	13.5	—10.3	91	NW	6	2.7			10s;fg		NW	Inap.	Inap.	Cloudy	
Uvalde, Texas	29.16	740.7	30.03	762.7	35	1.7	61	N	4	1.8		2c	0	Calm		0	0	Clear	
Vicksburg, Mississippi	29.72	754.9	29.98	761.5	39	3.9	91	NW	14	6.3			10s		NW	0.14	3.6	Cloudy	
Visalia, California	29.91	759.7	30.30	769.6	36	2.2	90	E	2	0.9		0	0			0	0	Clear	
Washington, D. C.	29.24	742.7	29 36	745.7	37	2.8	100	NE	12	5.4			10n		NE	1.06	26.9	Light rain	
Wickenburg, Arizona					38	3.3	31	W			4	0	0			0	0	Clear	
Wilmington, N. Carolina	29.49	749.0	29.54	750.3	52	11.1	86	W	8	3.6		5k	0	W		0.54	13.7	Fair	
Winnemucca, Nevada	26.11	663.2	30.47	773.9	21	— 6.1	71	NE	12	5.4		0	0			0	0	Clear	
Wood's Holl, Mass	29.88	758.9	29.92	760.0	34	1.1	79	E	13	5.8			10s		E	0	0	Cloudy	
Yankton, Dakota	28.83	732.3	30.24	768.1	12	—11.1	80	N	10	4.5			10s		N	0	0	Cloudy	
Yuma, Arizona	30.01	762.2	30.10	766.1	55	12.8	17	N	18	8.0		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	21.97	558.0			52.8	11.6	58	E	2	0.9		2c;cs	0			0	0	Fair	Thomas Herran.
Buff Bay Town, Jamaica.‡	29.79	756.7	30.10	764.5	67	19.4	84	E				0	0						
Havana, Cuba, W. I.	29.90	759.4	29.95	760.7	73	22.8	81	SW	3.6	1.6			8ks		W	Inap.	Inap.	Light rain	Charles Hasselbrink.
Jakobshavn, Greenland	30.32	770.1	30.38	771.0	31.6	— 0.2		SW			6		6			0	0		
Kingston, Jamaica, W. I.	29 98	761.5	29.99	761.7	68.3	20.2	94	Calm	0	0		0	0			0	0	Clear	Maxwell Hall.
Navassa, W. I.	29.89	759.2	29.97	761.2	73.5	23.1	72	NE	S.2	3.7		5k	5s	E	NE	Inap.	Inap.	Fair	F. M. Everett.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	76	24.4	91	E			3		10n	E		0.860	21.84	Raining	Dr. C. J. Hering.
Puerto Berrio, U. S. Colmbia	29.36	745.7	29.92	760.0	79	26.1	89	Calm			0	20k	5s	S	Calm	0.02	0.5	Hazy	Francesco J. Cisneros.
Rivas, Nicaragua					72	22		NE			1	0	0			0	0		Earl Flint.
Santiago de Cuba, W. I.	29.95	760.7	29.98	761.5	74	23.3	72	Calm	0	0		0	4ks			0	0		Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	30.20	767.1	30.26	768.6	15.6	— 9.1		W			2		0			0.126	3.2		
York Factory, B. A.	30.32	770.1	30.38	771.6	—27.0	—32.8		NW	16	7.2		1c	0	N		0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
M.H. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, N. 35° 51′, E. 14° 31′	30.14	765.5	60	15.6	61	NW			1		2	NW						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. W. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.94	760.5	66	18.9		SE			2		9	SE						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 32′, E. 81° 22′	29.89	759.2	79	26.1		N			2		5	N				3	N	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.92	760.0	81	27.2	70	NW			2-4		0							Squally	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 9° 10′, W. 78° 40′	29.91	759.7	65.5	18.6	97	SE			2		10					1	S	Foggy	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	30.14	765.5	58	14.4	70	NW			6		2	NW				4	NW	D. clouds	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 29° 02′, E. 122° 03′	30.41	772.4	42.7	5.9	66	N			5		0							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 17° 54′ E. 67° 00′	29.99	761.7	78	25.6	78	N			3-4		5	NE				2	NE	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 38° 42′, W. 9° 06′	29.72	754.9	62.5	16.9	91	SW			6		10	W						Misty	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Nevis, W. I.	30.00	762.0	75	23.9	90	E			3		9	NE						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 45° 56′	29.88	758.9	79	26.1	62	ESE			1		0					2	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis, N. 12° 27′, E. 43° 32′	30.13	765.3	77	25.0	73	SSE			5		0							Blue sky	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, India	30.13	765.3	64.5	18.1	58	N			1		0							Blue sky	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	30.07	763.8	84.0	29.0	58	NNE			1		0			0	0	1	SE	Blue sky	S. C. da Silva Costa, Comd't.
Sado, S. 3° 41′, E. 9° 56′	29.92	760.0	83.3	28.5	76	WSW			3		3			0	0	2	WSW	D. clouds	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, N. 34° 12′, E. 20° 18′	30.06	763.4	63.5	17.5		W			4		5							D. clouds	

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	29.96	761.0	45	7.2	76	NW	7	3.1			8		NW	0.39	9.9			Fair	
N. Yard, Portsmouth, N. H.	30.03	762.7	23	— 5.0	?	NE	6	2.7			10		NE	0	0			Cloudy	
Naval Hospital, Yokohama, Japan	29.36	745.7	36.5	2.5	90	W			2		10		W	0.41	10.4			Gloomy	
Adams, Ancon, Peru	30.02	762.5	71	21.7	90	Calm			0		10					Sm'h		Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.28	769.1	48	8.9	63	SE			2		0			0	0			Clear	
Alert, Hong-Kong, China *.	30.07	763.8	63	17.2	72	Calm			0		0			0	0	Sm'h		Hazy	
Alliance, N. 26° 03′, W. 83° 53′	29.91	759.7	68	20.0	70	WSW			3		2		WSW	Hea	vy	Sm'h	wsw	Fair	
Ashuelot, Tientsin, China	30.45	773.4	17	— 8.3	100	S			1		0							Clear	
Colorado, New York, N. Y.	29.71	754.6	30	— 1.1	100	NE	10	4.5			10		NE					Rain & sleet	
Constitution, N. Yard, League I'd., Pa			33	0.6	100	ENE	20	8.9										Light rain	
Franklin, Off N. Yard, Norfolk, Va	29.35	745.5	59	15.0	88	SSW	17	7.6			2		SW	0.40	10.2			Fair	
Galena, Villafranca, France	30.00	762.0	50	10.0	72	WSW			5		0							Clear	
Independence, N. Yard, Mare I'd, Cal.	30.27	768.8	45	7.2	76	E	7.2	3.2			5		E	0	0			Fair	
Jamestown, Sitka, Alaska *	30.10	764.5	46	7.8	92	SSE			3		10			0.75	17.1	Sm'h		Overcast	
Kearsarge, Port Royal, Jamaica, W.I.	29.99	761.7	74	23.3	86	NW			2		2		ENE			Sm'h		Fair	
Lackawanna, Ancon, Peru †.	30.07	763.8	69	20.6	80	S			1		2		S	0	0			Fair	
Marion, Straits of Magellan	30.10	764.5	52	11.1	85	SSW			2		8?		SSW			Sm'h		Clear?	
Michigan, Erie, Pennsylvania	29.28	743.7	33	0.6		E			4		10							Raining	
Minnesota, New York, N. Y.	29.71	754.6	30	— 1.1		E			6		10		E					Snowing	
Monocacy, Shanghai, China	30.45	773.4	31	— 0.6	69	N			3		0							Clear	
New Hampshire, Port Royal, S. C.	29.69	754.1	50	10.0	93	W	18	8.0			10		WNW	0.25	6.3			Foggy	
Nipsic, Villafranca, France	30.05	763.3	49	9.4	37	WSW			2		0					Sm'h		Blue sky	
Onward, Chimbote Bay, Peru †	29.89	759.2	70	21.1	85	SSE			2		5		NNE			Long	N;W	Fair	
Palos, Shanghai, China	30.49	774.4	31	— 0.6	69	NNW			3		0							Clear	
Passaic, Washington, D. C.	29.39	746.5	38	3.3	91	NE			3		10		NE					Rainy	
Pensacola, Mazatlan, Mexico	29.90	759.4	64	17.8	73	NNW			2		5					Long		Fair	
Portsmouth, Washington, D. C.	29.33	745.0	37	2.8	100	E			1		10							Rainy	
Powhatan, New York, N. Y.	29.79	756.7	28	— 2.2	100	NNE			3		10		N					Rain & sleet	
Quinnebaug, N. 35° 43′, E. 14° 52′	30.13	765.3	56	13.3	75	NW			6		2		NW			Mod.	NW		
Richmond, Swaton, China	30.20	767.1	61	16.1	55	S			1		0			0	0			Clear	
Saratoga, Baltimore, Md.	29.34	745.2	36	2.2	100	NE			3		10		NE	Hea	vy			Cloudy	
Shenandoah, Montevideo, Uruguay *	30.12	765.0	65	18.3	68	NW			3		0					Sm'h		Clear	
St. Louis, League Island, Pa	29.69	754.1	33	0.6	100	NE	14	6.3			10			0.325	8.26			Rainy	
Swatara, Kobe, Japan †.	29.61	752.1	40	4.4	73	WNW			4		10		Calm			Sm'h		Raining	
Tennessee, N. 17° 14′, W. 72° 12′	30.03	762.7	79	26.1	66	E	18	8.0			2			0	0	Sm'h		Clear	
Trenton, Villafranca, France *	30.01	762.2	59	15.0	23	NNW			2-3		0			0	0	Sm'h		Clear	
Vandalia, N. 13° 59′, W. 58° 15′	30.02	762.5	78	25.6	82	E			4		2		SW					Fair	
Wabash, Boston, Massachusetts	30.01	762.2	19	— 7.2	85	NNW	2	0.9			10		Calm	0	0			Overcast	
Wachusetts, Panama, Panama *.	29.51	749.5	77	25.0	91	NW			3		5		N	0	0	Sm'h		Fair	
Wyoming, Naples, Italy	29.99	761.7	47	8.3	48	W			4		2		NW			Sm'h		Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡ S. 32° 45′, E. 15° 59′	29.99	761.7	67.8	19.9	83	SE			6		3							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N 38° 31′, W. 18° 20′	29.73	755.1	56	13.3	100	NNE			6		10							Raining	Capt. A. J. Brown.
Ship Blychswood																			Capt. E. J. Molony.
British Merchant ‡																			Capt. E. Heggum.
Chin Yang, ‡ N. 26° 59′, W. 21° 45′	30.09	764.3	69	20.6	85	WSW			2		2							Blue sky	Capt. H. Youlden.
S. S. Clpero, N. 24° 40′, W. 45° 55′	30.21	767.3	69	20.6		WNW			1		3					2	W	D. clouds	W. N. Lailey.
City of Agra, ‡ S. 50° 29′, W. 52° 58′	29.42	747.3	42.0	5.6	86	SSW			5		10							Squally	Capt. T. Young.
Barque Commewyne, ‡ N. 7° 28′, W. 58° 25′	29.99	761.7	81.1	27.3	80	NE			4		9							Overcast	Capt. W. Scott.
Barque Coppename, N. 22° 00′, W. 24° 55′	30.11	764.8	74.3	23.5	73	ENE			4		3							D. clouds	Capt. A. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡ S. 32° 20′, E. 33° 10′	30.04	763.0	72.8	22.7	89	SE			4		10							Drizzling	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, N. 30° 23′, W. 21° 45′	30.07	763.8	67.5	19.7	88	WSW			5		1							Misty	Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 36° 30′, W. 3° 32′	30.00	762.0	60.5	15.8	88	ENE			2		8							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia, N. 50° 46′, W. 19° 18′	30.08	764.0	46	7.8	100	NNE			5		8		NNE	Ha	ll	Mod.	NNE	Squally	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 44° 12′, W. 54° 30′	30.02	762.5	36	2.2		NW			5		8		NW			Sm'h	NW	Cloudy	Capt. J. W. Jennings.
S. S. Britanic																			Capt. H. Perry.
S. S. Celtic, N. 40° 37′, W. 67° 25′	29.91	759.7	41	5.0		E			4		8		E	o	o	Sm'h		Fair	Capt. Benj. Gleadell.
S. S. Germanic, N. 45° 50′, W. 39° 00′	29.99	761.7	51	10.6		ESE			6		8?		ESE	o	o	H'vy	ESE	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Hermann, N. 51° 38′, E. 2° 14′	30.26	768.6	30.2	— 1.0		SE			4		0			o	o	Sm'h	SE	Clear	Capt. H. Baur.
S. S. Köln, N. 49° 50′, W. 17° 42′	30.19	766.8	41.0	5.0		ENE			4-6		0		ENE	Hea	vy	Cross	ENE	Fair	Capt. F. Pfeiffer.
S. S. Leipzig ‡																			Capt. G. Meyer.
S. S. Ohlo																			
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡ S. 10° 07′, W. 31° 08′	30.12	765.0	78.8	26	84	ENE			5		6							Raining	Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Philadelphia, Pa	29.49	749.0	30	— 1.1	89	NE			6		10		ENE					Raining	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 50° 58′, W. 23° 10′ †	30.29	769.4	45	7.2	92	E			6		8		S	Light		Mod.	E	Cloudy	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 51° 05′, W. 17° 07′ *†	30.25	768.3	46	7.8	92	E			3		5		E	Snow squalls		Mod.	NNE	Fair	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, Liverpool, England †	30.25	768.3	29	— 1.7		ENE			3		2		E	0	0			Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 22° 50′, W. 108° 46′ †	29.84	757.9	71	21.7	71	NNW			3		2		NNW	0	0	Sm'll	NNW	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 30° 52′, E. 133° 25′ †	29.83	757.7	59	15.0	65	WNW			8		10			0	0	High	W	Overcast	Capt. H. Davison.
S. S. Gaelic, San Francisco, Cal. †*	30.44	773 2	51	10.6	93	N			2		2		W					Clear	Capt. W. H. Kidley.
S. S. Oceanic, N. 43° 14′, W. 135° 34′	30.14	765.5	55	12.8	93	S			2		2		S	0.06	1.5	Sl't	SE;SW	Foggy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			Capt. J. M. Lachlan.
S. S. Geo. W. Elder																			Capt. Fred. Bolles
S. S. Columbia																			
S. S. Oregon, N. 37° 50′, W. 123° 05′ †	30.33	770.4	52.5	11.4	86	SE			1		0					Sm'h	SW	Pleasant	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, N. 32° 40′, W. 117° 15′ †	30.09	764.3	50	10.0	86	NE			3		0					Mod.	W	Clear	Capt. J. N. Ingalls.
S. S. Idaho, N. 47° 04′, W. 124° 25′ †	30.32	770.1	48	8.9	92	NNW			2		2		NW			Mod.	NW	Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, San Francisco, Cal. †	30.44	773.2	48	8.9	70	N			2		0					Sm'h		Clear	Thos. Wallace.
S. S. State of California, San Francisco, Cal. †	30.34	770.6	47	8.3	85	SE			3		0							Clear	Capt. G. Debney.
S. S. Victoria, N. 39° 03′, W. 123° 50′ *†	30.28	769.0	50	10.0	93	NNW			2		0					Light	W	Clear	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			A. Bannerman, 1st Officer.
S. S. Australia																			
S. S. City of New York, Sydney, N. S. W. †	30.06	763.5	69	20.6	100	S			3		0			0	0			Clear	Wm. H. Hawes, 2d Officer. Capt. D. S. Austin.
S. S. City of Panama, N. 32° 26′, W. 119° 16′ †	30.21	767.3	59	15.0	65	NE			4		0					Sm'h	W	Clear	Capt. G. G. Berry.
S. S. City of Peking, N. 30° 08′, E. 174° 05′ †	29.75	755.6	63	17.2	83	W			6		0		W	0	0	H'vy	WNW	Clear	Capt. H. C. Dearborn.
S. S. City of Sidney, N. 22° 39, W. 155° 22′ †	30.04	763.0	74	23.3	72	ESE			4		10		SSE	0	0	H'vy	WNW	Cloudy	A. L. Ritchie, 2d Officer.
S. S. City of Tokio, Yokohama, Japan †	29.63	752.6	40	4.4	73	SW			2		10		SW	1.	25.			Raining	apt. R. R. Searle.
S. S. Colima ‡																			Capt. D. E. Griffiths.
S. S. Dakota																			
S. S. Granada, Panama, Panama †	29.81	757.2	76	24.4	91	NNW			4		5?		NNW	0	0			Clear?	
S. S. Zealandia, N. 33° 17′, W. 134° 17′	30.34	770.6	63	17.2	72	SW			6		10		WSW			Mod.	NW	Overcast	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland, ‡ N. 50° 29′, W. 24° 01′ †	29.89	759.2	37	2.8	81	ESE			8		8		ESE			R'gh	ESE	Snowing	Capt. Sam'l Jackson. Capt. S. Stokes.
S. S. Nederland																			
S. S. Rhynland, ‡ N. 45° 25′, W. 45° 45′	29.71	754.6	39	3.9	91	WSW			5		10		WSW	0	0	Cross	ESE	Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 49° 27′, W. 33° 21′	30.32	770.1				E			5		5		E	0	0	Short	E	Fair	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, N. 37° 51′, W. 74° 30′ †	29.52	749.8	40	4.4		S			7		10			2.06	52.3	Long	SSE	Storming	Capt. A. Mehaffey.
Sch'r Addie Fuller, Brunswick, Ga.	29.75	755.6	53	11.7	66	W	14	6.3			20			0.06	1.5			Clear	Capt. J. Jorgensen. Capt. S. S. Lewis.
Sch'r Annie R. Lewis																			Capt B. F. Woodbury.
Bark Carrie Heckle																			
Brigantine George, ‡ Ponce, Porto Rico †	30.25	768.3	78	25.6		E			2		2			0	0	Sm'h		Fair	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	29.73	755.1	60	15.6	88	SW	4	1.8			8n			0.04	1.0			Cloudy	Capt. James S. Gawin
Ship Jumna																			
Bark Sunbeam, ‡ Lisbon, Portugal †	29.66	753.4	63	17.2	100	SW			4		10		W	Very	h'vy			Rainy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 22, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.13	765.4	67.1	19.5	83	Calm			0		3					Pretty fair.	Dr. Ollive.
Nemours			30.01	762.3	73.4	23.0	74	S			0		0			0	0	Clear.	Raynard.
Algie s			29.85	758.2	66.2	19.0	61	WSW			6		4			0	0	Cloudy	Nicolas.
La Calle			30.24	768.2	74.5	23.6	39	WNW			5		4			0	0	Cloudy	Fonfrède.
Tunis			30.07	763.7															Jacques.
Sfax			30.19	766.7															Gau.
Said.a			30.06	763.4	72.3	22.4	16	E			6		0			0	0	Clear	Dumas.
Tebessa			30.13	765.3	68.7	20.4	19	WNW			1		3			0	0	Pretty fair.	Watrin.
Gerville																			Lonchamp.
Laghouat			30.19	766.9	76.3	24.6	16	SW			1		1			0	0	Very fair	Herbin.
Biskra			30.17	766.3	64.8	18.2	67	NW			3		3			0	0	Pretty fair.	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.98	761.5	30.07	763.8	60.3	15.7	72	S	12	5.4			8			0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania			29.70	754.1	73	22.8		NW			3		4kn			0.02	0.5		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.60	751.8	30.20	767.0	18.1	— 7.7	83	Calm			0		10			0.087	2.2	Snowing	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.28	743.8	30.08	764.1	11.5	—11.4	93	WNW	11.2	5.0			0			0	0		Dr. Wiersbicki.
Eperies	29.19	739.0	30.05	763.3	16.0	— 8.9	82	NW			3		5cs			0	0		Julius Mikolik.
Gratz‡	28.81	731.7	30.16	766.0	18.0	— 7.8	55	SSW			2		0			0	0		Andreas Rospini.
Hermannstadt	28.62	726.9	30.19	766.9	12.9	—10.6	93	NW			3		0			0	0		Prof. A. Gottsching.
Kremsmunster, Obs'y	28.70	729.0	30.18	766.5	11.3	—11.5	93	Calm			0		0			0	0		The Staff.
Lemberg	28.95	735.3	30.02	762.4	18.1	— 7.7	78	NW			2		2			Inap.	Inap.		Dr. T. Stanecki.
Pola	29.89	759.3	30.01	762.3	32.2	0.1	98	ESE			4		10			0.630	16.0		I. R. Hydrographic Office.
Szathmar	29.69	754.2	30.15	765.8	16.3	— 8.7	88	S			2		10			0	0		Beich. Peter, S. J.
Szegedin	29.89	759.1	30.19	765.8	19.8	— 6.8	84	Calm			0		0			0	0		Kar. Stancel.
Trieste	29.95	760.8	30.06	763.4	27.1	— 2.7	94	ENE			2		10			Inap.	Inap.	Snowing	P. Busin.
Vienna	29.38	746.3	30.16	766.0	18.3	— 7.6	61	W			3		0			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.92	760.0	30.14	765.5	20.8	— 6.2	85	WSW			1		10		NNW	0.276	0.7		Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck	29.99	761.7	30.11	764.9	22.8	— 5.1	85	S			2		10			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 27, 1882.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.13	765.3	30.23	767.8	35.4	1.9	80	NW	15	6.7			9			0.030	0.76	Overcast	W. Boswell.
Armagh, Observatory	30.13	765.3	30.38	771.6	25.3	— 3.7	81	SW	7	3.1			5					D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.27	768.8	32.0	0.0	85	WNW	11	4.9			9					Overcast	John Hartnup.
Bolton, Sharples	29.67	753.6	30.23	767.8	29.2	— 1.6	100	NW	4	1.8			3					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.82	757.4	30.21	767.3	30.1	— 1.1	93	NW			2		9			0	0	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.00	762.0	30.03	762.7	82	27.8	68	NE			3		3					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			30.18	766.6	21.4	— 5.9	93	W			0.4		1					Blue sky	John McLaren.
Chatham, School M. E.	30.05	763.3	30.19	766.8	23.2	— 4.9	90	NW			1		10					Misty	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	30.02	762.5	30.26	768.6	28.6	— 1.9	94	NE			4		1					D. clouds	The Staff.
Fort Napier, Natal	27.48	698.0	29.70	754.4	74.3	23.5	81	NE			1		6					Overcast	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.88	758.9	85	29.4	87	SW			1		5					D. clouds	C. E. Keane.
Galway, Queen's College			30.35	770.9	25	— 3.9	87	N			2		2					Blue sky	J. O'Donaghadue.
Gibraltar, Mediterranean	29.93	760.2	29.99	761.7	61.4	16.3	92	W			5		8					Gloomy	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.07	763.8	30.27	768.8	31.3	— 0.4	88	N			1		10k					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	30.02	762.5	30.21	767.3	22.2	— 5.4	93	WSW			1		10					Snow & fog	The Staff.
Guernsey	29.90	759.4	30.13	765.3	31	— 0.6	89	NE			3		3					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.18	766.6	30.22	767.6	23.0	— 5.0	90	WNW	4	1.8			10					Misty	The Met'g'l Office.
Leicester, Museum	29.95	760.7	30.23	767.8	26.5	— 3.1	100	SW			1							Blue sky	E. Carryer.
Malta, Mediterranean	29.84	757.9	29.92	760.0	64.8	18.2	74	SW			3		4					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.02	762.5	70.2	21.2	100	S			0		5					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.69	754.1	30.25	768.3	27.7	— 2.4	79	NNW			3		9					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	29.98	761.5	30.24	768.1	19.8	— 6.8	?	W			1		7					Misty	The Staff.
Plymouth	30.18	766.6	30.25	768.3	27.2	— 2.7	94	NE			1		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.23	767.8	35.2	1.8	90	NNW	9	4.0			10					Overcast	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.07	763.8	30.14	765.5	35.2	1.8	63	N			1		5					D. clouds	Serg't W. H. Lyne.
Sheffield	29.95	760.7	30.24	768.1	34.4	1.3	96	ENE			1		8			Inap.	Inap.	Overcast	W. F. Cooper.
Silloth Rectory	30.24	768.1	30.27	768.8	30.4	— 0.9	69	Calm			0		10			0	0	Overcast	Rev. F. Redford, A. M.
Stonyhurst, Observatory			30.25	768.3	26.5	— 3.1	71	ENE	6	2.7			10					Misty	Rev. S. J. Perry.
Strathfield Turgiss	29.99	761.7	30.22	767.6	21.4	— 5.9	98	N			1		7					D. clouds	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution			30.27	768.8	31	— 0.6	79	NE			4		7					D. clouds	W. Newcombe.
Valencia, Observatory	30.38	771.6	30.40	772.1	30.9	— 0.6	65	NNE	16	7.2			2					Misty	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	29.82	757.4	29.86	758.4	— 7.5	—21.9		Calm	0	0		0	6s			0	0	Fair	Hon. J. Ferguson.
Chatham, N. B.*	29.62	752.3	29.69	754.1	0	—17.8	97	Calm	0	0		2k	5ks	N	N	0	0	Clear	G. A. Blair.
Charlottetown, P. E. Island	29.61	752.1	29.65	753.1	6	—14.4	100	Calm	0	0			10n			0	0	Threatening	H. J. Cundall, C. E.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario	29.54	750 3	29.74	755.4	10.7	—11.8	98	SW			1		10n			0.40	10.2	Snowing	James Smith, M. A.
Dalhousie, N. B	29.92	760.0	29.96	761.0	— 3.5	—19.7		W			2	0	1s			0	0	Clear	H. A. Johnson.
Father Point, Quebec*	29.72	754.9	29.74	755.4	10	—12.2	75	SW	2	0.9			10n		Calm	0	0	Cloudy	J. McWilliams.
Fredericton, N. B	29.64	752.8	29.71	754.6	14.3	— 9.8	77	E	2	0.9			10s			0	0	Cloudy	Prof. Harrison.
Fort Garry, Manitoba*	29.73	755.1	30.69	779.5	—10	—23.3	95	NW	5	2.2		0	0			0	0	Clear	James Stewart.
Granton, Ontario	28.61	726.7	29.76	755.9	23.3	— 4.8	96	NE			1		10n			0.60	15.2	Snowing	James Grant.
Halifax, N. S.*	29.45	748.0	29.59	751.6	17	— 8.3	93	NE	11	4.9			10n			0.04	1.0	Heavy snow	A. Allison.
Hamilton, Ontario	29.36	745.7	29.77	756.1	24.7	— 4.1	93	NE			1		10n			1.06	26.9	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.35	745.5	29.70	754.4	17	— 8.3	97	NE	8	3.6			10s		NE	0.75	19.0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	29.54	750.3	29.58	751.3	18.2	— 7.7	95	S	2	0.9			10n			0	0	Cloudy	C. H. Rigby.
Montreal, Quebec*	29.56	750.8	29.77	756.1	15	— 9.4	93	NE	22	9.8			10n			0.50	12.7	Heavy snow	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.09	738.9	29.84	757.9	14	—10.0	82	E	20	8.9		5k	5ks	NE	NE	Inap.	Inap	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.00	736.6	29.79	756.7	19.9	— 6.7	77	NE			1		10n			0.90	22.9	Snowing	J. F. Jeffers, M. A.
Port Dover, Ontario	29.03	737.3	29.75	755.6	24	— 4.4	100	Calm	0	0			10n			0.70	17.8	Light snow	H. Morgan.
Port Stanley, Ontario	29.07	738.4	29.75	755.6	23	— 5.0	95	NW	1	0.4			10n		NW	0.55	14.0	Light snow	M. Payne.
Quebec, Quebec*	29.40	746.7	29.84	757.9	14	—10.0	100	NE			1		8n		NE	0	0	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.37	746.0	29.87	758.7	10	—12.2	81	W	6	2.7		5s	0	W		0	0	Fair	W. H. McIntyre.
St. Andrews	29.59	751.6	29.64	752.8	16	— 8.9	90	NE	20	8.9			10n			0.16	4.1	Light snow	
St. John's, N. B	29.44	747.8	29.62	752.3	14.0	—10.0	100	NE	11	4.9			10n			0.10	2.5	Snowing	G. Murdock, C. E.
Saugeen, Ontario*	29.05	737.9	29.81	757.2	20	— 6.7	89	NE	12	5.4			10s			0.50	12.7	Heavy snow	K. Stewart.
Stratford, Ontario	28.47	723.1	29.82	757.4	21.5	— 5.8	94	Calm	0	0			10s			0.60	15.2	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.63	752.6	29.68	753.9	7	—13.9	98	Calm	0	0		5ck	2n		SE	0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.38	746.2	29.79	756.7	23	— 5.0	93	N	4	1.8			10n			0.60	15.2	Cloudy	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario	28.63	727.7	29.98	761.5	23.6	— 4.7	96	N	3	1.3			10s			1.20	30.5	Snowing	Prof. Wolverton.
Yarmouth, N. S.*	29.43	747.5	29.49	749.0	19	— 7.2	74	NE	19	8.5			Fog		NE	0.15	3.8	Foggy	Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. John's, Newfoundland	29.78	756.4	29.96	761.0	24	— 4.4	100	SE	2	0.9		10k	10s			0	0	Cloudy	John Delany.
St. Pierre, N. F			29.64	752.8	23.0	5.0		W			1					0	0		N. F. Land, Comd't.
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																0	0	Vapory	The Staff, for D. Gill.
Cape Town, C. G. H. Obs'y	29.94	760.5	29.97	761.2	84.6	29.2	51	SSE	23.1	10.3		0	1			0	0		John Duthie.
Cape St. Francis Lt. House	29.88	758.9			71.0	21.7	78	SW	14.4	6.4			2k						
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	30.26	768.7	30.29	769.3	29.5	— 1.4	80	SE	3.4	1.5			0			0	0	Clear	M. Marc Dechevrens, S J.

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

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.19	665.2	29.91	759.7	61.2	16.2	76	SE			2					0	0	Clear	Federico Maison.

DANISH SERIES.

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

Copenhagen	29.81	757.2	29.86	758.4	19.2	—7.1	90	Calm	0	0			9					Snowing	
Faröe	29.91	759.8	29.93	760.3	20.5	—6.4	90	E			2		1						
Godthaab, Greenland	30.39	772.0	30.44	773.1	33.4	0.8	70	S			4		8						
Stykkisholm, Iceland	30.33	770.3	30.37	771.4	29.8	—1.2	96	Calm			0		10					Snowing	
Thorshavn	30.26	768.6	30.30	769.5	32.4	0.2	65	NNE	7	3			8						
Vestervig	29.79	756.7	29.89	759.1	26.1	—3.3	100	Calm			0		0						

FRENCH SERIES.

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

Agen, Normal School	29.11	739.4	29.78	756.3	40.6	4.8	87	NE			1		n		E	0	0		M. Labroue, Director.
Alençon	29.67	753.7	30.22	767.7	16.9	—8.4	88	N			3		0			0	0	Clear	M. Nicot, Director.
Arras, Engineer School	29.88	758.9	30.16	766.1	17.2	—8.2	94	ESE				ck							M. Klein, Commandant.
Avignon, Normal School	29.72	755 0	29.80	757.0	31.3	—0.4	100	N			1		10					Snowy	M. Giraud, Director.
Bar-sur-Seine‖	29.48	748.8	30.09	764.2	17.6	—8.0	40	E			1		0			0	0	Clear	M. Sailliard, Director.
Beauvais, Normal School	29.91	759.6	30.20	767.1	16.0	—8.9	72	ENE			1		0			0	0	Clear	M. Frère Eugene Marie.
Besançon, Normal School	29.05	737.9	30.12	765.1	21.4	—5.9	100	NNE			4		0			0.04	1.	Clear	M. Gobin, Director.
Bordeaux, Observatory	29.51	749.6	29.78	756.4	34.5	1.4	95	ENE			1		10		WSW	0.185	4.7	Covered	M. Rayet, Director.
Bourges, Normal School	29.34	745.2	29.93	760.3	22.1	—5.5	64	NE			4		5kn		NE	0	0	Cloudy	M. Postel, Director.
Brest, Naval Observatory	29.86	758.4	30.10	764.6	27.0	—2.8	87	NE			2		0			0	0		M. de Rermaree, Dir.
Caen, Normal School	30.04	763.1	30.12	765.1	38.8	3.8	53	S			1		0			0.102	2.6	Clear	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.82	757.5	30.16	766.1	18.5	—7.5		NE			1		0			0	0	Clear	M. Jadot, Director.
Charleville, Normal School	29.60	751.9	30.15	765.8	27.0	—2.8	96	E			1		0			0	0	Clear	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.46	722.9	29.90	759.4	25.0	—3.9	95	NE			1		10			0.169	4.3	Snowing	M. Allúard, Director.
Cluny, Normal School	29.02	737.0	29.91	759.7	20.1	—6.6	31	N			3		10	Calm	Calm	0	0	Covered	M. de Villemontée, Dir.
Commercy, Normal School	29.25	742.9	30.18	766.6	15.8	—9		NE			4					0	0		Dr. Coulet, Director.
Gap, Normal School	27.23	691.6	29.86	758.4	30.6	—0.8	96	NE			1		10n		SW			Snowing	M. Jeangirard, Director.
Grèasque, du. Rhone	28.64	727.5	29.78	756.5	38.1	3.4	90	E			3		10		SE	0.24	6.	Sleeting	M. Kina, Director.
Grenoble, Normal School	29.12	739.6	29.94	760.4	23.4	—4.8		ENE			1		10n					Snowing	M. Ablard, Director.
Guéret, Normal School	28.21	716.4	29.87	758.8	24.8	—4	79	SW			1		10					Snowing	M. Rivoire Director.
Lamballe, Normal School	29.79	756.6	30.09	764.3	24.8	—4	98	NNW			1		1		NNW	0	0	Very clear	M. Ollitrault, Director.
Lescar, Normal School	28.98	736.0	29.67	753.6	41.4	5.2	84	E			1		10		W	0	0	Covered	M. Chauvin, Director.
Lorient, Naval Observatory	30.00	761.9	30.10	764.5	25.9	—3.4	65	NE			4		Fog	NE	N	0	0	Foggy	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.83	732.2	29.92	760.0	18.7	—7.4	83	N			1		n			0.295	7.5		M. André, Director.
Mans, Normal School	29.77	756.2	30.10	764.5	19.9	—6.7	91	E			6		2		E	0	0	Slightly cl'dy	M. Piboeu, Director.
Marseille, Observatory	29.47	748.5	29.74	755.4	44.2	6.8	73	E			1		10		E	0.185	4.70		M. Stephan, Director.
Montlouis l'instituteur	24.54	623.3	29.78	756.3	35.6	2.0	67	SW	5.6	2.5			4	SSW		0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.65	753.2	29.77	756.1	34.7	1.5	100	N			6		10			0.657	16.7	Raining	M. Galzin, Director.
Nancy, Normal School	29.26	743.2	30.10	764.4	14.4	—9.8	87	NW			2		0			0	0	Clear	M. Hasse.
Nantes, Observatory	29.91	759.6	30.06	763.6	21.6	—5.8	74	NNE			3		6nk		SW	0	0		M. Larocque, Dir.
Nice	29.78	756.3	29.81	757.2	46.4	8.0	59	N			2		10	N	N	0.201	5.1	Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.63	752.5	29.73	755.2	41.0	5.0	33	NE	3.8	1.7			10	NW	NW	0.118	3.0		Dr. Fines.
Pic-du-Midi, Plantade	22.14	562.4			25.5	—3.6							10		SW	0.098	2.5	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.78	730.9	29.89	759.2	31.3	—0.4		Calm			0		5					Snowing	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.77	629.1			20.1	—6.6	98	ESE			4		10			0.079	2.0	Snow and fog	M. Allnard, Director.
Rochefort, Naval Obs'y	29.79	756.7	29.82	757.5	30.2	—1.0	96	ENE			4		5		ENE	0	0	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.70	754.5	29.93	760.1	25.2	—3.8	65	NNE			3		8		NE	0	0	Very cloudy	M. Mouillot, Director.
Rodez, Normal School	27.61	701.2	29.82	757.4	33.8	1.0	89	E			1		10		W	0.079	2.0	Covered	M. Richard, Director.
Rouen, Normal School	30.08	763.9	30.16	766.1	23.2	—4.9	78	E			1		0			0	0	Clear	M. Platrier, Director.
Saint Lô, Normal School	30.02	762.6	30.18	766.6	24.1	—4.4	86	E			1		0			0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.95	760.8	30.12	765.0	18.9	—7.3	68	NNE			2		0						M. Renou, Director.
Toulouse, Observatory	29.07	738.4	29.79	756.7	39.7	4.3	91	SSE			1		10			0	0	Covered	M. Baillaud, Director.
Tours	29.79	756.7	29.99	761.7				NE			4		5	Calm	W	0	0	½ covered	M. de Tastes.
Versailles, Observatory	29.61	752.0	30.10	764.5	19.4	—7.0	56	NE			2		0			0.051	1.30	Clear	Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	29.25	743.0	30.12	765.0	14.0	—10.0	95	E			5		4ks	N		0	0		Prof. Dr. Hoh.
Berlin	29.73	755.1	29.91	759.8	21.2	— 6.0	69	NW			2		10			0.122	3.1		Prof. Dr. Arndt.
Breslau	29.45	747.9	29.98	761.4	16.0	— 8.9	91	SSW			2		10			0.030	0.75	Snowing	Royal University Obs'y.
Carlsruhe	29.72	754.8	30.19	766.7	12.6	—10.8	72	NE			2		0			0	0		Albert Senz.
Cassel	29.39	746.4	29.99	761.8	14.0	—10.0	80	S			4		10	S		0.017	0.42	Snowing	Dr. H. Möhl.
Frankfort on the Main	29.89	759.1	30.29	769.4	11.8	—11.2	60	N			1		6			0	0		Physical Society.
Friedrichshafen	28.55	725.1	30.11	764.7	12.9	—10.6	48	NE			4		0			0	0		Chief Telegrapher Wilhelm.
Hamburg	29.87	758.6	29.94	760.4	27.0	— 2.8	98	W			2		10			0.039	1.0		Dr. R. Kleeman.
Kiel	29.90	759.4	29.91	759.8	25.7	— 3.5	98	Calm			0		10			0.212	5.37	Snowing	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.57	751.0	30.02	762.5	17.2	— 8.2	91	WSW			4		10			0	0		Prof. Dr. Bruhns.
Magdeburg	29.71	754.7	29.95	760.7	23.2	— 4.9	88	W			4		10ks	NNW		0.012	0.3		Dr. Assmans.
Memel	29.73	755.2	29.78	756.4	27.5	— 2.5	79	W			4		10k						Reinbrecht & Issermann.
Munich	28.17	715.5	30.03	762.8	13 8	—10.1	72	NE			1		0			0	0	Hazy	Central Station.
Neufahrwasser	29.85	758.4	29.87	758.8	18.0	— 7.8	70	SSW			2		10			0.004	0.1		A Lothes.
Neustadt, Palatinate	29.53	750.0	30.06	763.4	12.7	—10.7		W			2		0			0	0		Dicknether.
Stuttgart	29.09	738.8	30.05	763.6	10.4	—12.0	63	NE			1		0			0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.50	724.0	30.04	763.0	14.4	— 9.8	78	Calm			0		1			0	0		Prof. Kemlein.
Wustrow	29.88	758.9	29.90	759.5	24.8	— 4.0	100	NNE			1		10s			0	0		Profs. Brandes & Reimer.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.76	755.9	30.16	766.0	52.5	11.4	.....	NW	.....	.....	1.0	.....	10	.....	.....	.....	.....	Covered	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.02	762.5	30.07	763.8	76.6	24.8	45	SW	5.0	2.2	.....	.....	0	.....	.....	0	0	Blue sky	
Deesa	29.52	749.9	30.00	762.0	80.8	27.1	32	W	8.4	3.8	.....	.....	0	.....	.....	0	0	Blue sky	
Bombay	29.94	760.5	29.98	761.5	81.9	27.7	65	NW	12.0	5.4	.....	.....	0	.....	.....	0	0	Blue sky	
Poona, Yarrowda	28.10	713.7	29.95	760.8	84.0	28.9	26	WSW	5.0	2.2	.....	.....	3	.....	W	0	0	D. clouds	
Belgaum	27.42	696.5	29.95	760.7	80.1	26.7	29	ENE	9.0	4.0	.....	.....	4	NW	.....	0	0	D. clouds	
Lahore	29.36	745.6	30.12	765.1	68.7	20.4	31	Calm	1.1	0.5	.....	.....	0	.....	.....	0	0	Blue sky	
Roorkee	29.17	740.9	30.10	764.5	66.8	19.3	37	W	1.3	0.6	.....	.....	0	.....	.....	0	0	.....	
Agra	29.53	750.0	30.11	764.9	71.3	21.8	38	W	2.2	1.0	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28.99	736.2	30.04	763.0	77.7	25.4	29	Calm	2.9	1.3	.....	.....	0	.....	.....	0	0	Blue sky	
Jubbulpore	28.69	728.8	30.09	764.3	71.3	21.8	33	Calm	1.5	0.7	.....	.....	0	.....	.....	0	0	Blue sky	
Lucknow	29.71	754.6	30.10	764.6	65.3	18.5	38	N	0.9	0.4	.....	.....	0	.....	.....	0	0	Blue sky	
Allahabad	29.76	756.0	30.09	764.3	66.0	18.9	53	Calm	0.6	0.3	.....	.....	0	.....	.....	0	0	Blue sky	
Patna	29.82	757.5	30.01	762.3	68.2	20.1	56	WNW	0.8	0.4	.....	.....	0	.....	.....	0	0	Blue sky	
Hazaribagh	28.01	711.5	30.10	764.4	64.0	17.8	33	N	5.9	2.6	.....	.....	0	.....	.....	0	0	Blue sky	
Cuttack	29.97	761.3	30.06	763.4	71.7	22.1	50	NE	1.0	0.4	.....	.....	0	.....	.....	0	0	Blue sky	
Calcutta, Alipore	30.02	762.6	30.05	763.2	65.8	18.8	59	N	0.5	0.2	.....	.....	0	.....	.....	0	0	Blue sky	
Goalpara	29.62	752.3	30.03	762.8	70.3	21.3	56	ENE	2.8	1.2	.....	.....	0	.....	.....	0	0	Blue sky	
Chittagong	29.94	760.3	30.03	762.7	69.6	20.9	66	W	2.2	1.0	.....	.....	0	.....	.....	0	0	Blue sky	
Sibsagar	29.72	754.9	30.07	763.8	61.9	16.6	80	ENE	1.6	0.7	.....	.....	0	.....	.....	0	0	Blue sky	
ITALIAN SERIES. By authority of the MINISTER OF AGRICULTURE, INDUSTRY AND COMMERCE. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.62	752.4	30.05	763.3	27.9	— 2.3	59	E	0.7	0.3	.....	.....	9	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.51	749.6	30.06	763.5	26.2	— 3.2	98	N	3.1	1.4	.....	.....	10	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.92	760.0	30.04	762.9	28.8	— 1.8	64	NE	9.8	4.4	.....	.....	10	NE	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.08	738.7	30.03	762.8	29.5	— 1.4	68	E	0.7	0.3	.....	.....	10	.....	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.74	755.3	29.93	760.3	31.6	— 0.2	79	N	14.3	6.4	.....	.....	10	N	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.04	712.3	30.06	763.4	26.8	— 2.9	47	W	.....	.....	2	.....	9	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.95	760.8	30.00	762.1	30.2	— 1.0	84	W	9.8	4.4	.....	.....	10	.....	.....	0	0	.....	Prof. Luigi Guidi.
Fiorence	29.66	753.3	29.92	760.0	37.9	3.3	83	NE	.....	.....	2	.....	10	.....	.....	0.016	0.4	.....	Cav. F. Meucci.
Leghorn	29.77	756.1	29.85	758.3	39.9	4.4	69	ENE	9.8	4.4	.....	.....	10	.....	.....	0.043	1.1	.....	Prof. P. Monte.
Rome	29.70	754.3	29.87	758.8	42.8	6.0	67	E	9.8	4.4	.....	.....	10	.....	.....	0	0	.....	Prof. P. S. Ferrari.
Lecce	29.80	756.9	30.06	763.4	41.7	5.4	75	SE	5.6	2.5	.....	.....	10	.....	.....	0.134	3.4	.....	Prof. C. de Giorgi.
Cosenza	29.11	739.5	30.02	762.5	41.9	5.5	69	WSW	0.7	0.3	.....	.....	10	SSW	.....	1.496	38.0	.....	Prof. D. Conti.
Cagliari	29.50	749.4	29.70	754.3	60.4	15.8	80	SE	.....	.....	2	.....	9	W	.....	0.134	3.4	.....	Prof. A. Pacinotti.
Palermo	29.57	751.0	29.82	757.3	59.0	15.0	73	WSW	25.5	11.4	.....	.....	5	.....	.....	0.138	3.5	.....	Prof. G. Cincciatore.
Syracuse	29.95	760.8	30.00	761.9	53.1	11.7	81	WNW	4.9	2.2	.....	.....	10	WSW	.....	0.071	1.8	.....	Prof. Vincenzo Guiliano
SUB-SERIES.																			
Naples, S. R.	29.40	746.7	29.94	760.5	40.1	4.5	87	N	2.5	1.1	.....	.....	10k	.....	.....	0.083	2.1	.....	Prof. F. Brioschi.
Stelvio	22.00	558.7	.....	.....	5.5	—14.7	74	SSW	.....	.....	.....	.....	0	.....	.....	0	0	.....	P. F. Denza.
Valdobbia	21.79	553.4	.....	.....	13.1	—10.5	100	E	.....	.....	.....	.....	10	.....	.....	‖1.969	50.0‖	.....	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.13	765.3	30.14	765.5	30.8	— 0.7	97	NNE	3.3	1.5	.....	.....	48.ck	.....	.....	0	0	Fair	K. Sasaki.
Kioto	29.90	759.4	30.08	764.0	33.0	0.6	76	.....	.....	.....	.....	.....	10s	.....	.....	0.030	0.76	Cloudy	
Nagasaki, I. M. Obs'y	29.98	761.5	30.19	766.8	36.9	2.7	79	NNW	2.9	1.3	.....	.....	10s	.....	.....	0.050	1.27	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.78	756.4	29.85	758.2	36.4	2.4	80	NW	10.2	4.6	.....	0	0	.....	.....	0	0	Clear	The Staff.
Wakayama	30.05	763.3	30.11	764.8	34.9	1.6	68	WNW	4.6	2.1	.....	.....	0	.....	.....	0	0	Clear	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.73	755.1	29.92	759.8	79.5	36.4	80	NNE	16.0	7.2	.....	2	8	.....	NNE	0.97	24.6	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the SECRETARY OF PUBLIC WORKS. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.65	753.0	29.91	759.7	61.2	16.2	57	NNW	.....	.....	3	0	1	S	.....	0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.12	765.0	30.12	765.0	32.9	0.5	.....	WNW	.....	.....	4	.....	.....	.....	.....	0	0	.....	.....
Groningen	29.91	759.8	29.97	761.2	30.6	— 0.8	.....	WNW	.....	.....	1	.....	.....	.....	.....	0.091	2.3	.....	
Helder	30.01	762.2	30.01	762.2	29.1	— 1.6	.....	ENE	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.07	763.8	30.07	763.8	32.2	0.1	100	W	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Utrecht	30.00	762.1	30.05	763.3	33.6	0.9	78	WSW	.....	.....	2	.....	5	.....	.....	0.008	0.2	Cloudy	H. van der Brink

‖ Unmelted snow.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.93	760.2	29.99	761.8	23.0	— 5.0	100	Calm	0	0			4			0.028	0.7	Dense fog....	
Christiania	29.66	753.4	29.82	757.4	21.9	— 5.6	87	SW	0	0			0			0	0		
Gjæsvær	29.63	752.5	29.65	753.1	18.0	— 7.8		Calm			0		10					Snowing.....	
Lodingen	29.71	754.7	29.76	755.9	19.9	— 6.7	52	N			4		0			0.012	0.3		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.77	756.2	29.93	760.2	55.8	13.2	82	SE	23.7	10.6			6			0	0		Dr. J. A. Sampaio.
Campo Major	28.95	735.4	29.97	761.2	51.1	10.6	65	W	8.0	3.6			8			0.283	7.2		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.97	761.2	30.05	763.4	68.0	20.0	72	WSW	6.9	3.1			4			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.67	753.7	30.04	762.9	52.5	11.4	64	NNW	11.2	5.0			5	WSW		0.122	3.1		The Staff.
Ponta Delgada, Azores	29.93	760.1	30.00	761.9	59.0	15.0	68	ESE	9.8	4.4			4			0.079	2.0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.49	723.6	29.59	751.5	33.1	0.6	100	SW	31	14			10						Capt. Lasarew.
Archangel	29.43	747.5	29.45	748.0	—25.1	—31.7	78	NW	2	1			0						Capt. Sseliwerstow.
Astrakhan	29.66	753.4	29.58	751.3	32.5	0.3	94	WNW	7	3			10n			Blank		Heavy cl'ds.	Capt. Wisganow.
Barnaul	29.35	745.6	29.88	759.0	21.2	— 6.0	69	NE	4	2			9						Meteorological Obs'y.
Dorpat	29.45	748.0	29.72	754.8	4.3	—15.4	90	WSW	4	2			10ks						Observatory.
Ekaterinburg	28.18	715.8	29.21	741.8	8.1	—13.3	52	WSW	18	8		7c;ck						Snow-drift..	Meteorological Obs'y.
Kasan	29.21	741.9	29.51	749.6	—11.2	—24.0	78	W	9	4			0						Observatory.
Kertch	29.86	758.4	29.88	758.9	22.3	— 5.4	80	NW	9	4			8						Lagorio.
Kieff	29.17	741.0	29.87	758.6	10.6	—11.9	74	NW	11	5			10ks;n					Light snow..	Observatory.
Krotkowo, N. 58°47', E. 48°34'																			Cand. Fatjanow.
Lugan	29.48	748.7	29.70	754.3	9.9	—12.3	70	WNW	13	6			3			Blank			Meteorological Obs'y.
Moscow	29.02	737.0	29.61	752.2	3.2	—16.0	71	S	4	2			3s						Meteorological Obs'y.
Nertchinsk	27.80	706.1	30.50	774.8	—25.1	—31.7	83						0						Meteorological Obs'y.
Nikolaiev	29.92	759.9	29.99	761.7	16.3	— 8.7	82	NNW	13	6			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.88	758.9	29.97	761.1	— 4.7	—20.4	73	Calm	0	0			10n						Lieut. Iwanow.
Nukuss	29.66	753.4	29.89	759.3	56.1	13.4	64	S	9	4			9kn						Dr. Dobrochotow.
Pekin, China	29.91	759.8	30.02	762.4	20.3	— 6.5	50	Calm	0	0			0						Physical Observatory.
St. Petersburg	29.61	752.0	29.62	752.4	— 2.7	—19.3	81	NW	2	1		ck	6k						Central Physical Obs'y.
Tashkend, Laboratory																			Teich, A. M.
Tiflis	28.15	715.0	29.58	751.3	42.8	6.0	64	N	2	1			10						Physical Observatory.
Warsaw	29.54	750.3	30.00	762.0	12.0	—11.1	82	W	11	5		6c							Astronomical Obs'y.
Wilna	29.36	745.8	29.81	757.2	19.0	— 7.2	91	SW	2	1			10					Snowing.....	Berg, Assistant.
Yeniseisk	29.86	758.5	30.18	766.6	3.2	—16.0	79	E	2	1			10						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.28	769.1	31.8	— 0.1	83	W			2		10k	N		0	0	Cloudy.....	Andrew Gibb.
Monach Lt. House, Hebrides			30.28	769.1	39	3.9	91	N			3	5	3	N		0	0		J. Youngclause.
North Unst, Shetland Isl'ds			30.18	766.6				N			4		10			0	0		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.64	752.8	29.74	755.5	51.1	10.6	66	W	5.1	2.3			4			0.165	4.19	Clouds..	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.78	756 3	29.84	757.8	52.9	11.6	64	SE	3.9	1.74		3	2	SW		0.051	1.3	Cloudy.....	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.85	682.0			35.2	1.8	83	W	8.0	3.57			9			0.157	4.0	Almost cov'd	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.62	701.6	29.92	760.0	39.7	4.3	93	SW	10.3	4.6			10			0.303	7.7	Covered.....	The Staff.
Murcia, Met. Obs'y	29.65	753.2	29.80	757.0	70.3	21.3	64	NE	2.2	1.0		2	2	NE		0.031	0.8	Misty.....	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.84	732.6	29.76	755.8	44.2	6.8	86	SW	18.6	8.3			9			0.220	5.6	Almost cov'd	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.95	760.7	30.02	762.4	68.7	20.4	94	SE	1.3	0.6		0	1k;ks			0.279	7.1	Fair.....	Benito Vines, S. J.
Manilla, Phillippine Islands	29.96	761.1	30.02	762.4	77.0	25.0	68	E	2.2	1.0			1s			0.01	0.3	Fair.....	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.94	760.4	30.04	762.9	60.1	15.6	91	WSW	10.6	4.7		0	9		W	0.084	2.1		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I.	29.99	761.8	30.08	764.1	74.1	23.4	89	S	0	0		1c	2k	SE	SE	0	0	Clear.....	Enrique Gadea, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.65	753.1	29.69	754.1	7.5	—13.6	92	NW			2		10			0	0		
Umea	29.59	751.6	29.64	752.9	14.0	—10.0	87	NE			2		10			0	0		
Hernosand	29.58	751.3	29.63	752.6	19.2	— 7.1	75	NNE			2		5			0.012	0.3		
Stockholm	29.45	747.9	29.62	752.4	16.9	— 8.4	94	W			2		0			0.031	0.8		
Wisby	29.63	752.7	29.69	754.2	22.3	— 5.4	96	W			2		10			0	0		
Sub-Series.																			
Upsala	29.50	749.4	29.59	751.6	19.9	— 6.7	84	WSW	6.3	2.8			3		W	0.010	0.25		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.50	723.8	30.02	762.6	21.9	— 5.6	82	NE			4		10			0	0	Covered.....	The Observatory.
Zurich	28.34	719.7	30.12	765.0	13.6	—10.2	74	W			1		0			0	0	Clear.....	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —3.7 mm.; Ther. —7°.4 cent.; Hum. +4 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.16	766.1	34.9	1.6	89	NW	10	4.5			5		N	0	0		The Observatory.
Valona			30.04	763.1	48.4	9.1		NW			2		5			0	0	Cloudy.....	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.00	762.1	66.0	18.9	71	SW			3		9n		SW	0.03	0.8		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.57	751.1	29.65	753.1	27	— 2.8	82	N	7	3.1			10s		N	0.25	6.3	Cloudy	
Alpena, Michigan	29.22	742.2	29.89	759.2	20	— 6.7	85	NE	10	4.5			10s		Calm	0.13	3.3	Cloudy	
Atton Id., Alaska	29.41	747.0			27	— 2.8	100	W	34	15.2			10n		W	0.53	13.5		
Atlanta, Georgia	28.82	732.0	30.00	762.0	34	1.1	79	NW	14	6.3			10s		Calm	0.01	0.3	Cloudy	
Atlantic City, New Jersey	29.69	754.1	29.71	754.6	35	1.7	80	W	10	4.5		10k	0	NW		0.90	22.9	Cloudy	
Augusta, Georgia	29.82	757.4	30.02	762.5	40	4.4	73	W	11	4.9			10s		W	0.01	0.3	Cloudy	
Baltimore, Maryland	29.70	754.4	29.75	755.6	38	3.3	72	SW	8	3.6		0	2ks		W	0.45	11.4	Fair	
Barnegat, New Jersey	29.66	753.4	29.68	753.9	31	— 0.6	89	NW	3	1.3			10s		NW	1.83	46.5	Cloudy	
Benton, Montana	27.53	699.2			14	—10.0	82	Calm	0	0		10k	0	Calm		0	0	Cloudy	
Bismarck, Dakota	28.65	727.7	30.50	774.7	— 4	—20.0		NW	6	2.7		0	0			Inap.	Inap.	Clear	
Boise City, Idaho	27.76	705.1	30.72	780.3	18	— 7.8	84	SE	2	0.9			10s		W	0	0	Cloudy	
Boston, Massachusetts	29.34	745.2	29.50	749.3	19	— 7.2	100	N	22	9.8		2c	8n	Calm	NE	2.25	57.1	Light snow	
Brackettville, Texas	29.19	741.4	30.32	770.1	33	0.6	70	NW	5	2.2			10ks		W	0	0	Cloudy	
Brownsville, Texas	30.25	768.3	30.30	769.6	45	7.2	61	N	10	4.5		10cs	0	Calm		0	0	Cloudy	
Buffalo, New York	29.00	736.6	29.72	754.9	23	— 5.0	86	NE	5	2.2			10n		Calm	0.51	13.0	Light snow	
Burlington, Vermont	29.45	748.0	29.76	755.9	17	— 8.3	83	N	13	5.8			10n		N	0.19	4.8	Heavy snow	
Cairo, Illinois	29.74	755.4	30.15	765.8	28	— 2.2	88	SW	3	1.3			10s		SW	0	0	Threatening	
Campo, California	27.58	700.5	30.15	765.8	38	3.3	38	E	16	7.2		0	0			0	0	Clear	
Camp Thomas, Arizona	27.48	698.0			32	0.0	69	E			3	0	0			0	0	Clear	
Cape Henry, Virginia	29.78	756.4	29.79	756.7	40	4.4	73	W	12	5.4		2cs	0	Calm		0	0	Clear	
Cape May, New Jersey	29.70	754.4	29.73	755.1	35	1.7	80	W	22	9.8		0	2s		NW	0.07	1.8	Fair	
Castroville, Texas	29.55	750.6	30.30	769.6	33	0.6	61	Calm	0	0		2c	0	NW		0	0	Fair	
Cedar Keys, Florida	30.03	762.7	30.05	763.3	48	8.9	78	NW	19	8.5		0	0			0	0	Clear	
Champaign, Illinois	29.08	738.6	29.92	760.0	23	— 5.0	73	NW	16	7.2			10s		W	0	0	Cloudy	
Charleston, S. Carolina	30.01	762.2	30.07	763.8	43	6.1	83	W	4	1.8		0	0			0	0	Clear	
Charlotte, N. Carolina	29.02	737.1	29.86	758.4	33	0.6	89	SW	4	1.8			10s		SW	0	0	Cloudy	
Chattanooga, Tennessee	29.22	742.2	30.06	763.5	32	0.0	79	W	6	2.7			10ks		W	Inap.	Inap.	Cloudy	
Cheyenne, Wyoming	24.13	612.9	30.07	763.8	7	—13.9	77	N	20	8.9		0	0			0.03	0.8	Clear	
Chicago, Illinois	29.09	738.9	29.80	756.9	28	— 2.2	88	N	6	2.7			10n		Calm	0.05	1.3	Light snow	
Chincoteague, Virginia	29.78	756.4	29.80	756.9	34	1.1	100	NW	7	3.1		1k	0	Calm		0.02	0.5	Clear	
Cincinnati, Ohio	29.29	744.0	29.96	761.0	31	— 0.6	69	SW	10	4.5			10s		Calm	0.11	2.8	Cloudy	
Cleveland, Ohio	29.05	737.9	29.79	756.7	27	— 2.8	88	W	9	4.0			10s		Calm	0.80	20.3	Cloudy	
Coleman City, Texas	28.53	724.6	30.33	770.4	27	— 2.8	64	N	20	8.9			10s		Calm	0.01	0.3	Cloudy	
Columbus, Ohio	29.00	736.6	29.86	758.4	29	— 1.7	89	W	17	7.6			10n		NW	0.05	1.3	Light snow	
Concho, Texas	28.41	721.6	30.22	767.6	29	— 1.7	78	W	9	4.0		8k	0	N		0	0	Cloudy	
Corsicana, Texas	29.88	758.9	30.39	771.9	32	0.0	69	N	4	1.8		0	5s		Calm	0	0	Fair	
Davenport, Iowa	29.26	743.2	29.93	760.2	21	— 6.1	86	W	4	1.8			10s		Calm	0.09	2.3	Cloudy	
Dayton, Washington T'y	28.99	736.3	30.86	783.8	18	— 7.8	100	Calm	0	0			10s		Calm	0	0	Cloudy	
Deadwood, Dakota	25.62	650.7			12	—11.1	80	S	3	1.3			10s		Calm	1.25	31.7	Cloudy	
Decatur, Texas	29.12	739.6	30.38	771.6	28	— 2.2	77	N	10	4.5		0	0			0	0	Clear	
Delaware Breakwater, Del.	29.73	755.1	29.75	755.6	34	1.1	79	W	16	7.2		0	0			0.04	1.0	Clear	
Denison, Texas	29.50	749.3	30.36	771.1	27	— 2.8	76	NW	8	3.6		0	0			0	0	Clear	
Denver, Colorado	24.97	634.2	30.19	766.8	2	—16.7	72	S	4	1.8		0	0			0	0	Clear	
Des Moines, Iowa	29.12	739.6	30.07	763.8	15	— 9.4	82	N	8	3.6			10s		Calm	0.23	5.8	Cloudy	
Detroit, Michigan	29.04	737.6	29.73	755.1	25	— 3.9	100	W	5	2.2			10n		Calm	0.63	16.0	Light snow	
Dodge City, Kansas	27.58	700.5	30.05	763.3	20	— 6.7	56	NW	20	8.9			10s		Calm	Inap.	Inap.	Cloudy	
Dubuque, Iowa	29.19	741.4	29.93	760.2	22	— 5.6	86	NW	6	2.7			10n		Calm	0.26	6.6	Light snow	
Duluth, Minnesota	29.50	749.3	30.23	767.8	21	— 6.1	86	NW	14	6.3			10s		NW	0.09	2.3	Cloudy	
Eagle Pass, Texas	29.63	752.6	30.41	772.4	38	3.3	54	N	9	4.0		5cs	0	W		0	0	Fair	
Eagle Rock, Texas	25.72	653.3	30.38	771.6	— 3	—19.4	66	SW	1	0.4			10s		Calm	0	0	Cloudy	
Eastport, Maine	29.50	749.3	29.57	751.1	18	— 7.8	84	NE	28	12.5			10n		NE	0.04	1.0	Light snow	
Edinburg, Texas					43	6.1	75	S			1	0	5ks		Calm	0	0	Fair	
El Paso, Texas	26.46	672.1			26	— 3.3	52	E	4	1.8		0	5s		W	0	0	Fair	
Erie, Pennsylvania	28.99	736.3	29.72	754.9	28	— 2.2	100	W	2	0.9			10n		Calm	0.52	13.2	Light snow	
Escanaba, Michigan	29.29	744.0	29.98	761.5	22	— 5.6	100	N	22	9.8			10s		Calm	0.37	9.4	Cloudy	
Florence, Arizona	28.75	730.2	30.35	770.9	41	5.0	25	NE	12	5.4		0	0			0	0	Clear	
Fort Apache, New Mexico	25.16	639.0	30.60	777.2	13	—10.6	44	NE	5	2.2		0	0			0	0	Clear	
Fort Assinniboine, Montana	27.46	697.5			13	—10.6	62	SW	16	7.2		10cs	0	SW		0	0	Cloudy	
Fort Bennett, Dakota	28.81	731.8			7	—13.9	77	NW	16	7.2		10cs	0	NW		0	0	Cloudy	
Fort Buford, Dakota	28.50	723.9	30.60	777.2	5	—15.0	100	Calm	0	0			10s		Calm	0.01	0.3	Cloudy	
Fort Custer, Montana	27.22	691.4			— 6	—21.1	65	SW	4	1.8		5k	0	W		0	0	Fair	
Fort Davis, Texas	25.27	641.8	30.23	767.8	17	— 8.3	83	NE	14	6.3			10n		Calm	Inap.	Inap.	Light snow	
Fort Elliott, Texas	27.45	697.2	29.94	760.5	14	—10.0	28	NW	12	5.4		5c	0	NW		0	0	Fair	
Fort Gibson, Indian T'y	29.69	754.1	30.28	769.1	20	— 6.7	70	NW	4	1.8		0	1s		Calm	0	0	Clear	
Fort Grant, Arizona	25.24	641.1	30.04	763.0	27	— 2.8	76	E	28	12.5		2cs	0	E		0	0	Clear	
Fort Griffin, Texas	28.99	736.3	30.36	771.1	28	— 2.2	66	NW	14	6.3		0	0			0	0	Clear	
Fort Keogh, Montana	27.92	709.2			12	—11.1	80	Calm	0	0			10s		Calm	0.02	0.5	Cloudy	
Fort Macon, North Carolina	29.88	758.9	29.89	759.2	41	5.0	91	W	9	4.0		10cs	0	Calm		0	0	Cloudy	
Fort Missoula, Montana	27.28	692.9			— 9	—22.8	100	Calm	0	0			10s		Calm	0	0	Cloudy	
Fort McKavett, Texas	27.92	709.2	29.98	761.5	25	— 3.9	75	NW	7	3.1		7k	0	NW		0	0	Fair	
Fort Shaw, Montana	26.66	677.2			28	— 2.2	77	N	1	0.4		10cs	0	Calm		0	0	Cloudy	
Fort Sill, Indian Territory	29.07	738.4	30.27	768.8	25	— 3.9	75	NW	11	4.9		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.66	728.0			— 5	—20.6	81	NW	4	1.8		0	0			0.02	0.5	Clear	
Fort Verde, Arizona					26	— 3.3	52	N			4	0	0			0	0	Clear	
Fredericksburg, Texas	28.56	725.4	30.25	768.3	30	— 1.1	68	N	16	7.2		1ck	0	NW		0	0	Clear	
Galveston, Texas	30.25	768.3	30.30	769.6	38	3.3	72	N	23	10.3			10s		W	0	0	Cloudy	
Grand Haven, Michigan	29.13	739.9	29.81	757.2	26	— 3.3	100	NE	6	2.7			10n		Calm	0.61	15.5	Light snow	
Hatteras, North Carolina	29.84	757.9	29.86	758.4	40	4.4	91	W	12	5.4		1c	0	Calm		0	0	Clear	
Helena, Montana	26.22	666.0			2	—16.7	100	Calm	0	0		8k	0	Calm		0	0	Cloudy	
Henrietta, Texas	29.33	745.0	30.35	770.9	26	— 3.3	63	NW	8	3.6		0	0			0	0	Clear	
Indianapolis, Indiana	29.11	739.4	29.92	760.0	27	— 2.8	76	W	7	3.1			10n		Calm	Inap.	Inap.	Light snow	
Indianola, Texas	30.30	769.6	30.33	770.4	39	3.9	64	N	27	12.1		5k	5s	N	Calm	0	0	Cloudy	
Jacksboro, Texas	29.14	740.1	30.35	770.9	30	— 1.1	68	NW	8	3.6		0	0			0	0	Clear	
Jacksonville, Florida	30.02	762.5	30.07	763.8	49	9.4	71	W	6	2.7		5cs	0	W		0	0	Fair	
Keokuk, Iowa	29.29	744.0	29.98	761.5	22	— 5.6	79	W	7	3.1			10s		Calm	Inap.	Inap.	Cloudy	
Key West, Florida	30.01	762.2	30.04	763.0	69	20.6	75	N	2	0.9			10s		Calm	0.11	2.8	Cloudy	
Kittyhawk, North Carolina	29.82	757.4	29.85	758.2	41	5.0	74	W	13	5.8		2k	0	W		0	0	Clear	
Knoxville, Tennessee	29.00	736.6	30.05	763.3	30	— 1.1	89	W	8	3.6			10s		Calm	Inap.	Inap.	Cloudy	
La Crosse, Wisconsin	29.20	741.7	29.99	761.7	18	— 7.8	84	N	12	5.4			10n		Calm	0.20	5.1	Light snow	
La Mesilla, New Mexico	26.31	668.3	30.46	773.7	26	— 3.3	63	W	2	0.9			10s		Calm	0	0	Cloudy	
Laredo, Texas	29.91	759.7	30.27	768.8	42	5.6	50	N	10	4.5			10s		N	0	0	Cloudy	
Leavenworth, Kansas	29.25	742.9	30.17	766.3	14	—10.0	82	NW	10	4.5			10s			0.02	0.5	Cloudy	
Lewiston, Idaho	29.90	759.4	30.61	777.5	25	— 3.9	60	E	5	2.2			10s		Calm	0	0	Cloudy	
Little Rock, Arkansas	29.86	758.4	30 20	767.1	32	0.0	79	W	8	3.6			10ks		N	0	0	Cloudy	
Los Angeles, California	29.89	759.2	30.25	768.3	46	7.8	40	NW	3	1.3		0	0			0	0	Clear	
Louisville, Kentucky	29.42	747.3	30.00	762.0	31	— 0.6	79	SW	16	7.2			10s		W	0.01	0.3	Cloudy	
Lynchburg, Virginia	29.13	739.9	29.82	757.4	37	2.8	71	W	4	0.9		0	0			0.02	0.5	Clear	
Madison, Wisconsin	28.84	732.5	29.88	758.9	19	— 7.2	85	N	12	5.4			10n		Calm	0.30	7.6	Light snow	
Marquette, Michigan	29.34	745.2	30.09	764.3	22	— 5.6	86	NE	16	7.2			10n		Calm	0.21	5.3	Light snow	
Mason, Texas	28.46	722.9	30.30	769.6	36	2.2	71	NW	20	8.9			10s		NW	0	0	Cloudy	
Memphis, Tennessee	29.53	750.0	29.88	758.9	35	1.7	80	W	4	1.8			10s		Calm	0.43	10.9	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
United States Series—Continued.																			
Milwaukee, Wisconsin	29.07	738.4	29.83	757.7	23	— 5.0	100	NW	12	5.4	.....	.....	1cn	.....	Calm	0.55	14.0	Light snow.	
Mobile, Alabama	30.05	763.3	30.13	765.3	40	4.4	73	NW	6	2.7	.....	.....	1cs	.....	NW	0	0	Cloudy.	
Montgomery, Alabama	29.87	758.7	30.12	765.0	36	2.2	80	NW	10	4.5	.....	.....	1cs	.....	Calm	0	0	Cloudy.	
Morgantown, W. Virginia	28.82	732.0	29.82	757.4	39	3.9	55	W	16	7.2	.....	.....	1cs	.....	W	0.16	4.1	Cloudy.	
Moorhead, Minnesota	29.36	745.7	30.45	773.4	2	—16.7	72	N	20	8.9	.....	0	5s	.....	NW	0.02	0.5	Fair	
Mt. Washington, N. H.	23.12	587.2	29.48	748.8	9	—12.8	100	E	57	25.5	.....	.....	10n;fog	.....	C;E	0.66	16.8	Light snow.	
Nashville, Tennessee	29.52	749.8	30.09	764.3	31	— 0.6	79	W	8	3.6	.....	.....	10ks	.....	W	Inap.	Inap.	Cloudy.	
New Haven, Connecticut	29.49	749.0	29.61	752.1	27	— 2.8	76	NW	7	3.1	.....	.....	1cs	.....	NW	0.91	23.1	Cloudy.	
New London, Connecticut	29.51	749.5	29.56	750.8	26	— 3.3	75	NW	10	4.5	.....	.....	1cs	.....	NW	1.32	33.5	Cloudy.	
New Orleans, Louisiana	30.10	764.5	30.16	766.1	45	7.2	68	N	5	2.2	.....	1oc	o	NW	.....	0	0	Cloudy.	
Newport, Rhode Island	29.42	747.3	29.47	748.5	24	— 4.4	87	NW	12	5.4	.....	.....	1cn	.....	NW	1.05	26.7	Light snow.	
New River, N. Carolina	.....	.....	.....	.....	40	4.4	83	W	.....	.....	2	8cs	o	Calm	.....	0	0	Cloudy.	
New Shoreham, Rhode I'd	29.53	750.0	29.56	750.8	27	— 2.8	76	N	23	10.3	.....	.....	1cs	.....	N	1.21	30.7	Cloudy.	
New York, New York	29.48	748.8	29.66	753.4	29	— 1.7	100	SW	3	1.3	.....	.....	1cs	.....	Calm	1.06	26.9	Cloudy.	
Norfolk, Virginia	29.76	755.9	29.82	757.4	44	6.7	68	W	7	3.1	.....	5c	o	NW	.....	0	0	Fair	
North Platte, Nebraska	27.30	693.4	30.12	765.0	12	—11.1	80	N	26	11.6	.....	.....	1cs	.....	N	0	0	Cloudy.	
Olympia, Washington T'y	30.49	774.4	30.53	775.4	35.5	1.9	90	NW	2	0.9	.....	1ocs	o	Calm	.....	0	0	Cloudy.	
Omaha, Nebraska	28.98	736.1	30.20	767.1	7	—13.9	89	NW	15	6.7	.....	0	1s	.....	Calm	0.01	0.3	Clear.	
Oswego, New York	29.34	745.2	29.68	753.9	20	— 6.7	85	NE	16	7.2	.....	.....	1cs	.....	Calm	0.90	22.9	Cloudy.	
Pensacola, Florida	30.12	765.0	30.15	765.8	44	6.7	76	NW	4	1.8	.....	.....	1cs	.....	Calm	0	0	Cloudy.	
Philadelphia, Pa	29.65	753.1	29.70	754.4	37	2.8	81	W	16	7.2	.....	.....	1cs	.....	W	0.20	5.1	Cloudy.	
Phœnix, Arizona	29.19	741.4	31.14	790.9	32	0.0	69	N	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Pike's Peak, Colorado	17.36	440.9	29.57	751.1	—20	—28 9	64	N	40	17.9	.....	0	0	.....	.....	0.42	10.7	Clear.	
Pilot Point, Texas	29.54	750.3	30.44	773.2	29	— 1.7	65	NW	11	4.9	.....	0	0	.....	.....	0	0	Clear.	
Pioche, Nevada	24.28	616.7	30.05	763.3	19	— 7.2	54	NW	9	4.0	.....	0	0	.....	.....	0	0	Clear.	
Pittsburg, Pennsylvania	28.98	736.1	29.80	756.9	32	0.0	89	W	12	5.4	.....	.....	1cn	.....	W	0.49	12.4	Light snow.	
Port Huron, Michigan	29.06	738.1	29.74	755.4	25	— 3.9	100	NE	2	0.9	.....	.....	1cn	.....	Calm	0.84	21.3	Light snow.	
Portland, Maine	29.53	750.0	29.58	751.3	19	— 7.2	85	NE	23	10.3	.....	.....	1cn	.....	Calm	1.10	27.9	Heavy snow	
Portland, Oregon	30.52	775.2	30.60	777.2	32	0.0	64	E	3	1.3	.....	10cs	o	NW	.....	0	0	Cloudy.	
Portsmouth, N. Carolina	.....	.....	.....	.....	41	5.0	82	W	15	6.7	.....	8k	o	W	.....	0	0	Cloudy.	
Prescott, Arizona	24.93	633.2	30.29	769.4	18	— 7.8	68	NE	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Punta Rassa, Florida	29.99	761.7	30.01	762.2	60	15.6	88	NE	6	2.7	.....	1c	5ks	SW	SW	0	0	Fair	
Red Bluff, California	30.12	765.0	30.49	774.4	42.0	5.6	58	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Rio Grande City, Texas	30.16	766.1	30.39	771.9	46	7.8	40	N	12	5.4	.....	.....	1cs	.....	Calm	0	0	Cloudy	
Rochester, New York	29.08	738.6	29.71	754.6	23	— 5.0	86	NE	8	3.6	.....	.....	1cs	.....	Calm	0.96	24.4	Cloudy.	
Roseburg, Oregon	29.97	761.2	29.58	751.3	36	2.2	100	NW	3	1.3	.....	.....	Fog	.....	Calm	0	0	Dense fog.	
Sacramento, California	30.32	770.1	30.40	772.1	46	7.8	69	N	7	3.1	.....	0	0	.....	.....	0	0	Clear.	
St. Louis, Missouri	29.43	747.5	30.04	763.0	22	— 5.6	86	W	11	4.9	.....	.....	1cs	.....	W	0	0	Cloudy.	
St. Paul, Minnesota	29.18	741.1	30.06	763.5	21	— 6.1	93	N	12	5.4	.....	.....	1cn	.....	N	0.52	13.2	Light snow.	
Salt Lake City, Utah	26.05	661.7	30.38	771.6	20	— 6.7	41	SE	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
San Antonio, Texas	29.58	751.3	29.32	770.1	33	0.6	70	NW	3	1.3	.....	1cs	o	Calm	.....	0	0	Clear.	
San Diego, California	30.26	768.6	30.34	770.6	53	11.7	19	E	13	5.8	.....	0	Haze	.....	Calm	0	0	Clear.	
Sandusky, Ohio	29.09	738.9	29.78	756.4	29	— 1.7	89	SW	12	5.4	.....	.....	1cn	.....	Calm	0.20	5.1	Light snow.	
Sandy Hook, New Jersey	29.65	753.1	29.69	754.1	31	— 0.6	90	SW	1	0.4	.....	.....	1cs	.....	Calm	1.00	25.4	Cloudy.	
San Francisco, California	30.29	769.4	30.36	771.1	58	14.4	24	NE	14	6.3	.....	4cs	o	N	.....	0	0	Fair	
Santa Fé, New Mexico	23.33	592.6	29.87	758 7	— 4	—20.0	65	Calm	0	0	.....	0	o	.....	.....	0	0	Clear.	
Savannah, Georgia	29.93	760.2	30.03	762.7	45	7.2	76	W	5	2.2	.....	5k	2s	W	W	0	0	Fair.	
Shreveport, Louisiana	30.03	762.7	30.30	769.6	30	— 1.1	78	Calm	0	0	.....	0	o	.....	.....	0	0	Clear.	
Silver City, New Mexico	24.36	618.7	31.00	787.4	13	—10.6	62	Calm	0	0	.....	0	o	.....	.....	0	0	Clear.	
Smithville, North Carolina	29.90	759.4	29.94	760.5	40	4.4	91	W	4	1.8	.....	0	1ks	.....	Calm	0	0	Clear.	
Socorro, New Mexico	25.27	641.8	29.34	745.2	19	— 7.2	54	E	3	1.3	.....	0	o	.....	.....	0	0	Clear.	
Springfield, Illinois	29.28	743.7	29.99	761.7	25	— 3.9	81	W	12	5.4	.....	.....	1cs	.....	.....	Inap.	Inap.	Cloudy.	
Springfield, Massachusetts	29.45	748.0	29.58	751.3	25	— 3.9	75	N	9	4.0	.....	.....	1cs	.....	Calm	0.24	6.1	Cloudy.	
Stockton, Texas	27.30	693.4	30.30	769.6	22	— 5.6	85	N	6	2.7	.....	0	8s	.....	W	0	0	Fair.	
St. Vincent, Minnesota	29.06	753.4	30.59	777.0	— 8	—22.2	100	NW	12	5.4	.....	0	o	.....	.....	0	0	Clear.	
Thatcher's Island, Mass	29.45	748.0	29.51	749.5	21	— 6.1	100	NE	50	22.4	.....	.....	1cn	.....	NE	1.42	36.1	Heavy snow	
Toledo, Ohio	29.06	738.1	29.75	755.6	33	0.6	90	W	8	3.6	.....	.....	1cs	.....	Calm	0.05	1.3	Cloudy.	
Tucson, Arizona	27.67	702.8	30.22	767.6	40	4.4	31	E	24	10.7	.....	0	o	.....	.....	0	0	Clear.	
Umatilla, Oregon	30.52	775.2	31.08	789.4	21	— 6.1	86	S	1	0.4	.....	.....	1cs	.....	Calm	0	0	Cloudy.	
Uvalde, Texas	29.37	746.0	30.22	767.6	35	1.7	80	N	9	4.0	.....	1oc	o	N	.....	0	0	Cloudy.	
Vicksburg, Mississippi	29.96	761.0	30.23	767.8	32	0.0	89	NW	8	3.6	.....	8c	o	Calm	.....	Inap.	Inap.	Fair.	
Visalia, California	30.01	762.2	30.41	772.4	38	3.3	95	SE	1	0.4	.....	0	Fog	.....	Calm	0	0	Clear.	
Washington, D. C.	29.67	753.6	29.79	756.7	37	2.8	71	NW	5	2 2	.....	.....	1cs	.....	NW	0.13	3.3	Cloudy.	
Wickenburg, Arizona	.....	.....	.....	.....	37	2.8	38	NW	.....	.....	6	o	o	.....	.....	0	0	Clear.	
Wilmington, N. Carolina	29.86	758.4	29.92	760.0	42	5.6	74	W	5	2.2	.....	8cs	o	Calm	.....	0	0	Fair.	
Winnemucca, Nevada	26.08	662.4	30.44	773.2	18	— 7.8	68	NE	2	0.9	.....	o	o	.....	.....	0	0	Clear.	
Wood's Holl, Mass	29.35	745.5	29.39	746.5	27	— 2.8	88	NW	28	12.5	.....	.....	1cs	.....	NW	0.91	23.1	Cloudy	
Yankton, Dakota	28.90	734.0	30.35	770.9	5	—15.0	100	N	21	9.4	.....	.....	1cn	.....	.....	0.46	11.7	Light snow.	
Yuma, Arizona	30.21	767.3	30.36	771.1	46	7.8	19	N	22	9.8	.....	0	o	.....	.....	0	0	Clear.	
Sub-Series.																			
Bogota, U. S. Columbia	21.97	558.0	.....	.....	54.0	12.2	69	Calm	0	0	.....	8cs;k	o	.....	.....	0	0	Cloudy.	Thomas Herran.
Buff Bay Town, Jam ica.‡	29.85	758.4	30.17	766.3	66	18.9	94	.....	.....	.....	.....	10k	10k	.....	.....	.....	.....	.....	.....
Havana, Cuba, W. I.	29.99	761.7	30.04	763.0	72	22.2	85	Calm	0	0	.....	0	4ks	.....	NW	0.61	15.5	Foggy	Charles Hasselbrink.
Jakobshavn, Greenland	30.19	766.9	30.35	768.3	28.4	— 2.	.....	SE	.....	.....	4	.....	10	.....	.....	0	0	.....	.....
Kingston, Jamaica, W. I.	30.00	762.0	30.01	762.2	73.5	23.1	75	N	1	0.4	.....	2ks	o	E	.....	0	0	Fine	Maxwell Hall.
Navassa, W. I.	29.93	760.2	30.01	762.2	70	24.4	69	NE	9.2	4.1	.....	5k	5s	E	NE	0	0	Fair.	F. M. Everett.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	77	25.0	86	E	.....	.....	2	.....	8ks	E	.....	0.620	15.75	Cloudy.	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.35	745.5	29.91	759.7	80	26.7	89	Calm	.....	.....	0	0	o	.....	.....	0.05	1.3	Fair.	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	73	23	.....	SE	.....	.....	1	0	1ks	.....	SE	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.02	762.5	30.05	763.3	74	23.3	75	Calm	0	0	.....	0	o	.....	.....	0	0	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	30.28	769.2	30.34	770.6	—13.0	—25	.....	N	.....	.....	6	.....	o	.....	.....	0.197	5.0	.....	.....
York Factory, B. A.	30.50	774.7	30.56	776.2	—28.0	—33.3	.....	N	14	6.3	.....	0	o	.....	.....	0	0	Clear.	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Capt. J. P. Maclear.
H. M. S. Alert																			Comm. A. J. Errington.
H. M. S. Alexandra, N. 35° 51′, E. 14° 31′	29.99	761.7	63	17.2	84	SSW			4		8	SSW						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. S. Hope.
H. M. S Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. J. F. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.84	757.9	69	20.6		ESE			1–3		8	SE						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 32′, E. 81° 22′	29.90	759.4	79	26.1		NNE			3		5	N				3	NNE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.91	759.7	81	27.2	70	NW			3		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyu.
H. M. S. Gannet, Chimbote, Peru	29.88	758.9	65	18.3	94	SSE			2		8							Misty	Comm. E. E. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla, N. 39° 38′, E. 19° 56′	29.95	760.7	62	16.7	86	SSW			6		5	S				5	SSW	D. clouds	Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 29° 09′, E. 122° 03′	30.35	770.9	39.5	4.2	64	Calm			0		0							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 16° 51′, E. 62° 25′	30.05	763.3	76	24.4	82	NNE			3–4		4	NE				2	NE	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 38° 42′, W. 9° 06′	29.98	761.5	56.5	13.6	81	N			3		3	W						Showery	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Off Guadeloupe, W. I.	30.07	763.8	78	25.6	73	ESE			2		1	ENE						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 56′	29.75	755.6	79	26.1	58	ESE			1		1					1	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	30.09	764.3	67.5	19.7	60	SSE			1		0							Blue sky	Capt. R. D. Cumming.
H. M. S. Zephys																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Sanbiago, Cape Verd Id.	30.04	763.1	79.5	26.4	78	Calm			0		0			0	0	3		Blue sky	S. C. da Silva Costa, Comd't.
Sado, S. 2° 43′, E. 9° 09′	29.93	760.3	83.7	28.7	75	WSW			3		7			0	0	2	WSW	Gloomy	G. A. de Brito Capello, Comd t.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, N. 33° 46′, E. 18° 58′	30.15	765.7	62.2	16.8	67	SSW			2		1							D. clouds	

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

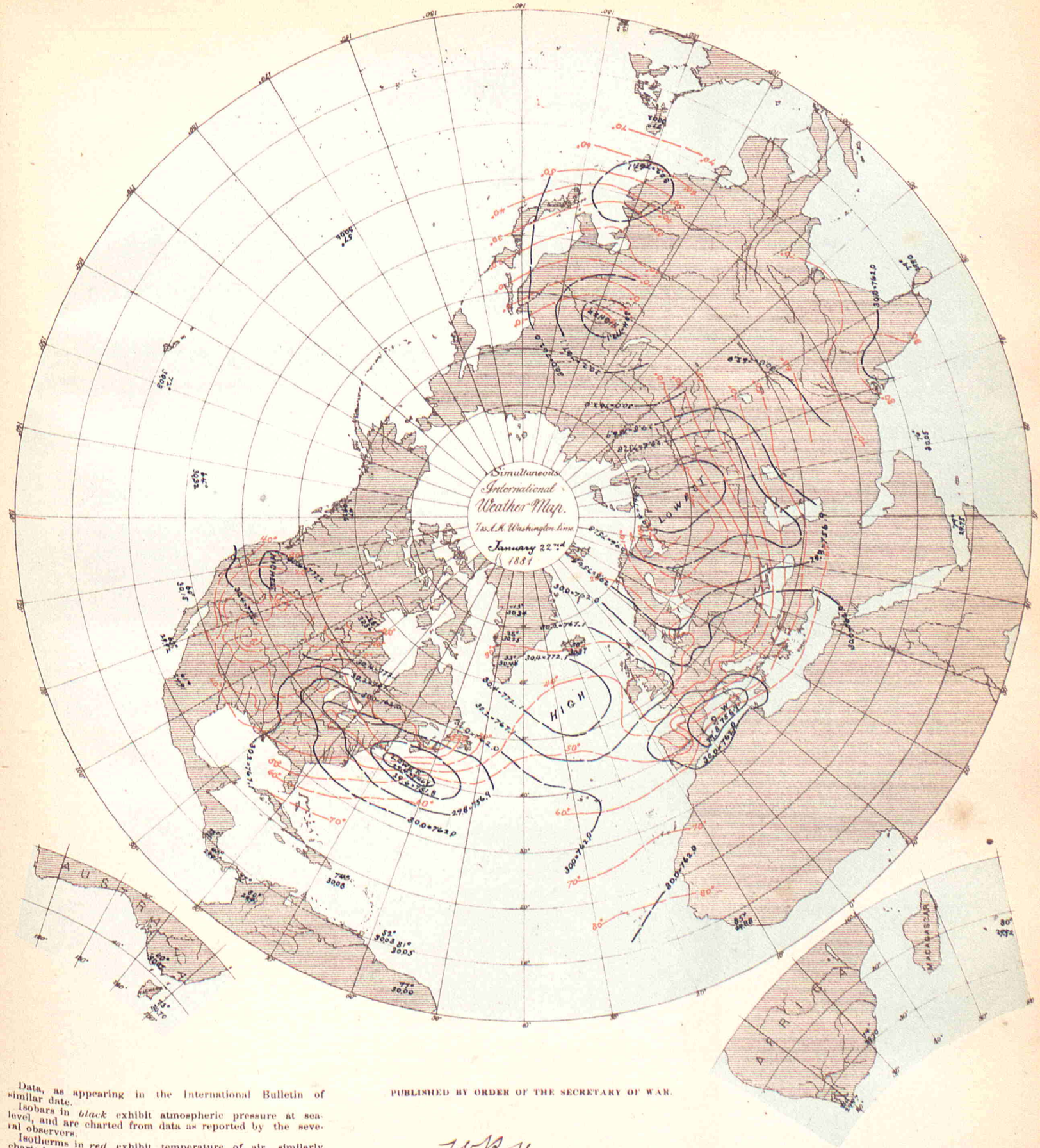
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.21	767.3	45	7.2	84	NW	1	0.4			10			0	0			Cloudy	
N. Yard, Portsmouth, N. H.	29.54	750.3	17	— 8.3	7	NE	24	10.7			10		NE					Snowing	
Naval Hospital, Yokohama, Japan	29.67	753.6	35	1.7	54	Calm			0		0			0	0			Clear	
Adams, Callao, Peru	29.92	760.0	68	20.0	95	Calm			0		10		SSE			Sm'h		Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.32	770.1	48	8.9	70	E			4		5			0	0			Fair	
Alert, Hong-Kong, China *	30.07	763.8	63	17.2	72	E			1		0			0	0	Sm'h		Hazy	
Alliance, N. 23° 40′, W. 82° 12′	30.03	762.7	74	23.3	86	E			1		8		SW	0	0	Sm'h	NE	Cloudy	
Ashuelot, Tientsin, China	30.08	764.0	24	— 4.4	87	N			1		0							Clear	
Colorado, New York, N. Y.	29.66	753.4	30	— 1.1	100	WSW	3	1.3			10			0.01	0.3			Threatening	
Constitution, N. Yard, League I'd., Pa			35	1.7	80	NW	8	3.6			10							Overcast	
Franklin, Off N. Yard, Norfolk, Va	29.76	755.9	40	4.4	73	WSW	6	2.7			2		WSW	0	0			Fair	
Galena, Villafranca, France	29.80	756.9	49	9.4	71	ESE			4		10		SE					Cloudy	
Independence, N. Yard, Mare I'd, Cal.	30.33	770.4	46	7.8	69	E	7.2	3.2			5		E	0	0			Fair	
Jamestown, Sitka, Alaska *	29.76	755.9	47	8.3	85	E			5		10			0.12	3.0			Cloudy	
Kearsarge, Port Royal, Jamaica, W.I.	30.01	762.2	74	23.3	81	NNW			1		2					Sm'h		Fair	
Lackawanna, Callao, Peru †	30.05	763.3	69	20.6	90	SE			0-1		10		SE	0	0			Cloudy	
Marion, Straits of Magellan	30.08	764.0	53	11.7	80	E			1		8		SW			Sm'h		Fair	
Michigan, Erie, Pennsylvania	29.75	755.6	29	— 1.7		W			3		10							Snowing	
Minnesota, New York, N. Y.	29.66	753.4	33	0.6		NW			2		10		NW					Misty	
Monocacy, Shanghai, China	30.32	770.1	31	— 0.6	79	ESE			1		0							Clear	
New Hampshire, Port Royal, S. C.	29.96	761.0	45	7.2	76	W	4	1.8			8		W	0	0			Cloudy	
Nipsic, Hyers Roadstead, France	29.76	755.9	48	8.9	70	E			6		10		E			Long	E	Squally	
Onward, Chimbote Bay, Peru †	29.87	758.7	70	21.1	85	SSE			3		8		N			Long	N:W	Cloudy	
Palos, Shanghai, China	30.33	770.4	32	0.0	59	SE			1		0							Clear	
Passaic, Washington, D. C.	29.79	756.7	37	2.8	90	WNW			1		8		W					Cloudy	
Pensacola, Mazatlan, Mexico	29.88	758.9	63	17.2	83	NW			3		0					Long		Clear	
Portsmouth, Washington, D. C.	29.75	755.6	37	2.8	71	NW			3		8		NW					Clear?	
Powhatan, New York, N. Y.	29.70	754.4	31	— 0.6	89	NNW			1		10							Overcast	
Richmond, Swaton, China	30.25	768.3	57	13.9	75	E			2		0			0	0			Clear	
Saratoga, Baltimore, Md	29.69	754.1	37	2.8	100	WNW			2		8		W	0	0			Cloudy	
Shenandoah, Montevideo, Uruguay *	30.34	770.6	66	18.9	79	ESE			3		8					Sm'h		Fair	
St. Louis, League Island, Pa	29.77	756.1	36	2.2	71	W	15	6.7			10		WNW	0.895	22.73			Cloudy	
Swatara, Kobe, Japan †	29.98	761.5	36	2.2	71	WNW			3		2		Calm			Mod.	WNW	Hazy	
Tennessee, N. 17° 32′, W. 74° 18′	30.04	763.0	79	26.1	78	E	15	6.7			2		E	0.03	0.8	Sm'h		Fair	
Trenton, Villafranca, France *	29.77	756.1	48	8.9	63	N			2		10			11 h	ours	Sm'h		Cloudy	
Vandalia, Bridgetown, Barbadoes, W.I	30.08	764.0	82	27.8	75	E			3		5		ESE					Fair	
Wabash, Boston, Massachusetts	29.51	749.5	20	— 6.7	85	NNE	19	8.5			8		NNE	1.27	32.3			Clearing	
Wachusetts, Panama, Panama *	29.52	749.8	77	25.0	86	NW			3		2		N	0	0	Sm'h		Clear	
Wyoming, Naples, Italy	29.94	760.5	45	7.2	84	NNE			2		10					Sm'h		Raining	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡ S. 29° 53′, E. 12° 17′	30.09	764.3	68	20.0	76	SE			6		5							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 36° 40′, W. 19° 54′	30.03	762.7	59	15.0	76	ENE			6		10							Overcast	Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
British Merchant ‡																			Capt. E. J. Molony.
Chin Yang, ‡ N. 28° 29, W. 22° 02′	30.07	763.8	68.5	20.3	73	Calm			0		5							D. clouds	Capt. N. Youlden.
S. S. Clpero, N. 22° 15′, W. 48° 25′	30.27	768.8	74	23.3		NNE			2		3					1	NE	D. clouds	Capt. W. N. Lailey.
City of Agra, ‡ S. 47° 58′, W. 48° 30′	29.92	760.0	43.5	6.4	75	SW			5		9							Squally	Capt. T. Young.
Barque Commewyne, ‡ N. 10° 08′, W. 58° 00′	30.05	763.3	81.2	27.3	75	ENE			4		7							Misty	Capt. W. Scott.
Barque Coppename, N. 20° 40′, W. 27° 12′	30.10	764.5	73.3	22.9	69	NE			4		9							Overcast	Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra, ‡ S. 32° 05′, E. 30° 15′	29.88	758.9	80	26.7	82	NE			3		9							Overcast	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡ N. 55° 15′, W. 15° 55′	30.47	773.9	46	7.8	92	NNW			3		6					3	NNE	D. clouds	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 28° 56′, W. 21° 40′	30.11	764.8	68.5	20.3	77	WNW			1		7cs	NW				3	NW	Misty	Capt. H. W. Dyke.
Barque Merlola																			Capt E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 36° 17′, W. 7° 02′	29.96	761.0	61.5	16.4	88	W			3		7							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
Moravian																			
S. S. Peruvian																			Capt. W. H. Smith, R.N.R.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia, N. 51° 15′, W. 13° 26′	30.16	766.1	43	6.1	79	ENE			5		2		ENE	Snow		R'gh	ENE	Fine	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 42° 05′, W. 62° 15′ †	29.57	751.4	49	9.4		W			5		8		W			Mod.	E	Cloudy	Capt. J. W. Jennings.
S. S. Britanic																			Capt. H. Perry.
S. S. Celtic, N. 41° 03′, W. 60° 39′ †	29.38	746.2	57	13.9		Var.			2-3		10		WNW	10h'rs	he'vy	Cross	S;WSW	Cloudy	Capt. Benj. Gleadell.
S. S. Germanic, N. 47° 45′, W. 33° 29′ †	30.22	767.6	49	9.4		ESE			5		5?		ESE	o	o	Mod.	ESE	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT--MARINE SERIES.																			
NORTH GERMAN LLOYD--Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Undütsch.
S. S. Hermann. N. 49° 57′ W. 4° 39′	30.22	767.6	32.9	0.5		NE			6		5		NE	o	o	Long	NE	Fair	Capt. H. Maur.
S. S. Köln, N. 49° 49′, W. 13° 15′	30.32	770.1	36.5	2.5		ENE			6		8		ENE	Rain; sn	hail; ow	H'vy	ENE	Cloudy	
S. S. Leipzig ‡																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT--MARINE SERIES.																			
Barque Adolph Fredholm, ‡ Pernambuco, Brazil, S.A. †*	30.12	765.0	84.2	29.	75	WNW			5		4							Blue sky	Capt Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Sköterbrand

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. Philadelphia, Pa	29.68	753.9	37	2.8	90	W			3		10		NW					Cloudy	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 51° 22′, W. 17° 19′ †	30.33	770.4	41	5.0	91	E			6		2		E	Mod	erate	R'gh	NE	Clear	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 50° 23′, W. 25° 41′ *†	30.40	772.1	49	9.4	93	ESE			3		8		ESE	Sn	ow	Sm'll	ESE	Cloudy	Wm. Shakford, 1st Off'r.
S. S. Pennsylvania, Liverpool, England †	30.18	766.6	28	— 2.2		E			2		8		E	Squ	alls			Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*														o	o				
S. S. Newbern, N. 24° 22′, W. 111° 58′ †	29.92	760.0	63	17.2	67	NNE			5		0			o	o	G'tl	WNW	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 29° 35′, E. 129° 45′ †	30.17	766.3	71	21.7	62	NW			4		10			Ra	in	Mod.	NW	Raining	Capt. H. Davison.
S. S. Gaelic, San Francisco, Cal. *†	30.44	773.2	55	12.8	80	N			2		2		W					Clear	Capt. W. H. Kidley.
S. S. Oceanic, N. 41° 09′, W. 129° 37′	30.58	776.7	53	11.7	86	NE			3		5		N	o	o	Sl't		Hazy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			Capt. J. M. Lachlan.
S. S. Geo. W. Elder																			Capt. Fred. Rolles.
S. S. Columbia																			Capt. E. Polemann.
S. S. Oregon																			
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Pedro, Cal †	30.25	768.3	57	13.9	32	E			4		0							Clear	Capt. J. N. Ingalls.
S. S. Idaho, N. 42° 25′, W. 124° 30′ †	30.44	773.2	51	10.6	93	NNW			2		10		NW			Light	SW	Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, San Francisco, Cal †	30.46	773.7				NE			4		5		N			Sm'h		Fair	Thos. Wallace.
S. S. State of California, N. 41° 00′, W. 124° 24′ †	30.45	773.4	54	12.2	87	NNW			3		2		NW			Sm'h	W	Clear	Capt. G. Debney
S. S. Victoria, N. 42° 31′, W. 124° 50′ *†	30.39	772.0	51	10.6	86	NNW			3		5		Calm			Light	W	Fair	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			A. Bannerman, 1st Officer.
S. S. Australia																			
S. S. City of New York, Sydney, N. S. W	30.06	763.5	71	21.7	95	SSE			3		10		SSE	Squ	alls			Light rain	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 29° 14′, W. 116° 34′ †	30.15	765.8	60	15.6	71	ENE			3		0					Sm'h	W	Clear	Capt. D. S. Austin.
S. S. City of Peking, N. 30° 06′, E. 170° 05′ †	30.06	763.5	57	13.9	69	NNE			1		5		N	o	o	Mod.	NW	Cloudy	Capt. G. G. Berry.
S. S. City of Sidney, N. 24° 38′, W. 152° 03′	30.03	762.7	72	22.2	76	SSE			5		5		S	o	o	H'vy	WNW	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, Yokohama, Japan †	29.86	758.4	33	0.6	61	NE			1		5		NW	o	o			Fair	A. L. Ritchie, 2d Officer.
S. S. Colima ‡																			Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, Panama, Panama †	29.82	757.4	80	26.7	82	NW			3		5		NW	o	o			Hazy	
S. S. Zealandia, N. 31° 10′, W. 139° 11′	30.32	770.1	64	17.8	89	SE			4		5		SE			H'vy	NW	Showery	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland, ‡ N. 51° 23′, E. 2° 40′ †	29.96	761.0	38	3.3	72	NE			6		5		NE			Sm'h	N	Foggy	Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland, ‡ N. 46° 43′, W. 40° 46′	29.74	755.4	54	12.2	87	ESE			7		10		ESE	0.2	5.	H'vy	ESE	Light rain	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 48° 38′, W. 40° 00′	30.02	762.5				SSE			8		8		SE	Driz	zles	Cross	SE	Cloudy	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby Bentley, N. 37° 27′, W. 75° 08′ †	29.74	755.4	40	4.4		W			2		0			0.125	3.18	Long	SW	Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 32° 36′, W. 79° 08′ †	29.95	760.7	48	8.9	70	W	12	5.4			8cs		W	o	o	Sm'h		Cloudy	Capt J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, ‡ Ponce, Porto Rico †	30.28	769.1	78	25.6		E			2		2			Show	ers	Sm'h		Fair	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va. †	29.86	758.4	39	3.9	82	NW	1	0.4		2c	2s			o	o			Fine	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Spain †	29.97	761.2	60	15.6	100	NE			3		5		W	Mod	erate			Clearing	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 23, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.04	762.9	67.3	19.6	76	SW			2	7				0	0	Very cloudy	Dr. Ollive.
Nemours			29.99	761.7	64.4	18.0	98	NE			0	3				0	0	Pretty fair.	Raynard.
Algie s			29.97	761.1	58.3	14.6	81	N			1	4				0.047	1.2	Cloudy	Nicolas.
La Calle			29.94	760.5	61.9	16.6	75	WSW			3	7				0	0	Very cloudy	Fonfréde.
Tunis			29.91	759.8															Jacques.
Sfax			30.06	763.6															Gau.
Said.a			30.03	762.8	66.2	19.0	41	ESE			2	2				0	0	Fair	Dumas.
Tebessa			30.04	763.0	63.0	17.2	33	W			7	0				0	0	Clear.	Watrin.
Gerville																			Lonchamp.
Laghouat			30.14	765.5	68.7	20.4	29	SW			1	1				0	0	Very fair.	Herbin.
Biskra			30.10	764.6	71.2	21.8	58	NW			3	3				0	0	Pretty fair.	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.92	759.9	30.01	762.2	59.2	15.1	80	SE	10	4.5		2				0	0	Very fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.80	756.9	77	25.0		NW			3	10ku				0.02	0.5		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.38	746.3	29.97	761.3	23.0	— 5.0	78	NE			1	10				0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.12	739.6	29.94	760.5	19.8	— 6.8	86	W	9.8	4.4		10				0	0		Dr. Wiersbicki.
Eperies	29.02	737.0	29.98	761.6	9.3	—12.6	92	Calm			0	98		SE		0	0		Julius Mikolik.
Gratz‡	28.69	728.7	30.04	763.0	18.3	— 7.6	75	S			2	0				0	0		Andreas Rospini.
Hermannstadt	28.42	721.8	30.00	762.0	5.4	—14.8	100	S			2	4				0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.63	727.3	30.11	764.7	11.5	—11.4	80	Calm			0	3				0	0		The Staff.
Lemberg	28.85	732.7	29.91	759.6	18.7	— 7.4	69	NW			1	4				0.020	0.5		Dr. T. Stanecki.
Pola	29.62	752.3	29.74	755.3	32.4	0.2	81	ENE			3	10				0	0		I. R. HydrographicOffice.
Szathmar	29.50	749 2	29.95	760.8	14.9	— 9.5	77	E			2	0				0	0		Beicht Peter, S. J.
Szegedin																			Karl Stancel.
Trieste	29.69	754.1	29.79	756.7	28.8	— 1.8	84	ENE			5	5				0	0		P. Busin.
Vienna	29.28	743.6	30.05	763.2	18.7	— 7.4	72	NW			1	0				0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.91	759.7	30.12	765.1	33.1	0.6	86	SW			2	9		N		0	0		Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck	29.95	760.8	30.08	764.0	33.8	1.0	80	W			2	10				0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 30, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.15	765.8	30.25	768.3	31.0	— 0.6	86	NW	14	6.3			4			0	0	Blue sky	W. Boswell.
Armagh, Observatory	30.04	763.0	30.29	769.4	30.0	— 1.1	99	SSW	3	1.3									S. Gall.
Bidston, Liverpool Obs'y			30.22	767.6	32.0	0.0	95	SSE	10	4.5			10					Snowing	John Hartnup.
Bolton, Sharples	29.65	753.1	30.21	767.3	31.0	— 0.6	100	SE	4	1.8			10					Overcast?	Thomas Mackereth.
Bradford, Yorkshire																0	0		J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.00	762.0	30.03	762.7	82	27.8	67	NE			3		3					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			30.19	766.8	36.0	2.2	90	NW			0.4		10					Overcast	John McLaren.
Chatham, School M. E	30.06	763.5	30.20	767.1	32.2	0.1	91	Calm			0		10					Gloomy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	30.05	763.3	30.28	769.1	35.8	2.1	63	N			1		3					D. clouds	The Staff.
Fort Napier, Natal	27.57	700.3	29.78	756.4	80.2	26.8	92	E			2		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9	85	29.4	92	SW			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			30.14	765.5	40	4.4	91	SE			2		10					Overcast	J. O'Donaghadue.
Gibraltar, Mediterranean	29.96	761.0	30.01	762.2	63.0	17.2	94	SE			1		3					D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.04	763.0	30.24	768.1	30.8	— 0.7	93	N			1		10k					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	30.03	762.7	30.22	767.6	34.0	1.1	75	NNW			1		10			Blank		Overcast	The Staff.
Guernsey	29.97	761.2	30.20	767.1	36.5	2.5	70	NNE			2		8					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.19	766.8	30.23	767.8	25.5	1.9	65	NNW	4	1.8			9					Gloomy	The Met'g'l Office.
Leicester, Museum	29.95	760.7	30.22	767.6	35.0	1.7	74	NE			1		7					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.85	758.2	29.93	760.2	67.0	19.4	64	W			2		3					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			30.09	764.3	72.2	22.3	89	SE			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.70	754.4	30.25	768.3	34.0	1.1	84	W			1		8					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	29.99	761.7	30.25	768.3	34.5	1.4	97	NW			2		10					Foggy	The Staff.
Plymouth	30.18	766.6	30.26	768.6	33.0	0.6	79	NW			1		0					Misty	John Merrifield.
Sandwick Manse, Orkneys			30.24	768.1	20.8	— 6.2	100	N	1	0.4			7					D. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.81	757.2	29.88	758.9	40.0	4.4	51	ESE			2		10			Blank		Gloomy	Serg't W. H. Lyne.
Sheffield	29.94	760.5	30.23	767.8	34.4	1.3	99	Calm			0		9			0	0	Foggy	W. F. Cooper.
Siloth Rectory	30.19	766.8	30.22	767.6	33.4	0.8	75	Calm			0		0			0	0	Blue sky	Rev. F. Redford, A. M.
Stonyhurst, Observatory			30.22	767.6	33.9	1.1	64	NE	4	1.8			10					Gloomy	Rev. S. J. Perry.
Strathfield Turgiss	30.01	762.2	30.24	768.1	34.3	1.3	79	NW			1		9					D. clouds	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution			30.28	769.1	38	3.3	81	E			1		6					D. clouds	W. Newcombe.
Valencia, Observatory	30.29	769.4	30.31	769.9	35.1	1.7	90	W	3	1.3			3			Blank		Misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Chatham, N. B.*	29.46	748.3	29.52	749.8	0	—17.8	94	Calm	0	0		2k	8ks	N	N	0	0	Cloudy	G. A. Blair.
Charlottetown, P. E. Island	29.46	748.3	29.50	749.3	11	—11.7	100	W	1	0.4		2cs	0			0.120	3.05	Fair	H. J. Cundall, C. E.
Chicontime, Quebec					9.4	—12.6		NW			5	0	9s			0	0	Clearing	Rev. V. A. Huart.
Cornwall, Ontario	29.74	755.4	29.95	760.7	6.8	—14.1	100	W			1		10s			0.10	2.5	Cloudy	James Smith, M. A.
Dalhousie, N. B	29.50	749.3	29.53	750.0	15.0	— 9.4		W			2		10ks			0	0	Cloudy	H. A. Johnson.
Father Point, Quebec*	29.62	752.3	29.64	752.8	14	—10.0	67	N	5	2.2			10n		N	0	0	Cloudy	J. McWilliams.
Fredericton, N. B	29.55	750.6	29.62	752.3	16.0	— 8.9	83	NW	12	5.4			10s			0	0	Cloudy	Prof. Harrison.
Fort Garry, Manitoba*	29.54	750.3	30.50	774.7	—10	—23.3	95	SE	2	0.9		0	0			0	0	Clear	James Stewart.
Granton, Ontario	28.90	734.0	30.11	764.8	12.5	—10.8	90	Calm			0		10n			0	0	Cloudy	James Grant.
Halifax, N. S.*	29.43	747.5	29.57	751.1	19	— 7.2	84	NW	7	3.1			10n			0.36	9.1	Cloudy	A. Allison.
Hamilton, Ontario	29.66	753.4	30.09	764.3	15.2	— 9.3	90	NE			1	10k	0			0.31	7.9	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.63	752.6	30.00	762.0	6	—14.4	93	Calm	0	0		5cs	0			0.02	0.5	Fair	S. Woods, M. A.
Little Glace Bay, N. S	29.38	746.2	29.42	747.3	22.5	— 5.3	93	NW	3	1.3			10n			0.30	7.6	Cloudy	C. H. Rigby.
Montreal, Quebec*	29.69	754.1	29.91	759.7	10	—12.2	77	NW	11	4.9			10n			0.20	5.1	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	29.35	745.5	30.12	765.0	8	—13.3	74	E	7	3.1		2k	5ks	NE	NE	0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.30	744.2	30.05	763.3	16	— 8.9	98	N	11	4.9			10n			0.30	7.6	Light snow	H. Morgan.
Port Stanley, Ontario	29.37	746.0	30.07	763.8	17	— 8.3	90	E	1	0.4			10n		E	0.15	3.8	Cloudy	M. Payne.
Quebec, Quebec*	29.42	747.3	29.77	756.1	8	—13.3	78	NW			1		8n		NW	0	0	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.59	751.6	30.09	764.3	10	—12.2	83	NW	6	2.7			10s		NW	0	0	Cloudy	W. H. McIntyre.
St. Andrews	29.59	751.6	29.64	752.8	15	— 9.4	86	NW	5	2.2			10n			0.20	5.1	Cloudy	
St. John's, N. B	29.42	747.3	29.59	751.6	16.0	— 8.9	91	N	4	1.8			10s			0.21	5.3	Cloudy	G. Murdock, C. E.
Saugeen, Ontario*	29.32	744.7	30.09	764.3	14	—10.0	93	NE	7	3.1			10ks			0.05	1.3	Lght snow	K. Stewart.
Stratford, Ontario	28.73	729.7	30.12	765.0	12.8	—10.7	94	Calm	0	0			10s			0.30	7.6	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.39	746.5	29.43	747.5	24	— 4.4	95	W	2	0.9		5cs	5n			0.23	5.8	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.68	753.9	30.10	764.5	12	—11.1	88	N	9	4.0			10ks		W	0.25	6.3	Cloudy	Magnetic Observatory.
Windsor, N. S	29.44	747.8	29.54	750.3	18.5	— 7.5	100						10n			0.10	2.5	Fair	
Woodstock, Ontario	28.92	734.6	30.08	764.0	14.1	— 9.9	96	N	4	1.8			10s			0.37	9.4	Light snow	Prof. Wolverton.
Yarmouth, N. S.*	29.55	750.6	29.61	752.1	22	— 5.6	79	NW	7	3.1		2ck	5s	W	NW	0.32	8.1	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.08	738.6	29.25	742.9	29	— 1.7	100	NE	1	0.4		10k	10s			0.05	1.3	Cloudy	John Delany.
St. Pierre, N. F			29.22	742.2	24.8	— 4.0		N			2					0	0		N. F. Land, Comd't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.93	760.2	29.96	761.0	83.0	28.3	51	SSE	20.0	8.9		0	1			0	0	Vapory	The Staff, for D. Gill.
Cape St. Francis Lt. House	29.92	760.0			72.0	22.2	74	SW	22.5	10.1		3c	0			0	0	Fine	John Duthie.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.31	769.8	30.33	770.4	35.6	2.0	75	NNW	5.6	2.5			0			0	0	Clear	M. Marc Dechevrens, S. J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.19	665.2	29.91	759.7	63.5	17.5	90	NE			2	4ck;d		NE		0	0	Misty	Federico Maison.

DANISH SERIES.

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

Copenhagen	30.07	763.8	30.12	765.0	14.5	— 9.7	74	NW	11	5			0						
Fanöe	30.19	766.7	30.21	767.2	13.6	—10.2	97	N			2		0						
Godthaab, Greenland	30.11	764.9	30.16	756.0	29.7	— 1.3	61	ENE			2		4						
Stykkisholm, Iceland	30.09	764.2	30.13	765.3	33.4	0.8	92	W			4		8						
Thorshavn	30.04	762.9	30.07	763.8	36.1	2.3	68	W	13	6			10						
Vestervig	30.05	763.3	30.15	765.7	21.4	— 5.9	98	Calm			0		0						

FRENCH SERIES.

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

Agen, Normal School	29.44	747.8	30.14	765.5	25.5	—3.6	87	NW			1		8			0	0	Almost cov.	M. Labroue, Director.
Alençon	29.67	753.6	30.22	767.6	30.2	—1	92	NE			1		10kn		S	0	0	Covered	M. Nicot, Director.
Arras, Engineer School	29.97	761.2	30.24	768.1	30.2	—1.0	96	Calm	0	0									M. Klein, Commandant.
Avignon, Normal School	29.87	758.6	29.95	760.6	27.0	—2.8	84	N			4		0			0.362	9.2	Clear	M. Giraud, Director.
Bar-sur-Seine	29.58	751.3	30.18	766.6	19.4	—7.0	76	NE			1		10					Snowing	M. Saillard, Director.
Beauvais, Normal School	29.91	759.7	30.19	766.9	34.3	1.3	78	N			1		8		N.	0.010	0.25	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.20	741.6	30.15	765.8	25.0	—3.9	100	NE			1		0			0	0	Clear	M. Gobin, Director.
Bordeaux, Observatory	29.87	758.7	30.19	766.7	28.2	—2.1	57	ENE			1		0			0.012	0.3	Clear	M. Rayet, Director.
Bourges, Normal School	29.54	750.4	30.14	765.5	22.3	—5.4	85	NE			1		5kn		NE	0	0	Cloudy	M. Postel, Director.
Brest, Naval Observatory	30.01	762.3	30.26	768.5	34.5	1.4	93	NNE			1		10		NNE	0	0	Misty	M. de Rermaree, Dir.
Caen, Normal School	30.07	763.8	30.15	765.9	34.9	1.6	79	S			1		10			0.08	2.	Covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.84	758.0	30.18	766.5	28.0	—2.2		Calm			0		10			0	0	Covered	M. Jadot, Director.
Charleville, Normal School	29.60	751.9	30.14	765.6	33.1	0.6	89	S			1		10			0	0	Covered	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.69	728.8	30.16	766.1	19.9	—6.7	84	NW			1		0			0.358	9.1		M. Alluard, Director.
Cluny, Normal School	29.23	742.3	30.10	764.5	28.4	—2	73	N			2		0			0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	29.23	742.5	30.15	765.8	23.0	—5	86	E			3		10kn	E	E			Snowing	Dr. Coulet, Director.
Gap, Normal School	27.22	691.5	29.89	759.1	24.8	—4	78	NE			3				S	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.72	729.5	29.86	758.5	31.6	—0.2	96	NW			3		2		NW	0.091	2.3		M. Kina, Director.
Grenoble, Normal School	29.13	740.0	29.95	760.8	24.8	—4		WNW			1		c			0.764	19.40		M. Ablard, Director.
Guéret, Normal School	28.48	723.5	30.18	766.5	23.9	—4.5	77	SW			1					0	0		M. Rivoir, Director.
Lamballe, Normal School	29.90	759.4	30.19	766.8	35.6	2	90	NNW			1		8		NNW	0	0	Foggy	M. Ollitrault, Director.
Lescar, Normal School	29.47	748.6	30.18	766.5	36.5	2.5	93	N					1		W	0.12	3.	Clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.14	765 6	30.24	768.2	29.1	—1.6	67	NNE			1		Fog	NE	N	0	0	Foggy	Lt. T Carré, Director.
Lyon Obs'y, Park Station	29.00	736.6	30.10	764.6	18.9	—7.3	56	SE			1		0			0	0	Hazy	M. André, Director.
Mans, Normal School	29.89	759.3	30.22	767.6	29.3	—1.5	98	NNE			1		8		N	0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.59	751.6	29.87	758.7	33.3	0.7	65	NW			1-2		2		W	0.071	1.80		M. Stephan, Director.
Montlouis l'Instituteur	24.60	624.8	29.84	757.8	32.0	0.0	53	SW	3.8	1.7			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.84	757.9	29.95	760.8	34.5	1.4	73	N			3		0			0.24	6.	Rainy	M. Galzin, Director.
Nancy, Normal School	29.32	744.6	30.13	765.4	23.7	—4.6	81	WNW			1		8ck					Snow & fog	M. Hasse.
Nantes, Observatory	30.11	764.8	30.27	768.9	27.0	—2.8	100	NW			1		10			0	0	Foggy	M. Larocque, Dir.
Nice	29.72	754.8	29.75	755.6	47.5	8.6	76	E			3		5	W	W	0.114	2.9	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.83	757.6	29.93	760.3	45.7	7.6	57	N	33.5	15.0			2	NW	NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.26	565.3			10.2	—8.8							10		NW	0.276	7.0	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.93	734.8	30.07	763.7	23.9	—4.5		Calm			0		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	24 93	633.3			10.2	—12.1	97	NE			8		2			0.315	8.0	Light fog	M. Alluard, Director.
Rochefort, Naval Obs'y	30.15	765.7	30.18	766.5	33.4	0.8	88	ENE			2		0			0	0	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.04	763.0	30.26	768.7	29.5	—1.4	96	N			1		10			0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	27.83	706.9	30.09	764.2	28.0	—2.2	60	E			2		Fog		WNW	0.091	2.3	Foggy	M. Richard, Director.
Rouen, Normal School	30.09	764.3	30.18	766.5	36.7	2.6	61	S			1		10		S	0	0	Covered	M. Platrier, Director.
Saint Lô, Normal School	30.07	763.8	30.22	767.7	30.0	—1.1	92	NE			1		10		E	0.031	0.8	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.00	762.0	30.17	766.2	32.0	0.0	87	N			2		10		NE			Covered	M. Renou, Director.
Toulouse, Observatory	29.37	746.1	30.10	764.5	28.0	—2.2	83	NW			1		10			0	0	Covered	M. Baillaud, Director.
Tours	29.98	761.4	30.17	766.4				NE			1		10			0	0	Covered	M. de Tastes.
Versailles, Observatory	29.67	753.7	30.17	766.2	31.3	—0.4	85	NW			1		10			0.058	1.46	Covered	Dr. A. Bérigny, Director.
Sun-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	29.18	741.2	30.04	763.1	17.6	— 8.0	90	E			5		4k	N				Light snow	Prof. Dr. Hoh.
Berlin	29.84	758.0	30.03	762.7	24.1	— 4.4	86	NW			2		4			0.008	0.2		Prof. Dr. Arndt.
Breslau	29.42	747.2	29.95	760.6	21.4	— 5.9	87	WNW			2		10			0.071	1.79		Royal University Obs'y.
Carlsruhe	29.72	754.8	30.18	766.5	20.5	— 6.4	86	SSW			0		10		N	0.031	0.8	Snowing	Albert Senz.
Cassel	29.49	749.0	30.10	764.5	23.7	— 4.6	86	NW			4		8		NE	0	0		Dr. H. Möhl.
Frankfort on the Main	29.82	757.4	30.21	767.4	23.7	— 4.6	72	W			1		8			0	0		Physical Society.
Friedrichshafen	28.59	726.2	30.14	765 6	16.9	— 8.4	85	NE			2		2	NE		0	0		Chief Telegrapher Wilhelm.
Hamburg	30.10	764.6	30.17	766.4	17.4	— 8.1	85	NNE			3		0			0	0		Dr. R. Kleeman.
Kiel	30.09	764.2	30.10	764.6	19.4	— 7.0	77	Calm			0		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.63	752.6	30.08	764.0	22.6	— 5.2	96	WSW			1		10			0.091	2.3	Light snow	Prof. Dr. Bruhns.
Magdeburg	29.83	757.7	30.07	763.8	24.8	— 4.0	89	NW			6		7k	NW		0.004	0.1		Dr. Assmans.
Memel	29.72	754.8	29.76	756.0	18.5	— 7.5	92	SW			2		10n						Reinbrecht & Issermann.
Munich	28.16	715.3	30.02	762.6	10.6	—11.9	80	N			1		3	N		0	0	Hazy	Central Station.
Neufahrwasser	29.77	756.2	29.79	756.6	27.5	— 2.5	85	N			6		10			0.114	2.9		A Lothes.
Neustadt, Palatinate	29.52	749.9	30.04	763.1	22.8	— 5.1		SW			2		9			0.059	1.5	Snowing	Dicknether.
Stuttgart	29.09	738.8	30.05	763.2	19.4	— 7.0	100	NE			1		10			0.008	0.2	Light snow	Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.50	723.8	29.99	761.8	19.0	— 7.2	81	NW			2		0			0	0		Prof. Kemlein.
Wustrow	30.08	764.0	30.10	764.6	19.0	— 7.2	90	NNE			4		38			0	0		Profs. Brandes & Reimer.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.34	745.2	29.73	755.2	58.3	14.6	.....	SW	.....	.....	1.0	.....	5	.....	.....	.....	.....	½ Clear	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.03	762.8	30.08	764.1	81.2	27.3	17	NE	7.0	3.1	.....	.....	0	.....	.....	0	0	Blue sky	
Deesa	29.53	750.1	30.01	762.2	80.6	27.0	31	NE	7.3	3.3	.....	.....	0	.....	.....	0	0	Misty	
Bombay	29.95	760.6	29.98	761.6	82.2	27.9	56	NNW	19.0	8.5	.....	.....	0	.....	.....	0	0	Blue sky	
Poona, Yarrowda	28.10	713.8	29.94	760.6	84.3	29.1	18	SE	5.0	2.2	.....	.....	4	.....	WNW	0	0	D. clouds	
Belgaum	27.42	696.5	29.95	760.7	80.0	26.7	23	ENE	8.0	3.6	.....	.....	1	NE	NE	0	0	D. clouds	
Lahore	29.33	744.9	30.09	764.4	69.7	20.9	28	W	1.0	0.4	.....	.....	0	.....	.....	0	0	Blue sky	
Roorkee	29.15	740.3	30.08	764.0	66.2	19.0	36	NW	2.1	0.9	.....	.....	0	.....	.....	0	0	.....	
Agra	29.52	749.7	30.10	764.4	73.3	22.9	32	NW	2.8	1.2	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28.96	735.6	30.01	762.3	79.5	26.4	26	E	1.9	0.8	.....	.....	3	N	.....	0	0	D. clouds	
Jubbulpore	28.68	728.6	30.08	764.1	71.3	21.8	33	Calm	1.5	0.7	.....	.....	0	.....	.....	0	0	Blue sky	
Lucknow	29.68	753.9	30.07	763.8	69.3	20.7	22	NNW	1.8	0.8	.....	.....	0	.....	.....	0	0	Blue sky	
Allahabad	29.73	755.2	30.06	763.5	65.8	18.8	59	Calm	1.4	0.6	.....	.....	0	.....	.....	0	0	Blue sky	
Patna	29.90	759.4	30.09	764.2	69.0	20.6	56	WNW	0.6	0.3	.....	.....	2	WNW	WNW	0	0	.....	
Hazaribagh	27.99	711.0	30.07	763.9	63.3	17.4	32	NW	5.7	2.6	.....	.....	0	.....	.....	0	0	Blue sky	
Cuttack	29.98	761.4	30.06	763.5	73.0	22.8	45	NE	0.3	0.1	.....	.....	0	.....	.....	0	0	Blue sky	
Calcutta, Alipore	30.01	762.2	30.03	762.7	66.5	19.2	59	Calm	0	0	.....	.....	0	.....	.....	0	0	Blue sky	
Goalpara	29.59	751.6	30.01	762.2	70.4	21.3	43	Calm	3.8	1.7	.....	.....	0	.....	.....	0	0	Blue sky	
Chittagong	29.92	759.8	30.01	762.2	70.8	21.6	65	W	2.7	1.2	.....	.....	0	.....	.....	0	0	Blue sky	
Sibsagar	29.70	754.3	30.05	763.2	62.2	16.8	80	NE	1.9	0.8	.....	.....	0	.....	.....	0	0	Blue sky	
ITALIAN SERIES. By authority of the MINISTER OF AGRICULTURE, INDUSTRY AND COMMERCE. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.42	747.2	29.85	758.1	32.5	0.3	45	E	1.3	0.6	.....	.....	3	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.32	744.8	29.87	758.7	26.4	— 3.1	95	S	2.5	1.1	.....	.....	7	SE	.....	0.102	2.6	.....	Prof. Schiaparelli.
Padua	29.73	755.1	29.84	758.0	33.4	0.8	80	NNE	8.7	3.9	.....	.....	10	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.89	733.7	29.84	757.8	27.1	— 2.7	76	E	4.3	1.9	.....	.....	2	.....	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.55	750.5	29.74	755.5	35.6	2.0	59	N	11.2	5.0	.....	.....	1	N	.....	0.114	2.9	.....	Prof. G. M. Garibaldi.
Mondovi	27.84	707.2	29.85	758.3	30.6	— 0.8	69	S	.....	.....	2	.....	9	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.78	756.5	29.84	757.8	29.5	— 1.4	91	W	27.3	12.2	.....	.....	10	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.46	748.3	29.72	755.0	37.4	3.0	81	NE	.....	.....	4	.....	10	.....	.....	0	0	.....	Cav. F. Meucci.
Leghorn	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.394	10.0	.....	Prof. P. Monte.
Rome	29.52	749 8	29.70	754.3	46.0	7.8	78	Calm	0	0	.....	.....	10	.....	.....	0.421	10.7	.....	Prof. P. S. Ferrari.
Lecce	29.35	745.6	29.61	752.1	58.1	14.6	70	WSW	12.5	5.6	.....	.....	6	SW	.....	0.142	3.6	.....	Prof. C. de Giorgi.
Cosenza	28.84	732.6	29.75	755.6	52.3	11.3	72	SE	0	0	.....	.....	10	ESE	.....	5.961	151.4	.....	Prof. D. Conti.
Cagliari	29.65	753.1	29.84	758.0	55.6	13.1	37	NW	.....	.....	6	.....	3	W	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.58	751.3	29.83	757.6	60.8	16.0	56	W	22.4	10.0	.....	.....	7	WNW	.....	0	0	.....	Prof. G. Ciacciatore.
Syracuse	29.72	755.0	29.77	756.1	63.7	17.6	52	WNW	17.4	7.8	.....	.....	6	WNW	.....	0	0	.....	Prof. Vincenzo Guiliano
SUB-SERIES.																			
Naples, S. R	29.13	739.9	29.66	753.3	52.3	11.3	66	WSW	21.0	9.4	.....	6ck	.....	WNW	.....	‖0.071	1.8‖	.....	Prof. F. Brioschi.
Stelvio	21.96	557.7	.....	.....	3.0	—16.1	60	E	.....	.....	.....	0	.....	.....	.....	0	0	.....	P. F. Denza.
Valdobbia	21.73	552.0	.....	.....	12.2	—11.0	90	NE	.....	.....	.....	3	.....	.....	.....	‖1.181	30.0‖	.....	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y†	29.89	759.2	29.91	759.7	39.4	4.1	82	W	3.3	1.5	.....	.....	10s;ck	.....	.....	0.108	2.74	Gloomy	K. Sasaki.
Kioto	29.78	756.4	29.96	761.0	32.4	0.2	84	.....	.....	.....	.....	.....	10s	.....	.....	0.020	0.51	Cloudy	
Nagasaki, I. M. Obs'y	29.73	755.1	29.93	760.2	49.6	9.8	74	SW	10.5	4.7	.....	.....	10s	.....	.....	0.170	4.32	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.87	758.7	29.95	760.7	32.8	0.4	78	N	2.5	1.1	.....	ck	10s	.....	.....	0	0	Cloudy	The Staff.
Wakayama	29.93	760.2	29.98	761.5	33.8	1.0	72	E	4.2	1.9	.....	.....	7cs	.....	.....	0	0	Cloudy	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.75	755.6	29.94	760.5	80.0	26.7	78	NNE	14.5	6.5	.....	2	6	.....	NNE	0.02	0.5	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the SECRETARY of PUBLIC WORKS. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. Banda, C. E.
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanaxuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Leal.
Mazatlan	29.72	754.8	29.98	761.5	58.5	14.7	53	NNW	.....	.....	5	2c	0	SW	.....	0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff.
Morelia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Fena, M. D.
Pabellon, Aguascallentes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.13	765.4	30.13	765.4	35.2	1.8	.....	NNW	.....	.....	3	.....	.....	.....	.....	0.055	1.4	.....	
Groningen	30.13	765.4	30.17	766.4	23.2	— 4.9	.....	ENE	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Helder	30.12	765.1	30.12	765.1	31.3	— 0.4	.....	NNE	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.11	764.8	30.11	764.8	35.4	1.9	88	Calm	.....	.....	0	.....	.....	.....	.....	0	0	.....	
Utrecht	30.08	764.0	30.13	765.2	34.7	1.5	72	NW	.....	.....	2	.....	8	.....	.....	0	0	Very cloudy	H. van der Brink

‖ Unmelted snow.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.07	763.7	30.13	765.3	20.1	— 6.6	89	Calm	0	0			4			0	0		
Christiania	29.88	759.0	30.04	763.0	21.9	— 5.9	75	Calm	0	0			10			0	0	Foggy	
Gjæsvær	28.80	731.4	28.82	732.0	28.8	— 1.8		WSW			7		7						
Lodingen	29.24	742.8	29.29	744.0	28.4	— 2.0	96	WSW			6		10			0.283	7.2	Light snow.	
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.59	751.6	29.75	755.7	54.3	12.4	88	E	21.7	9.7			6			1.555	39.5		Dr. J. A. Sampaio.
Campo Major	29.01	736.9	30.04	763.1	45.3	7.4	75	ENE	4.9	2.2			9			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.82	757.5	29.91	759.7	65.3	18.5	81	W	6.3	2.8			9			0.339	8.6		Capt. D. A. de Cunha.
Lisbon, Observatory	29.67	753.7	30.04	763.1	45.3	7.4	87	NE	12.5	5.6			9	WSW		0	0		The Staff.
Ponta Delgada, Azores	29.61	752.2	29.69	754.0	57.6	14.2	78	NE	2.5	1.1			4			0.449	36.8		
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	27.97	710.4	29.04	737.5	38.5	3.6	77	S	27	12			10						Capt. Lasarew.
Archangel	29.54	750.3	29.56	750.8	— 4.4	—20.2	82	Calm	0	0			10						Capt. Sselìwerstow.
Astrakhan	30.21	767.4	30.13	765.3	18.9	— 7.3	61	W	11	5			10k						Capt. Wisganow.
Barnaul	29.15	740.3	29.65	753.2	38.7	3.7	70	SW	13	6			10					Raining	Meteorological Obs'y.
Dorpat	29.55	750.5	29.82	757.3	5.9	—14.5	91	ESE	7	3			10k						Observatory.
Ekaterinburg	28.52	724.4	29.60	751.9	—12.8	—24.9	63	WSW	9	4			0						Meteorological Obs'y.
Kasan	29.55	750.6	29.87	758.6	—19.1	—28.4	81	WSW	2	1			0						Observatory.
Kertch	30.08	764.0	30.10	764.5	23.2	— 4.9	90	ENE	7	3			10						Lagorio.
Kieff	29.26	743.2	29.95	760.7	12.2	—11.0	69	SSW	7	3		20						Light clouds	Observatory.
Krotkowo, N. 53°47′, E. 48°34′																			Cand. Fatjanow.
Lugan	29.87	758.8	30.10	764.6	0.0	—17.3	73	W	4	2			10						Meteorological Obs'y.
Moscow	29.29	744.0	29.90	759.4	3.9	—15.6	76	S	7.8	3.5			10s					Snowing	Meteorological Obs'y.
Nertchinsk	27.89	708.5	30.64	778.2	—30.5	—34.7	83						0						Meteorological Obs'y.
Nikolaiev	30.03	762.7	30.10	764.5	18.5	— 7.5	72	ESE	4	2			0						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	30.05	763.3	30.14	765.5	—16.6	—27.0	74	W	7	3			0						Lieut. Iwanow.
Nuknus	29.59	751.5	29.83	757.6	38.5	3.6	54	NW	2	1			10kn						Dr. Dobrochotow.
Pekin, China	30.10	764.4	30.24	768.0	30.0	— 1.1	41	SW	4	2			0						Physical Observatory.
St. Petersburg	29.84	757.8	29.85	758.2	4.8	—15.1	87	SE	4	2			10n						Central Physical Obs'y.
Tashkend, Laboratory																			Teich, A. M.
Tiflis	28.71	729.3	30.19	766.9	37.2	2.9	47	NW	22	10			1k						Physical Observatory.
Warsaw	29.32	744.8	29.77	756.2	21.4	— 5.9	90	W	18	8			10ks						Astronomical Obs'y.
Wilna	29.35	745.5	29.81	757.1	9.3	—12.6	80	Calm	0	0			8						Berg, Assistant.
Yeniseisk	29.43	747.6	29.74	755.3	18.5	— 7.5	96	SE	2	1			10						M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.27	768.8	34.0	1.1	78	W			1		10k	E		0	0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			30.27	768.8	39	3.9	91	S			3	10	5	NW		1.	25.		J. Youngclause.
North Unst, Shetland Isl'ds			30.04	763.0				W			2		10			0	0		Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.80	756.8	29.90	759.5	50.0	10.	58	W	4.5	2.0			0			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.28	769.2	30.34	770.7	41.4	5.2	83	NW	0.8	0.38		2	7	SE		0.272	6.9	Rainy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.07	687.5			34.5	1.4	79	SW	6.4	2.84			9			0	0	Almost cov'd	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.80	705.0	30.10	764.6	40.5	4.7	71	S	3.6	1.6		0	4			0	0	Light clouds	The Staff.
Murcia, Met. Obs'y. ‡	29.89	759.1	30.04	763.0	58.1	14.5	55	NW	2.7	1.2		0	3			0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.10	739.2	30.02	762.5	45.0	7.2	71	NE	13.0	5.8			3			0.150	3.8	Cloudy	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.99	761.8	30.06	763.5	68.8	20.4	92	ESE	2.7	1.2		6ck	2s	SW		1.327	33.7	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.96	761.1	30.02	762.4	77.1	25.1	67	E	0.7	0.3			1s			0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.94	760.4	30.04	762.9	57.4	14.1	84	Calm	0	0			10		NW	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.02	762.6	30.11	764.9	75.9	24.4	90	S	2.3	1.04		2cs	3k	S	S	0	0	Clear	Enrique Gadea, Chief Engineer.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.58	751.3	29.62	752.3	— 3.6	—19.8	100	SW			2		10			0	0		
Umea	29.73	755.1	29.78	756.4	— 2.2	—19.0	88	Calm			0		9			0	0		
Hernosand	29.83	757.6	29.88	758.9	6.3	—14.3	96	Calm			0		8			0.008	0.2		
Stockholm	29.78	756.5	29.96	761.0	8.2	—13.2	84	WNW			2		1			0	0		
Wisby	29.79	756.6	29.85	758.1	19.0	— 7.2	72	NNE			4		10			0.020	0.5	Snowing	
Sub-Series.																			
Upsala	29.47	748.6	29.56	750.8	7.0	—13.9	77	NW	12.8	5.7			5		N	0.003	0.08		Nils Ekholm
SWISS SERIES.																			
Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.58	726.0	30.04	763.1	20.7	— 6.3	69	E			2		0			0.028	0.7	Clear	The Observatory.
Zurich	28.39	721.2	30.17	766.3	16.2	— 8.8	68	NW			1		2			0	0	Clear	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —1.4 mm.; Ther. —8°.1 cent.; Hum. —9 per cent.																			
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.92	760.0	39.9	4.0	51	ESE	20	9.0			10		SW	0.756	19.2	Rain & snow	The Observatory.
Valona			29.60	751.9	57.0	13.9		S			2		10			0.20	5.	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.12	765.1	66.0	18.9	55	WSW			2		2k		SW	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.84	757.9	29.93	760.2	22	— 5.6	79	NW	8	3.6	.....	1c	5s	Calm	N	0.08	2.0	Fair.	
Alpena, Michigan	29.50	749.3	30.20	767.1	10	—12.2	79	N	7	3.1	.....	.....	10s	.....	Calm	0.17	4.3	Cloudy	
Attou Id., Alaska‡	29.48	748.8	.....	.....	35	1.7	100	NE	19	8.5	.....	.....	10n	.....	NE	0.58	14.7	.....	
Atlanta, Georgia	28.98	736.1	30.19	766.8	30	— 1.1	68	W	10	4.5	.....	.....	10s	.....	Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.02	762.5	30.04	763.0	28	— 2.2	66	W	10	4.5	.....	5c	0	W	.....	0	0	Fair.	
Augusta, Georgia	30.00	762.0	30.22	767.6	36	2.2	61	NW	1	0.4	.....	1cs	5s	Calm	Calm	0	0	Fair.	
Baltimore, Maryland	30.06	763.5	30.11	764.8	30	— 1.1	78	W	4	1.8	.....	2cs	0	W	.....	0	0	Clear.	
Barnegat, New Jersey	29.98	761.5	30.00	762.0	26	— 3.3	75	NW	15	6.7	.....	2c	0	W	.....	0	0	Clear.	
Benton, Montana	27.33	694.2	.....	.....	27	— 2.8	88	W	10	4.5	.....	5k	5s	Calm	Calm	0.02	0.5	Cloudy	
Bismarck, Dakota	28.50	723.9	30.35	770.9	—10	—23.3	.....	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Boise City, Idaho	27.51	698.7	30.53	775.4	20	— 6.7	85	SE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Boston, Massachusetts	29.65	753.1	29.81	757.2	21	— 6.1	71	W	13	5.8	.....	2c	5s	W	W	Inap.	Inap.	Fair.	
Brackettville, Texas	29.13	739.9	30.26	768.6	32	0.0	89	N	1	0.4	.....	.....	10ks	.....	SW	0	0	Cloudy.	
Brownsville, Texas	30.28	769.1	30.33	770.4	40	4.4	82	N	8	3.6	.....	10cs	0	Calm	.....	0	0	Cloudy.	
Buffalo, New York	29.28	743.7	30.03	762.7	20	— 6.7	93	NW	2	0.9	.....	.....	10n	.....	Calm	0.24	6.1	Light snow.	
Burlington, Vermont	29.67	753.6	29.98	761.5	11	—11.7	80	N	14	6.3	.....	.....	10s	.....	N	0.01	0.3	Cloudy.	
Cairo, Illinois	29.89	759.2	30.32	770.1	23	— 5.0	73	SW	3	1.3	.....	0	2s	.....	SW	0.04	1.0	Clear.	
Campo, California	27.57	700.3	30.14	765.5	34	1.1	61	E	5	2.2	.....	0	0	.....	.....	0	0	Clear.	
Camp Thomas, Arizona	27.44	697.0	.....	.....	16	— 8.9	66	Calm	.....	.....	.....	0	0	.....	.....	0	0	Clear.	
Cape Henry, Virginia	30.09	764.3	30.11	764.8	34	1.1	61	N	10	4.5	.....	.....	10s	.....	Calm	0	0	Cloudy	
Cape May, New Jersey	30.03	762.7	30.06	763.5	30	— 1.1	68	NW	29	13.0	.....	2cs	5s	W	Calm	0	0	Fair.	
Castroville, Texas	29.50	749.3	30.26	768.6	33	0.6	61	NW	2	0.9	.....	.....	10s	.....	NW	0	0	Cloudy.	
Cedar Keys, Florida	30.17	766.3	30.20	767.1	45	7.2	76	N	11	4.9	.....	5ck	0	Calm	.....	0	0	Fair.	
Champaign, Illinois	29.28	743.7	30.13	765.3	20	— 6.7	70	SW	12	5.4	.....	.....	10n	.....	SW	0.03	0.8	Light snow.	
Charleston, S. Carolina	30.13	765.3	30.19	766.8	41	5.0	57	W	6	2.7	.....	0	5s	.....	Calm	0	0	Fair.	
Charlotte, N. Carolina	29.26	743.2	30.12	765.0	31	— 0.6	79	N	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Chattanooga, Tennessee	29.40	746.7	30.25	768.3	28	— 2.2	66	W	5	2.2	.....	2k	8ks	W	W	Inap.	Inap.	Cloudy.	
Cheyenne, Wyoming	24.02	610.1	29.96	761.0	19	— 7.2	54	NW	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Chicago, Illinois	29.36	745.7	30.09	764.3	25	— 3.9	75	E	7	3.1	.....	0	0	.....	.....	0.15	3.8	Clear.	
Chincoteague, Virginia	30.07	763.8	30.09	764.3	30	— 1.1	78	NW	12	5.4	.....	10k	0	NW	.....	0	0	Cloudy.	
Cincinnati, Ohio	29.50	749.3	30.19	766.8	28	— 2.2	77	W	6	2.7	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy.	
Cleveland, Ohio	29.31	744.5	30.08	764.0	23	— 5.0	91	SW	7	3.1	.....	.....	10n	.....	Calm	0.06	1.5	Light snow.	
Coleman City, Texas	28.51	724.1	30.34	770.6	18	— 7.8	53	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Columbus, Ohio	29.26	743.2	30.15	765.8	25	— 3.9	87	SW	6	2.7	.....	.....	10ks	.....	SW	0.02	0.5	Cloudy.	
Concho, Texas	28.36	720.3	30.20	767.1	17	— 8.3	83	W	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Corsicana, Texas	29.89	759.2	30.40	772.1	27	— 2.8	64	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Davenport, Iowa	29.49	749.0	30.19	766.8	17	— 8.3	83	N	6	2.7	.....	Haze	5s	Calm	Calm	0.06	1.5	Fair.	
Dayton, Washington T'y	28.84	732.5	30.69	779.5	18	— 7.8	100	SW	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Deadwood, Dakota	25.38	644.6	.....	.....	7	—13.9	77	S	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Decatur, Texas	29.12	739.6	30.39	771.9	22	— 5.6	86	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Delaware Breakwater, Del.	30.05	763.3	30.07	763.8	29	— 1.7	78	W	14	6.3	.....	.....	10s	.....	W	0	0	Cloudy.	
Denison, Texas	29.51	749.5	30.37	771.4	25	— 3.9	87	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Denver, Colorado	24.82	630.4	30.04	763.0	12	—11.1	50	S	4	1.8	.....	5ck	5s	NW	NW	0	0	Cloudy	
Des Moines, Iowa	29.31	744.5	30.27	768.8	16	— 8.9	83	N	2	0.9	.....	.....	10s	.....	Calm	0.07	1.8	Cloudy.	
Detroit, Michigan	29.36	745.7	30.08	764.0	17	— 8.3	90	NW	4	1.8	.....	.....	10s	.....	Calm	0.16	4.1	Cloudy.	
Dodge City, Kansas	27.56	700.0	30.05	763.3	15	— 9.4	65	NW	7	3.1	.....	.....	10n	.....	Calm	0.01	0.3	Light snow.	
Dubuque, Iowa	29.46	748.3	30.22	767.6	19	— 7.2	85	NW	4	1.8	.....	.....	10s	.....	Calm	0.10	2.5	Cloudy.	
Duluth, Minnesota	29.63	752.6	30.38	771.6	15	— 9.4	82	NW	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Eagle Pass, Texas	29.63	752.6	30.41	772.4	38	3.3	54	N	4	1.8	.....	0	5s	.....	Calm	0	0	Fair.	
Eagle Rock, Texas	25.50	647.7	30.15	765.8	4	—15.6	74	N	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Eastport, Maine	29.56	750.8	29.63	752.6	14	—10.0	64	NW	12	5.4	.....	.....	10s	.....	NW	0.12	3.0	Cloudy.	
Edinburg, Texas	.....	.....	.....	.....	45	7.2	76	S	.....	.....	.....	1	0	8ks	S	0	0	Fair.	
El Paso, Texas	26.38	670.0	.....	.....	15	— 9.4	48	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Erie, Pennsylvania	29.28	743.7	30.03	762.7	26	— 3.3	88	W	4	1.8	.....	.....	10s	.....	Calm	0.11	2.8	Cloudy.	
Escanaba, Michigan	29.55	750.6	30.26	768.6	15	— 9.4	82	N	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Florence, Arizona	28.73	729.7	30.33	770.4	29	— 1.7	45	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort Apache, New Mexico	25.08	637.0	30.53	775.4	7	—13.9	54	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Fort Assinniboine, Montana	27.26	692.4	.....	.....	28	— 2.2	77	SW	10	4.5	.....	.....	10s	.....	SW	0	0	Cloudy.	
Fort Bennett, Dakota	28.70	729.0	.....	.....	— 8	—22.2	58	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Fort Buford, Dakota	28.18	715.8	30.23	767.8	3	—16.1	100	E	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
Fort Custer, Montana	26.93	684.0	.....	.....	21	— 6.1	57	SW	4	1.8	.....	.....	10s	.....	NW	0	0	Cloudy.	
Fort Davis, Texas	25.24	641.1	30.20	767.1	15	— 9.4	82	NE	13	5.8	.....	0	0	.....	.....	Inap.	Inap.	Clear.	
Fort Elliott, Texas	27.44	697.0	29.97	761.2	10	—12.2	18	NW	16	7.2	.....	0	0	.....	.....	0	0	Clear.	
Fort Gibson, Indian T'y	29.75	755.6	30.35	770.9	10	—12.2	79	Calm	0	0	.....	0	0	.....	.....	Inap.	Inap.	Clear.	
Fort Grant, Arizona	25.24	641.1	30.04	763.0	20	— 6.7	70	NE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Fort Griffin, Texas	28.97	710.4	30.36	771.1	22	— 5.6	45	W	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Fort Keogh, Montana	27.62	701.5	.....	.....	— 2	—18.9	67	SW	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Fort Macon, North Carolina	30.07	763.8	30.08	764.0	38	3.3	81	N	9	4.0	.....	10cs	0	E	.....	0	0	Cloudy.	
Fort Missoula, Montana	27.02	686.3	.....	.....	— 6	—21.1	100	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort McKavett, Texas	28.00	711.2	30.09	764.3	21	— 6.1	57	SW	3	1.3	.....	4ck	0	SW	.....	0	0	Fair.	
Fort Shaw, Montana	26.48	672.6	.....	.....	25	— 3.9	87	W	13	5.8	.....	5os	0	Calm	.....	0	0	Fair.	
Fort Sill, Indian Territory	29.03	737.3	30.23	767.8	23	— 5.0	73	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear.	
Fort Stevenson, Dakota	28.45	722.6	.....	.....	—20	—28.9	100	Calm	0	0	.....	Haze	0	.....	.....	0	0	Clear.	
Fort Verde, Arizona	.....	.....	.....	.....	20	— 6.7	41	N	.....	.....	.....	1	0	.....	.....	0	0	Clear.	
Fredericksburg, Texas	28.52	724.4	30.20	767.1	28	— 2.2	88	N	1	0.4	.....	.....	10ks	.....	N	0	0	Cloudy.	
Galveston, Texas	30.30	769.6	30.34	770.6	40	4.4	56	NE	10	4.5	.....	.....	10s	.....	W	0	0	Cloudy.	
Grand Haven, Michigan	29.43	747.5	30.13	765.3	17	— 8.3	83	NE	4	1.8	.....	.....	10n	.....	Calm	0.17	4.3	Light snow.	
Hatteras, North Carolina	30.06	763.5	30.08	764.0	40	4.4	91	N	10	4.5	.....	0	8s	.....	Calm	0	0	Fair	
Helena, Montana	25.98	659.9	.....	.....	3	—16.1	73	SW	1	0.4	.....	2ck	0	Calm	.....	0	0	Fair.	
Henrietta, Texas	29.31	744.5	30.34	770.6	21	— 6.1	57	NW	9	4.0	.....	0	0	.....	.....	0	0	Clear.	
Indianapolis, Indiana	29.31	744.5	30.14	765.5	24	— 4.4	87	W	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Indianola, Texas	30.34	770.6	30.37	771.4	41	5.0	82	N	12	5.4	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Jacksboro, Texas	29.13	739.9	30.34	770.6	29	— 1.7	67	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Jacksonville, Florida	30.18	766.6	30.22	767.6	43	6.1	75	W	7	3.1	.....	5cs	0	W	.....	0	0	Fair	
Keokuk, Iowa	29.48	748.8	30.19	766.8	18	— 7.8	84	W	2	0.9	.....	.....	10n	.....	Calm	0.05	1.3	Light snow.	
Key West, Florida	30.06	763.5	30.09	764.3	68	20.0	90	NE	16	7.2	.....	.....	10s	.....	NE	0.48	12.2	Cloudy	
Kittyhawk, North Carolina	30.08	764.0	30.10	764.5	37	2.8	71	NE	20	8.9	.....	8c	0	W	.....	0	0	Cloudy.	
Knoxville, Tennessee	29.15	740.4	30.22	767.6	28	— 2.2	88	W	9	4.0	.....	.....	10s	.....	W	0	0	Cloudy	
La Crosse, Wisconsin	29.45	748.0	30.24	768.1	20	— 6.7	70	N	4	1.8	.....	.....	10s	.....	Calm	0.05	1.5	Cloudy.	
La Mesilla, New Mexico	26.27	667.2	30.42	772.7	13	—10.6	62	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear.	
Laredo, Texas	29.92	760.0	30.28	769.1	39	3.9	100	E	1	0.4	.....	.....	10n	.....	Calm	Inap.	Inap.	Light rain.	
Leavenworth, Kansas	29.34	745.2	30.26	768.6	15	— 9.4	82	NW	8	3.6	.....	.....	10s	.....	.....	0.02	0.5	Cloudy.	
Lewiston, Idaho	29.72	754.9	30.42	772.7	24	— 4.4	72	E	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Little Rock, Arkansas	29.98	761.5	30.33	770.4	25	— 3.9	87	W	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Los Angeles, California	29.84	757.9	30.20	767 1	39	3.9	46	NE	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Louisville, Kentucky	29.59	751.6	30.18	766.6	29	— 1.7	89	SW	8	3.6	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy.	
Lynchburg, Virginia	29.40	746.7	30.12	765.0	31	— 0.6	69	Calm	0	0	.....	1c	1s	NW	Calm	0	0	Fair.	
Madison, Wisconsin	29.11	739.4	30.18	766.6	15	— 9.4	82	N	12	5.4	.....	.....	10n	.....	Calm	0.19	4.8	Light snow.	
Marquette, Michigan	29.52	749.8	30.29	769.4	17	— 8.3	82	NE	6	2.7	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy.	
Mason, Texas	28.64	727.4	30.57	776.5	23	— 5.0	73	NW	6	2.7	.....	2k	0	NW	.....	0	0	Fair.	
Memphis, Tennessee	29.97	761.2	30.33	770.4	25	— 3.9	75	W	4	1.8	.....	0	5s	.....	W	Inap.	Inap.	Fair.	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.37	746.0	30.15	765.8	19	— 7.2	85	N	12	5.4			10s		Calm	0.32	8.1	Cloudy	
Mobile, Alabama	30.24	768.1	30.32	770.1	36	2.2	71	N	6	2.7			10s		W	0	0	Cloudy	
Montgomery, Alabama	30.07	763.8	30.32	770.1	31	— 0.6	79	NW	5	2.2		8cs	0	W		0	0	Fair	
Morgantown, W. Virginia	29.08	738.6	30.11	764.8	34	1.1	53	SW	8	3.6			10s		SW	0.01	0.3	Cloudy	
Moorhead, Minnesota	29.37	746.0	30.48	774.2	—10	—23.3	77	N	8	3.6		0	0			0	0	Clear	
Mt. Washington, N. H.	23.11	587.0	29.47	748.5	3	—16.1	83	NW	63	28.1			Fog		NW	0.03	0.8	Light fog	
Nashville, Tennessee	29.70	754.4	30.27	768.8	26	— 3.3	88	W	8	3.6			10ks		W	0.01	0.3	Cloudy	
New Haven, Connecticut	29.80	756.9	29.92	760.0	18	— 7.8	68	NW	3	1.3		0	0			0	0	Clear	
New London, Connecticut	29.84	757.9	29.89	759.2	20	— 6.7	70	W	6	2.7		0	0			Inap.	Inap.	Clear	
New Orleans, Louisiana	30.25	768.3	30.31	769.9	41	5.0	48	NW	10	4.5			10s			0.01	0.3	Cloudy	
Newport, Rhode Island	29.80	756.9	29.86	758.4	23	— 5.0	73	W	14	6.3		1c	0	Calm		0.01	0.3	Clear	
New River, N. Carolina																			
New Shoreham, Rhode I'd	29.85	758.2	29.88	758.9	26	— 3.3	75	NW	21	9.4		0	0			0	0	Clear	
New York, New York	29.78	756.4	29.97	761.2	29	— 1.7	89	NW	2	0.9			10s		NW	0	0	Cloudy	
Norfolk, Virginia	30.06	763.5	30.12	765.0	34	1.1	70	N	6	2.7		8cs	0	Calm		0	0	Fair	
North Platte, Nebraska	27.27	692.6	30.12	765.0	6	—14.4	76	NW	12	5.4		0	0			Inap.	Inap.	Clear	
Olympia, Washington T'y	30.48	774.2	30.52	775.2	35.0	1.7	90	N	1	0.4			Fog		Calm	0	0	Dense fog	
Omaha, Nebraska	29.07	738.4	30.29	769.4	11	—11.7	80	N	8	3.6		5c	2s	Calm	Calm	0.05	1.3	Fair	
Oswego, New York	29.66	753.4	30.00	762.0	18	— 7.8	84	NE	11	4.9			10s		N	0.28	7.1	Cloudy	
Pensacola, Florida	30.28	769.1	30.31	769.9	38	3.3	72	N	7	3.1			10s		W	0	0	Cloudy	
Philadelphia, Pa	29.98	761.5	30.04	763.0	27	— 2.8	76	W	10	4.5		0	Fog	Calm		0	0	Clear	
Phœnix, Arizona	29.13	739.9	31.10	789.9	24	— 4.4	74	S	4	1.8		0	0			0	0	Clear	
Pike's Peak, Colorado	17.39	441.7	29.60	751.8	—11	—23.9	76	W	40	17.9			Fog		W	0	0	Dense fog	
Pilot Point, Texas	29.53	750.0	30.45	773.4	23	— 5.0	73	W	3	1.3		0	0			0	0	Clear	
Ploche, Nevada	24.13	612.9	29.90	759.4	22	— 5.6	45	NW	4	1.8		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.25	742.9	30.10	764.5	27	— 2.8	88	W	6	2.7			10s		W	0.03	0.8	Cloudy	
Port Huron, Michigan	29.34	745.2	30.05	763.3	18	— 7.8	100	N	10	4.5			10n		Calm	0.64	16.3	Light snow	
Portland, Maine	29.68	753.9	29.74	755.4	24	— 4.4	74	NW	1	0.4			10s		Calm	0.10	2.6	Cloudy	
Portland, Oregon	30.48	774.2	30.56	776.2	28	— 2.2	97	NE	1	0.4		0	0			0	0	Clear	
Portsmouth, N. Carolina																			
Prescott, Arizona	24.83	630.7	30.19	766.8	15	— 9.4	65	N	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	30.11	764.8	30.13	765.3	57	13.9	81	N	14	6.3			10s		N	0	0	Threatening	
Red Bluff, California	29.93	760 2	30.30	769.6	39.0	3.9	73	N	4	1.8		0	0			0	0	Clear	
Rio Grande City, Texas	30.16	766.1	30 40	772.1	39	3.9	73	N	10	4.5			10s		Calm	0	0	Cloudy	
Rochester, New York	29.34	745.2	30.00	762.0	21	— 6.1	86	NW	4	1.8			10s		Calm	0.85	21.6	Cloudy	
Roseburg, Oregon	29.90	759.4	30.50	774.7	34	1.1	100	Calm	0	0			Fog		Calm	0	0	Dense fog	
Sacramento, California	30.22	767.6	30.29	769.1	40	4.4	91	SE	4	1.8		0	0			0	0	Clear	
St. Louis, Missouri	29.61	752.1	30.24	768.1	16	— 8.9	91	W	7	3.1		0	5n		Calm	Inap	Inap	Light snow	
St. Paul, Minnesota	29.37	746.0	30.26	768.6	20	— 6.7	85	NE	7	3.1			10s		NE	0.27	6.9	Cloudy	
Salt Lake City, Utah	25.83	656.1	30.16	766.1	25	— 3.9	38	Calm	0	0			10s		Calm	0	0	Cloudy	
San Antonio, Texas	29.63	752.6	30.38	771.6	35	1.7	70	N	2	0.9			10s		S	0	0	Cloudy	
San Diego, California	30.18	766.6	30.25	768.3	39	3.9	46	NE	3	1.3		0	0			0	0	Clear	
Sandusky, Ohio	29.36	745.7	30.07	763.8	26	— 3.3	88	SW	11	4.9			10s		Calm	0.09	2.3	Cloudy	
Sandy Hook, New Jersey	29.93	760.2	29.97	761.2	30	— 1.1	78	N	20	8.9		5k	0	W		0	0	Fair	
San Francisco, California	30.20	767.1	30.27	768.8	47	8.3	77	NE	2	0.9		1c	0	N		0	0	Clear	
Santa Fé, New Mexico	23.21	589.5	29.75	755.6	0	—17.8	70	N	4	1.8		0	0			0	0	Clear	
Savannah, Georgia	30.10	764.5	30.20	767.1	41	5.0	57	NW	8	3.6			10ks		Calm	0	0	Cloudy	
Shreveport, Louisiana	30.11	764.8	30.37	771.4	28	— 2.2	66	Calm	0	0		5cs	0	Calm		0	0	Fair	
Silver City, New Mexico	24.30	617.2	31.09	789.7	7	—13.9	48	N	1	0.4		0	0			0	0	Clear	
Smithville, North Carolina	30.10	764.5	30.14	765.5	39	3.9	82	NW	5	2.2		2c	1s	Calm	Calm	0	0	Fair	
Socorro, New Mexico	25.40	645.2	29.46	748.3	13	—10.6	62	NE	2	0.9		0	0			0	0	Clear	
Springfield, Illinois	29.47	748.5	30.19	766.8	20	— 6.7	85	W	8	3.6			10n		Calm	Inap.	Inap.	Light snow	
Springfield, Massachusetts	29.74	755 4	29.88	758.9	18	— 7.8	68	W	3	1.3		0	5s		Calm	0	0	Fair	
Stockton, Texas	27.18	690.4	30.18	766 6	16	— 8.9	83	Calm	0	0		0	0			0	0	Clear	
St. Vincent, Minnesota	29.53	750.0	30.46	773.7	— 9	—22.8	100	NW	1	0.4		0	0			0	0	Clear	
Thatcher's Island, Mass	29.74	755.4	29.79	756.7	24	— 4.4	74	NW	14	6.3			10s		NW	0.22	5.6	Cloudy	
Toledo, Ohio	29.38	746.2	30.10	764 5	25	— 3.9	88	W	2	0.9			10n		Calm	0.05	1.3	Light snow	
Tucson, Arizona	27.68	703.1	30.23	767.8	35	1.7	27	SE	9	4.0		0	0			0	0	Clear	
Umatilla, Oregon	30.31	769.9	30.86	783 8	22	— 5.6	86	SW	4	1.8			10s		Calm	0	0	Cloudy	
Uvalde, Texas	29.34	745.2	30.20	767.1	34	1.1	52	N	2	0.9		5c	0	N		0	0	Fair	
Vicksburg, Mississippi	30.09	764.3	30.37	771.4	30	— 1.1	78	N	2	0.9			10s		Calm	0	0	Cloudy	
Visalia, California	29.89	759.2	30.28	769.1	37	2.8	90	E	1	0.4		0	0			0	0	Clear	
Washington, D. C.	29.99	761.7	30.11	764.8	28	— 2.2	77	NW	3	1.3		10k;ks	0	NW		0	0	Cloudy	
Wickenburg, Arizona					17	— 8.3	19	NW			1	0	0			0	0	Clear	
Wilmington, N. Carolina	30.07	763.8	30.13	765.3	39	3.9	73	NW	2	0.9		2ck	5s	Calm	Calm	0	0	Fair	
Winnemucca, Nevada	26.00	660.4	30.30	771.1	26	— 3.3	75	NE	8	3.6		0	5ks		NE	0	0	Fair	
Wood's Holl, Mass	29.78	756.4	29.82	757.4	25	— 3.9	75	W	21	9.4		0	2s		W	0	0	Fair	
Yankton, Dakota	29.00	736.6	30.49	774.4	— 3	—19.4	66	NW	8	3.6		0	0			0.09	2.3	Clear	
Yuma, Arizona	30.12	765 0	30.28	769.1	37	2.8	38	W	2	0.9		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	21.98	558.3			53.8	12.1	69	Calm	0	0		5k	2ks			0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jam ica.‡	29.86	758.4	30.18	766.6	66	18.9	84	E				0	0						
Havana, Cuba, W. I.	30.02	762.5	30.07	763.8	72	22.2	85	Calm	0	0		8ck	0	SW		1.14	29.0	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	30.21	767.3	30.27	768.8	9.7	—12.4		N			7		10			0.122	3.1		
Kingston, Jamaica, W. I.	30.05	763.3	30.06	763.5	69.4	20.8	80	N	1	0.4		0	0			0	0	Clear	Maxwell Hall.
Navassa, W. I.	29.93	760.2	30.01	762.2	76	24.4	71	NE	10	4.5		5k	2s	SE	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.03	762.7	75	23.9	90	E			3	4ck	5k	E		0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	746.2	29.93	760.2	81	27.2	80	Calm			0	2ck	8ks	S	Calm	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					73	23		NE			2	0	1		NE	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.04	763.0	30.06	763.5	75	23.9	76	Calm	0	0		0	0			0	0		Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	30.47	773.8	30.53	775.4	—24.7	—31.5		W			2		0			0.083	2.1		
York Factory, B. A.	30.46	773.7	30.52	775.2	—37.0	—38.3		N	8	3.6		2c	0	NW		0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
M.H. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, N. 35° 51′, E. 14° 31′	29.93	760.2	66	18.9	69	WNW			3-4		1							Blue sky	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon																			Comm. G. W. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.94	760.5	68	20.0		SW			2		3	SW						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 32′, E. 81° 22′	29.92	760.0	79	26.1		NNE			1		3	N				2	NNE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.92	760.0	82	27.8	63	NW			3		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon,																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Chimbote, Peru	29.90	759.4	66	18.9	94	S			2		10							Foggy	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 29° 09′, E. 122° 03′	30.25	768.3	50.9	10.5	44	N			3		0							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 15° 56′ E. 57° 40′	30.07	763.8	74	23.3	86	NE			3		2	NE				2	NE	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 38° 42′, W. 9° 45′	29.98	761.5	53	11.7	100	ESE			4		10	W				4	NW	Overcast	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Dominica, W. I.	30.05	763.3	77	25.0	82	Calm			0		9	E						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 45° 56′	29.73	755.1	76	24.4	60	ESE			1		1					1	ESE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis, N. 14° 08′, E. 52° 28′	30.23	767.8	77	25.0	54	ENE			4		2	E				2	E	D. clouds	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	30.07	763.8	69.5	20.8	70	S			4-5		0							Blue sky	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, St. Vincent, Cape Verd Id	30.09	764.2	77.4	25.2	80	ESE			3		3			0	0	3		D. clouds	S. C da Silva Costa, Comd't.
Sado, S. 1° 04′, E. 8° 01′	29.94	760.5	84.9	29.4	75	WSW			2		5			0	0	2	WSW	D. clouds	G. A de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	Up'er 0—10	Lo'er 0—10	Upper From.	Lower. From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.42	772.7	39	3.9	73	NW	4	1.8			10		NW	0.32	8.1			Cloudy	
N. Yard, Portsmouth, N. H.	29.75	755.6	24	— 4.4	62	W	10	4.5		5c		W		0	0			Fair	
Naval Hospital, Yokohama, Japan	29.78	756.4	36.5	2.5	76	Calm			0		5		W	0.05	1.3			Fair	
Adams, Callao, Peru	29.92	760.0	69	20.6	90	SSE			1		8		SSE			Sm'h		Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.28	769.1	43	6.1	83	Calm			0		0			0	0			Clear	
Alert, Hong-Kong, China *	30.05	763.5	65	18.3	78	Calm			0		0			0	0	Sm'h		Hazy	
Alliance, Mantanzas, Cuba, W.I.	30.06	763.5	68	20.0	95	W			1		5			Light		Sm'h		Foggy	
Ashuelot, Tientsin, China	30.29	769.4	25	— 3.9	100	S			2		0							Clear	
Colorado, New York, N. Y	29.94	760.5	29	— 1.7	100	NW	3	1.3			8		NW					Light snow.	
Constitution, N. Yard, League I'd., Pa			27	— 2.8		W	4	1.8			2							Fair	
Franklin, Off N. Yard, Norfolk, Va	30.06	763.5	35	1.7	61	NE	7.2	3.2			10		N	0	0			Cloudy	
Galena, Villafranca, France	29.69	754.1	48	8.9	92	ENE			1		8					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal.	30.27	768.8	40	4.4	79	ESE	1.2	0.5			5		Calm	0	0			Fair	
Jamestown, Sitka, Alaska *	30.45	773.4	41	5.0	96	E			1		10			1.29	32.8			Cloudy.	
Kearsarge, Port Royal, Jamaica, W.I.	30.05	763.3	72	22.2	85	NNW			2		2					Sm'h		Fair	
Lackawanna, Callao, Peru †.	30.06	763.5	70	21.1	90	S			1		10		NW	0	0			Cloudy	
Marion, Straits of Magellan	29.95	760.7	56	13.3	81	SW			0-1		10		Calm			Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	29.98	761.5	22	— 5.6		NW			3		10		NW					Snowing	
Minnesota, New York, N. Y	29.97	761.2	32	0.0	100	NW			2		10		NW					Threatening	
Monocacy, Shanghai, China	30.29	769.4	37	2.8	71	N			3		0							Clear	
New Hampshire, Port Royal, S. C	30.17	766.3	41	5.0	63	WNW	8	3.6			5		Calm	0	0			Fair	
Nipsic, Hyeres Roadstead, France	29.78	756.4	50	10.0	58	WNW			4		0					Sm'h		D. clouds	
Onward, Chimbote Bay, Peru †	29.88	758.9	71	21.7	85	SSE			3		8		W			Long	N;W	Cloudy	
Palos, Shanghai, China	30.33	770.4	37	2.8	71	NNW			2		0							Clear	
Passaic, Washington, D. C	30.15	765.8	26	— 3.3	88	NW			1		8		NW					Cloudy.	
Pensacola, Mazatlan, Mexico	29.94	760.5	61	16.1	66	NW			2-3		0					Long	NW	Clear.	
Portsmouth, Washington, D. C	30.10	764.5	23	— 5.0	100	W			1		5?		SW					Clear?	
Powhatan, New York, N. Y	29.97	761.2	30	— 1.1	89	NW			1		10		NW					Snowing	
Quinnebaug, Naples, Italy	29.66	753.4	58	14.4	64	W			4		8		W			Mod.			
Richmond, Swaton, China	30.21	767.3	58	14.4	82	ESE			1		0			0	0			Clear.	
Saratoga, Baltimore, Md	30.07	763.8	28	— 2.2	100	W			2		2		W	0	0			Clear	
Shenandoah, Montevideo, Uruguay *	30.30	769.6	65	18.3	63	NE			3		8					Sm'h		Fair	
St. Louis, League Island, Pa	30.08	764.0	26	— 3.3	75	W	10	4.5			2			0	0			Clear.	
Swatara, Kobe, Japan †.	29.88	758.9	42	5.6	74	W			1		8		Calm			Sm'h		Hazy	
Tennessee, N. 18° 04′, W. 76° 00′	30.05	763.3	80	26.7	70	SE	16	7.2			2			0	0	Sm'h		Fair.	
Trenton, Villafranca, France *	29.70	754.4	50	10.0	72	E			2-4		10			7 hr's	rainy	Sm'h		Cloudy	
Vandalia, Bridgetown, Barbadoes, W.I	30.08	764.0	78	25.6	86	ENE			2		5		ENE			Sm'h		Fair	
Wabash, Boston, Massachusetts	29.84	757.9	21	— 6.1	58	W	7	3.1			5		W	0	0			Misty	
Wachusetts, Panama, Panama *	29.52	749.8	78	25.6	71	NW			3		5		NE	0	0	Sm'h		Fair	
Wyoming, Naples, Italy	29.66	753.4	55	12.8	68	WSW			4		5		W			Sm'h		Showery	

UNITED STATES NAVAL SERIES.

By authority of the Secretary of the Navy.

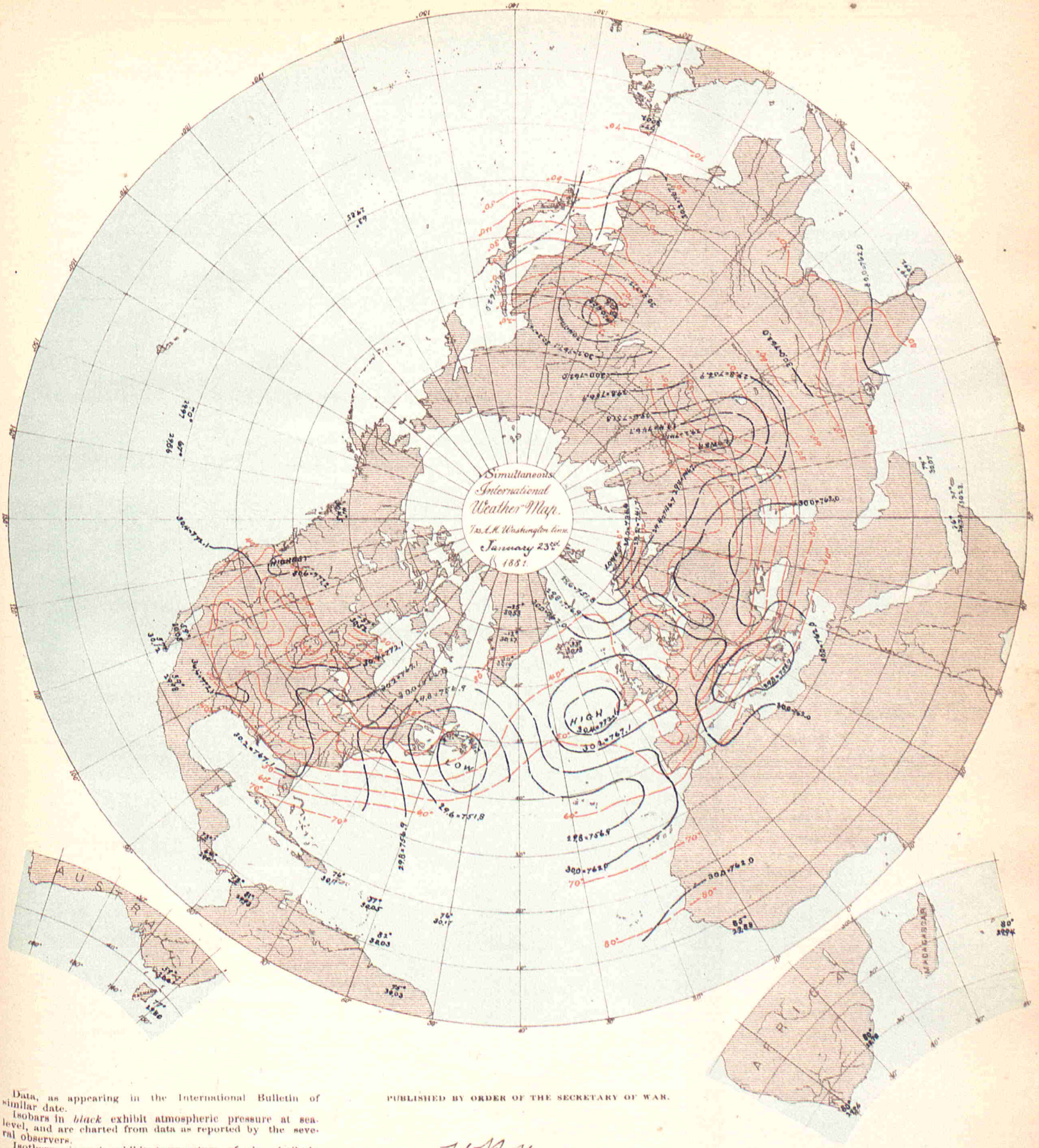
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Asturte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡																			
N. 27° 42′, E. 9° 10′	30.07	763.8	69.9	21.1	67	ESE			6		7							D. clouds	Capt. C. J Russell.
S. S. Bateshire,																			Capt. John Arbuckle
Barque Belleisle,																			
N. 36° 04′, W. 21° 37′	29.61	752.1	61	16.1	82	SW			6		6							Showery	Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
British Merchant, ‡																			Capt. E. J. Molony.
Barque Chin Yang, ‡																			
N. 27° 26′, W. 22° 17′	30.01	762.2	67.3	19.6	78	W			3		5							Showery	Capt. H. Youlden.
S. S. Cipero,																			
N. 19° 40′, W. 51° 1 ′	30.17	766.3	76	24.4		E			3		2					1	ESE	Blue sky	Capt. W. N. Lailey.
City of Agra, ‡																			
S. 45° 50′, W. 43° 30′	29.99	761.7	50.5	10.3	89	WSW			5		9							Overcast	Capt. T. Young.
Barque Commewyne, ‡																			
N. 12° 19′, W. 58° 53′	30.09	764.3	80.2	26.8	74	ENE			4		5							D. clouds	Capt. W. Scott.
Barque Coppename,																			
N. 19° 26′, W. 29° 44′	30.10	764.5	77.0	25.0	97	ENE			4		2							Blue sky	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 32° 35′, E. 29° 12′	29.93	760.2	74	23.3	76	S			6		8							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡																			
N. 54° 06′, W. 24° 08′	30.45	773.4	51	10.6	93	W			2		6					4	ESE	D. clouds	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle,																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡																			Capt. J. Raeburn, R.N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 27° 32′, W. 20° 50′	30.05	763.5	66.7	19.3	90	WSW			4		5					3	WNW	Misty	Capt. H. W. Dyke.
Barque Mertola,																			
N. 51° 02′, W. 8° 00′	30.32	770.1	43.3	6.2	88	NW			2		1							Blue sky	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡																			
N. 38° 32′, W. 9° 27′	29.96	761.0	49.5	9.7	89	NE			4		10							Overcast	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton, ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic,																			
N. 40° 33′, W. 68° 20′	29.93	760.2	36	2.2		WNW			6		5		W			R.gh	WNW	Clearing	Capt. J. W. Jennings.
S. S. Britanic,																			
N. 51° 29′, W. 18° 47′ †	30.51	774.9	49	9.4		Var.			1		1		W			Sm'h	SE	Blue sky	Capt. H. Perry.
S. S. Celtic,																			
N. 41° 39′, W. 53° 10′ †	29.22	742.2	47	8.3		W			6		10		W	6 h'rs	light	Mod.	W	Cloudy	Capt. Benj. Gleadell.
S. S. Germanic,																			
N. 49° 29′, W. 26° 21′ †	30.37	771.4	48	8.9		E			4		5?		E	0	0	Mod.	E	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann,																			
N. 49° 35′, W. 12° 16′	30.32	770.1	44.6	7.0		N			4		0			0	0	Mod.	NNE	Clear	Capt. H. Baur.
S. S. Köln,																			
N. 49° 44′, W. 8° 40′	30.29	769.4	48.2	9.0		NE			3		5		E	4 h'rs	light	R'gh	ENE	Fair	
S. S. Leipzig ‡																			
S. S. Ohlo																			Capt. F. Pfeiffer.
																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Philadelphia, Pa	29.85	758.2	26	— 3.3	88	W			3		2		W					Clear.	Capt. J. W. Shackford.
S. S. Indiana, ‡																			
St. George's Channel, Eng.†	30.27	768.8	43	6.1	92	NE			4		8		NE	Mod	erate	R'gh	NE	Cloudy	Capt. R. W. Sargent.
S. S. Ohio, ‡																			
N. 49° 11′, W. 33° 56′...*†	30.15	765.8	53	11.7	93	SSE			6		8		SSE	o	o	L'ge	SSE	Cloudy	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, Liverpool, England ††	30.15	765.8	34	1.1		W			1		10		E	Sn	ow			Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 26° 10′, W. 113° 46′....†	30.08	764.0	59	15.0	38	NNE			5		0			o	o	Mod.	WNW	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 28° 12′, E. 126° 11′.....†	30.17	766.3	61	16.1	55	WSW			6		2		NW	o	o	Light	W	Clear	Capt. H. Davison.
S. S. Gaelic, N. 38° 00′, W. 124° 56′..*†	30.42	772.7	55	12.8	80	NW			4		1		W			Sl't	NW	Clear	Capt. W. H. Kidley.
S. S. Oceanic, N. 38° 33′, W. 124° 10′.....	30.33	770.4	53	11.7	86	NW			4		2		NW	o	o	Sl't	NW	Stormy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			Capt. J. M. Lachlan.
S. S. Geo. W. Elder																			Capt. Fred. Bolles
S. S. Columbia																			Capt E. Polemann.
S. S. Oregon																			
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, Santa Barbara, Cal.....†	30.14	765.5	45	7.2	84	NE			1		0							Clear	Capt. J. N. Ingalls.
S. S. Idaho, N. 38° 50′, W. 125° 00′....†	30.50	774.7	45	7.2	100	NNW			3		10					Light	SW	Raining	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, San Francisco, Cal.....†	30.44	773.2	47	8.3	92	NE			1		2		N					Clear	Thos. Wallace.
S. S. State of California, N. 46° 13′, W. 124° 10′....†	30.52	775.2	44	6.7	?	Calm			0		10					Long	SW	Foggy	Capt. G. Debney.
S. S. Victoria, N. 46° 02′, W. 124° 24′..*†	30.43	773.0	45	7.2	92	N			8		8		Calm			Light	W	Fair	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			A. Bannerman, 1st Officer.
S. S. Australia																			
S. S. City of New York, Sydney, N. S. W.....†	30.03	762.7	68	20.0	100	SSE			3		10		SSE	Ra	in			Raining	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 24° 34′, W. 111° 59′..†.	30.12	765.0	57	13.9	43	NNW			5		0					Sm'h	W	Clear	Capt. D. S. Austin.
S. S. City of Peking, N. 29° 59′, E. 165° 34′.....†	29.85	758.2	63	17.2	57	NNW			6		0					Mod.	WNW	Clear	Capt. G. G. Berry.
S. S. City of Sidney, N. 26° 50, W. 148° 11′.....†	29.97	761.2	70	21.1	90	S			5		8		S	o	o	Mod.	SSE	Cloudy	Capt. H. C. Dearborn
S. S. City of Tokio, N. 34° 50′, E. 141° 47′.....†	29.99	761.7	48	8.9	78	E			1		10		SW	o	o	Long	SW	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima ‡																			Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, Panama, Panama.....†	29.83	757.7	81	27.2	87	NNW			3		5		NNW	o	o			Hazy	
S. S. Zealandia, N. 28° 57′, W. 144° 17′.....	29.86	758.4	67	19.4	89	SE			7		5		S			Mod.	E	Squally	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland, ‡ Flushing, Netherlands.†	30.12	765.0	42	5.6	83	WNW			3		8		N			Sm'h		Snowing	Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland, ‡ N. 47° 19′, W. 37° 07′.....	29.75	755.6	61	10.6	93	SE			8		10		SE	0.1	3.	Very h'vy	SSE	Storming	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 47° 15′, W. 45° 47′.....	29.34	745.2				SSE			6		8		SSW	Driz	zles	Long	SE	Cloudy	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, N. 36° 11′, W. 75° 20'.....†	30.09	764.3	50	10.0		NNE			2		10			o	o	Long	N	Threatening	Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 33° 38′, W. 77° 43′.....†	30.07	763.8	45	7.2	68	NW	10	4.5			8k		NW	o	o	Short		Cloudy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, ‡ Ponce, Porto Rico.....†	30.33	770.4	79	26.1		ENE			5		2			o	o	Sm'h		Fair	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va†	30.10	764.5	35	1.7	80	NNE	2	0.9		2c	5n			o	o			Cloudy	Capt. James S. Gawin
Ship Jumna																			
Bark Sunbeam, ‡ Lisbon, Portugal.....†	29.97	761.2	49	9.4	100	NE			6		8		NE	o	o			Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 24, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.98	761.5	65.8	18.8	77	SW			2		5			0	0	Cloudy	Dr. Ollive.
Nemours			29.93	760.1	59.4	15.2	96	E			0		2			0	0	Fair	Raynard.
Algie s			30.01	762.3	60.4	15.8	83	NE			1		7			0	0	Very cloudy	Nicolas.
La Calle			30.04	763.0	60.8	16.0	75	E			5		4			0	0	Cloudy	Fonfréde.
Tunis			30.02	762.4															Jacques.
Sfax			30.11	764.7															Gau.
Saida			30.04	763.0	71.1	21.7	14	W			5		2			0	0	Fair	Dumas.
Tebessa			30.07	763.8	66.9	19.4	33	WNW			3		3			0	0	Pretty fair.	Watrin.
Gerville																			Lonchamp.
Laghouat			30.13	765.2	65.8	18.8	39	E			1		2			0	0	Fair	Herbin.
Biskra			30.11	764.7	65.8	18.8	60	N			2		8			0	0	Very cloudy	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.98	761.5	30.07	763.8	61.1	16.2	68	SSE	6	2.7			10			0	0	Dull	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.90	759.4	74	23.3		SW			2		2k			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.84	758.0	30.45	773.4	16.2	— 8.8	72	N			2		0			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.48	748.9	30.32	770.0	18.7	— 7.4	86	WNW	12.5	5.6			5			0.004	0.1		Dr. Wiersbicki.
Eperies	29.27	743.4	30.22	767.6	21.7	— 5.7	75	NW			3		7c;cs		SE	0	0		Julius Mikolik.
Gratz‡	29.07	738.3	30.43	772.8	21.9	— 5.6	58	SSW			2		0			0	0		Andreas Rospini.
Hermannstadt	28.69	728.8	30.26	768.6	13.5	—10.3	100	W			2		1			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.01	736.9	30.50	774.6	14.4	— 9.8	97	Calm			0		0			0.012	0.3		The Staff.
Lemberg	29.07	738.4	30.13	765.4	21.4	— 5.9	72	NW			2		10			0.016	0.4		Dr. T. Stanecki.
Pola	30.22	767.6	30.34	770.7	32.5	0.3	87	E			2		0			0	0		I. R. HydrographicOffice
Szathmar	29.81	757.2	30.27	768.9	14.0	—10.0	87	SW			2		10			0	0		Beicht Peter, S. J.
Szegedin	30.00	762.0	30.30	769.7	20.5	— 6.4	61	N			1		0			0	0		Karl Stancel.
Trieste	30.27	768.8	30.37	771.4	31.3	— 0.4	66	E			1		0			0	0		P. Busin.
Vienna	29.63	752.5	30.40	772.2	21.6	— 5.8	64	WNW			3		0			Inap.	Inap.		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	30.12	765.0	30.34	770.6	19.4	— 7.0	100	Calm			0		0			0	0	Foggy	Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck	30.22	767.5	30.34	770.7	16.5	— 8.6	100	NE			2		0			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 31, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.98	761.5	30.08	764.0	37.6	3.1	53	W	11	4.9		7				0	0	D. clouds	W. Boswell.
Armagh, Observatory	29.99	761.7	30.24	768.1	27.2	— 2.7	85	NNE	1	0.4		10						Foggy	S. Call.
Bidston, Liverpool Obs'y			30.22	767.6	27.6	— 2.4	88	SE	12	5.4		0						Misty	John Hartnup.
Bolton, Sharples	29.70	754.4	30.26	768.6	26.0	— 3.3	100	S	4	1.8		10						Overcast	Thomas Mackereth.
Bradford, Yorkshire	29.82	757.4	30.21	767.3	27.1	— 2.7	97	SE			1	10				0	0	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.01	762.2	30.04	763.0	82	27.8	58	NE			2	3						D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			30.25	768.3	25.0	— 3.9	100	NW			0.2	10						Foggy	John McLaren.
Chatham, School M. E.	30.15	765.8	30.29	769.4	23.2	— 4.9	90	Calm			0	0						Foggy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.97	761.2	30.20	767.1	35.2	1.8	90	SE			1	10						Overcast	The Staff.
Fort Napier, Natal	27.63	701.8	29.84	757.9	71.3	21.8	80	NE			1	8						Overcast	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.90	759.4	84	28.9	87	SE			1	5						D. clouds	C. E. Keane.
Galway, Queen's College			30.14	765.5	24	— 4.4	48	N			2	2						Blue sky	J. O'Donaghadue.
Gibraltar, Mediterranean	29.92	760.0	29.97	761.2	62.5	16.9	94	SE			2	7						D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.99	761.7	30.19	766.8	23.2	— 4.9	93	N			1							Dense fog	D. G. MacLean.
Greenwich, Royal Obs'y	30.11	764.8	30.30	769.6	25.0	— 3.9	100	ENE			1	10						Foggy	The Staff.
Guernsey	29.95	760.7	30.18	766.6	37.3	2.9	72	ENE			1	3						D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.25	768.3	30.29	769.4	27.6	— 2.4	91	NNW	2	0.9								Foggy	The Met'g'l Office.
Leicester, Museum	30.02	762.5	30.29	769.4	22.6	— 5.2	100	SW			1	10						Overcast	J. E. Carryer.
Malta, Mediterranean	30.03	762.7	30.11	764.8	61.0	16.1	67	NW			1	6						D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.01	762.2	73.0	22.8	100	SW			3	4						D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.72	754.9	30.28	769.1	18.6	— 7.4	100	E			1	10						Foggy	Robert Pate.
Oxford, Radcliffe Obs'y	30.03	762.7	30.29	769.4	18.1	— 7.7	99	Calm			0	10						Foggy	The Staff.
Plymouth	30.13	765.3	30.20	767.1	36.2	2.3	85	NE			1	8						D. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.98	761.5	38.9	3.8	91	WNW	18	8.0		8						Showery	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.86	758.4	29.93	760.2	32.6	0.3	94	NNW			4	10						Snowing	Serg't W. H. Lyne.
Sheffield	29.97	761.2	30.26	768.6	31.4	— 0.3	100	SE			1	0				0	0	Blue sky	W. F. Cooper.
Silloth Rectory	30.18	766.6	30.21	767.3	22.5	— 5.3	47	Calm			0	2				0	0	D. clouds	Rev. F. Redford, A. M.
Stonyhurst, Observatory			30.23	767.8	22.0	— 5.6	93	NE	4	1.8		0						Misty	Rev. S. J. Perry.
Strathfield Turgiss	30.05	763.3	30.29	769.4	26.0	— 3.3	98	NE			0-1	10						Foggy	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution			30.18	766.6	38	3.3	81	E			1	5						D. clouds	W. Newcombe.
Valencia, Observatory	30.12	765.0	30.15	765.8	39.9	4.4	73	E	7	3.1		4				Blank		D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	29.78	756.4	29.82	757.4	— 4.5	—20.3		NW	9	4.0		0	0			0	0	Clear	Hon. J. Ferguson.
Chatham, N. B.*	29.65	753.1	29.72	754.9	— 1	—18.3	94	Calm	0	0		5ck	0	W		0	0	Fair	G. A. Blair.
Charlottetown, P. E. Island	29.59	751.6	29.63	752.6	7	—13.9	91	W	9	4.0		2c	2s			0	0	Fair	H. J. Cundall, C. E.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario	29.93	760.2	30.15	765.8	— 8.5	—23.1	100	SW			1	0	0			0	0	Clear	James Smith, M. A.
Dalhousie, N. B	29.64	752.8	29.68	753.9	— 2.0	—18.9		W			3	0	0			0	0	Clear	H. A. Johnson.
Father Point, Quebec*	29.95	760.7	29.97	761.2	— 7	—21.7	64	N	10	4.5		0	0			Inap.	Inap.	Clear	J. McWilliams.
Fredericton, N. B	29.76	755.9	29.83	757.7	2.1	—16.6	69	NW	14	6.3		0	0			0	0	Clear	Prof. Harrison.
Fort Garry, Manitoba*	29.42	747.3	30.36	771.1	— 4	—20.0	97	SW	2	0.9		2ck	2ks	W	W	0	0	Fair	James Stewart.
Granton, Ontario	29.06	738.1	30.28	769.1	10.6	—11.9	88	W			1		1on			Inap.	Inap.	Cloudy	James Grant.
Halifax, N. S.*	29.55	750.6	29.69	754.1	15	— 9.4	89	NW	10	4.5			1on			Inap.	Inap.	Cloudy	A. Allison.
Hamilton, Ontario	29.84	757.9	30.28	769.1	2.4	—16.4	95	SW			1	10k	0	W		0.02	0.5	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.82	757.4	30.20	767.1	— 7	—21.7	83	Calm	0	0		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S	29.40	746.7	29.44	747.8	17.0	— 8.3	94	N	4	1.8		5ck	0	N		0	0	Fair	C. H. Rigby.
Montreal, Quebec*	29.91	759.7	30.13	765.3	1	—17.2	68	W	12	5.4		0	0			0	0	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.40	746.7	30.19	766.8	— 6	—21.1	81	E	4	1.8			1on		E	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.40	746.7	30.29	769.4	—16.6	—27.0		Calm			0	0	0			0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.50	749.3	30.28	769.1	2	—16.7	100	Calm	0	0			1on			Inap.	Inap.	Cloudy	H. Morgan.
Port Stanley, Ontario	29.56	750.8	30.27	768.8	13	—10.6	91	W	3	1.3			1on		W	Inap.	Inap.	Cloudy	M. Payne.
Quebec, Quebec*	29.67	753.6	30.03	762.7	— 7	—21.7	60	NW			3	0	0			0	0	Clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.68	753.9	30.20	767.1	— 9	—22.8	70	NW	1	0.4			10s		NW	0	0	Cloudy	W. H. McIntyre.
St. Andrews	29.78	756.4	29.83	757.7	7	—13.9	56	NW	7	3.1		0	0			0	0	Clear	
St. John's, N. B	29.65	753.1	29.83	757.7	5.0	—15.0	100	NW	12	5.4		0	0			0	0	Clear	G. Murdock, C. E.
Saugeen, Ontario*	29.41	747.0	30.18	766.6	17	— 8.3	88	NE	22	9.8			10ks			0.05	1.3	Cloudy	K. Stewart.
Stratford, Ontario	28.86	733.0	30.27	768.8	8.1	—13.3	95	W	9	4.0			10s			0	0	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.41	747.0	29.45	748.0	19	— 7.2	86	W	13	5.8		2ck	2ks	W	W	0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.82	757.4	30.25	768.3	0	—17.8	88	NW	10	4.5		0	0			0	0	Clear	Magnetic Observatory.
Windsor, N. S	29.56	750.8	29.66	753.4	14.5	—9.7	91					0	8k			0	0	Fair	
Woodstock, Ontario	29.09	738.9	30.26	768.6	9.7	—12.4	98	SW	6	2.7			10s			0	0	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*	29.73	755.1	29.80	756.9	16	— 8.9	72	N	21	9.4		5k	0	N		0.02	0.5	Fair	Lt. F. E. Wilmot, R.N
Sub-Series.																			
St. John's, Newfoundland	28.93	734.8	29.10	739.1	24	— 4.4	100	NE	1	0.4		10k	10s			0.01	0.3	Cloudy	John Delany.
St. Pierre, N. F			29.08	738.6	24.8	— 4.0		NW			4					0	0		N. F. Land, Comd't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.88	758.9	29.92	760.0	84.0	28.9	46	SSE	13.0	5.8		0	1			0	0		The Staff, for D. Gill.
Cape St. Francis Lt. House	29.94	760.5			71.5	21.9	71	S	9.1	4.1		0	0			0	0	Light haze	John Duthie.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.25	768.3	30.28	769.9	32.0	0.0	84	SE	3.6	1.6			0			0	0	Clear	M. Marc Dechevrens, S J.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Tempera-ture of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direc-tion. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.16	664.5	29.88	758.9	64.8	18.2	85	NE			2					0	0	Misty	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.04	762.9	30.08	764.1	31.8	—0.1	79	WNW	27	12		8							
Fanöe	30.12	765.1	30.14	765.6	32.5	0.3	81	W			4	7							
Godthaab, Greenland	29.81	757.1	29.85	758.2	26.1	—3.3	78	NNE			4	10							
Stykkisholm, Iceland	29.85	758.3	29.90	759.4	14.7	—9.6	87	E			7	10						Snowing	
Thorshavn	29.72	755.0	29.76	755.9	39.6	4.2	60	W	9	4		5							
Vestervig	29.92	759.9	30.01	762.3	31.8	—0.1	100	WSW			2	3							
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.32	744.8	30.00	762.1	28.8	—1.8	92	WNW			1	8n				0	0	Al. covered.	M. Labroue, Director.
Alençon	29.79	756.6	30.34	770.6	27.0	—2.8	97	E			1	10n						Snowing	M. Nicot, Director.
Arras, Engineer School	30.04	763.0	30.32	770.0	23.0	—5.0	76	Calm	0	0									M. Klein, Commandant.
Avignon, Normal School	30.08	764.1	30.16	766.1	30.2	—1	96	N			1	5	S			0	0	Cloudy	M. Giraud, Director.
Bar-sur-Seine‖	29.70	754.3	30.30	769.6	22.8	—5.1	60	E			1	8k		ENE		0.016	0.4	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	30.02	762.6	30.31	769.8	31.1	—0.5	87	SE			1	10				0.098	2.5	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.33	745.0	30.28	769.0	24.1	—4.4	100	NE			2	0				0	0	Clear	M. Gobin, Director.
Bordeaux, Observatory	29.74	755.4	30.02	762.4	28.6	—1.9	96	ESE			1	10				0	0	Covered	M. Rayet, Director.
Bourges, Normal School	29.60	751.8	30.19	766.8	24.8	—4	89	ENE			1	2c		NNW		0	0	Slightly cl'dy	M. Postel, Director.
Brest, Naval Observatory	29.91	759.7	30.15	765.9	39.2	4.0	41	ESE			1		1		E	0	0		M. de Rermaree, Dir.
Caen, Normal School	30.08	764.0	30.16	766.0	33.1	0.6	100	S			1		10			0	0	Covered	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.97	761.3	30.31	769.9	23.4	—4.8		SSE			1		5	ENE	ESE	0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.84	757.9	30.39	772.0	23.7	—4.6	86	SSE			1		8			0	0	¾ covered	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.75	730.3	30.23	767.9	16.5	—8.6	94	NW			1		10			0	0		M. Alluard, Director.
Cluny, Normal School	29.35	745.4	30.22	767.7	28.0	—2.2	77	N			1		1		W	0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	29.42	747.2	30.35	770.8	20.3	—5.5		E			4		n		E	0	0		Dr. Coulet, Director.
Gap, Normal School	27.59	700.7	30.29	769.3	23.9	—4.5	90	NE			2	c			W	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.01	736.8	30.15	765.8	41.7	5.4	61	E			2		8		SE	0	0		M. Kina, Director.
Grenoble, Normal School	29.48	748.8	30.31	769.9	22.8	—5.1		S			1	ck				0	0		M. Ablard, Director.
Guéret, Normal School	28.47	723.0	30.16	766.0	25.5	—3.6	77	SE			1					0	0		M. Rivoir, Director.
Lamballe, Normal School	29.91	759.7	30.16	766.0	34.2	1.2	85	NNE			1		1		NNE	0	0	Light fog	M. Ollitrault, Director.
Lescar, Normal School	29.42	747.3	30.13	765.3	28.8	—1.8		N					10			0	0	Covered	M. Chauvin, Director.
Lorient, Naval Observatory	30.09	764.2	30.19	766.8	35.2	1.8	67	ENE			1		0			0	0	Clear	Lt. T Carré, Director.
Lyon Obs'y, Park Station	29.14	740.2	30.24	768.1	21.6	—5.8	93	N			1		10		WNW	0	0	Covered	M. André, Director.
Mans, Normal School	29.93	760.2	30.26	768.5	28.8	—1.8	96	NE			4		5		WNW	0	0	Cloudy	M. Piboen, Director.
Marseille, Observatory	29.82	757.3	30.09	764.3	45.9	7.7	56	E			2		0		W	0	0		M. Stephan, Director.
Montlouis l'instituteur	24.61	625.0	29.84	758.0	25.2	—3.8	66	WSW	13.0	5.8			8	W		0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.00	761.9	30.11	764.8	30.6	—0.8	89	N			3		10			0	0	Snowing	M. Galzin, Director.
Nancy, Normal School	29.59	749.2	30.32	770.2	21.2	—6.0	92	NNE			2		2cn			0	0	Slightly cov.	M. Hasse.
Nantes, Observatory	30.08	764.0	30.24	768.0	26.6	—3	96	N			1		0			0	0	Clear	M. Larocque, Dir.
Nice	30.16	766.0	30.19	766.9	46.0	7.8	46	E			4		5	NE	E	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.94	760.4	30.04	763.1	35.1	1.7	65	NW	1.8	0.8			10	SE	SE	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.24	565.0			25.2	—3.8							10		W	0.185	4.7	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.17	740.8	30.28	769.0	28.4	—2.0		Calm			0		10			0	0	Covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.97	634.3			12.7	—10.7	76	SE			8		8			0.028	0.7		M. Alluard, Director.
Rochefort, Naval Obs'y	30.05	763.2	30.08	764.0	29.8	—1.2	96	E			2		5		ENE	0.71	18.	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.88	758.9	30.11	764.7	30.6	—0.8	77	NE			1		5		WNW	0	0	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.82	706.5	30.04	762.9	35.2	1.8	63	NW			3		10		N			Snowing	M. Richard, Director.
Rouen, Normal School	30.16	766.1	30.25	768.3	33.3	0.7	86	SE			1		10		E	0	0	Covered	M. Platrier, Director.
Saint Lô, Normal School	30.06	763.4	30.21	767.4	31.3	—0.4	97	ENE			1		5		ENE	0	0	Foggy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.13	765.2	30.29	769.4	25.5	—3.6	94	E			1		10		E				M. Renou, Director.
Toulouse, Observatory	29.32	744.7	30.04	763.1	32.7	0.4	96	SSE			1		10			0	0	Covered	M. Baillaud, Director.
Tours	29.98	761.4	30.17	766.4			40	ENE			3		0			0	0	Clear	M. de Tastes.
Versailles, Observatory	29.76	755.8	30.25	768.3	24.8	—4.0	95	SE			2		10			0	0	Covered	Dr. A. Bérigny, Director.
Sun-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.51	749.5	30.38	771.7	10.2	—12.1	88	NW			4		3ks	NW		0	0		Prof. Dr. Hoh.
Berlin	30.16	766.1	30.35	770.9	21.0	— 6.1	57	SW			3		0			0	0		Prof. Dr. Arndt.
Breslau	29.79	756.6	30.32	770.2	17.8	— 7.9	83	WNW			3		10			0.015	0.38	Snowing	Royal University Obs'y.
Carlsruhe	29.95	760.8	30.42	772.6	23.0	— 5.0	77	E			2		0			0	0		Albert Senz.
Cassel	29.76	756.0	30.39	771.8	8.6	—13.0	76	E			2		0			0	0		Dr. H. Möhl.
Frankfort on the Main	30.15	765.8	30.55	776.0	15.1	— 9.4	63	N			1		1			0	0		Physical Society.
Friedrichshafen	28.82	732.1	30.38	771.7	18.0	— 7.8	52	NE			4		0			0	0		Chief Telegrapher Wilhelm.
Hamburg	30.26	768.5	30.33	770.3	12.2	—11.0	76	WSW			6		0			0	0		Dr. R. Kleeman.
Kiel	30.22	767.7	30.24	768.1	20.8	— 6.2	80	SW			1		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.98	761.4	30.44	773.2	14.0	—10.0	80	SW			3		0			0	0		Prof. Dr. Bruhns.
Magdeburg	30.13	765.4	30.38	771.7	15.1	— 9.4	84	W			1		18			0.004	0.1		Dr. Assmams.
Memel	29.97	761 3	30.02	762.5	27.7	— 2.4	83	W			4		3k						Reinbrecht & Issermann.
Munich	28.46	722.8	30.34	770.6	15.6	— 9.1	76	E			2		0			0.004	0.1		Central Station.
Neufahrwasser	30.09	764.3	30.11	764.7	27.1	— 2.7	60	SSW			2		8			0.008	0.2		A Lothes.
Neustadt, Palatinate	29.74	755.3	30.26	768.5	23.0	— 5		N			2		2			0	0		Dicknether.
Stuttgart	29.35	745.5	30.32	770.0	20.8	— 6.2	71	E			1		0			0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.79	731.2	30.34	770.5	17.6	— 8.0	86	SE			2		0			0.012	0.3		Prof. Kemlein.
Wustrow	30.21	767.2	30.23	767.8	22.6	— 5.2	100	SW			5		10s			0	0		Profs. Brandes & Reimer.

‖ Observation taken 25 minutes late.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Barometer. Corrected for instru-m'tal error and tem-perature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Tempera-ture of the Air. Fah.	Tempera-ture of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direc-tion. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.59	751.6	29.98	761.6	56.5	13.6		NW			3.0		5					½ Clear	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.02	762.5	30.07	763.8	79.1	26.2	30	SSW	10.0	4.5			0			0	0	Blue sky	
Deesa	29.53	750.0	30.00	762.0	83.8	28.8	24	Calm	8.2	3.7			0			0	0	Blue sky	
Bombay	29.94	760.5	29.98	761.4	80.4	26.9	66	NNW	20.0	8.9			0			0	0	Blue sky	
Poona, Yarrowda	28.11	714.1	29.96	761.0	83.5	28.6	17	NE	8.0	3.6			1		E	0	0	D.clouds	
Belgaum	27.43	696.8	29.97	761.2	79.0	26.1	20	NE	3.0	1.3			1		NE	0	0	D. clouds	
Lahore	29.31	744.4	30.08	763.9	68.7	20.4	35	Calm	1.1	0.5			0			0	0	Blue sky	
Roorkee	29.14	740.1	30.06	763.6	67.8	19.9	34	W	3.2	1.4			0			0	0		
Agra	29.53	750.1	30.11	764.9	73.3	22.9	34	W	3.7	1.6			0			0	0		
Nagpur	28.99	736.3	30.04	763.0	79.7	26.5	23	Calm	3.0	1.3			0			0	0	Blue sky	
Jubbulpore	28.69	728.8	30.09	764.3	71.8	22.1	33	N	1.5	0.7			0			0	0	Blue sky	
Lucknow	29.70	754.3	30.09	764.2	69.3	20.7	26	N	2.0	0.9			0			0	0	Blue sky	
Allahabad	29.77	756.1	30.09	764.3	68.7	20.4	45	Calm	1.8	0.8			0			0	0	Blue sky	
Patna	29.90	759.6	30.09	764.4	70.2	21.2	57	W	0.6	0.3			0			0	0	Blue sky	
Hazaribagh	28.02	711.6	30.10	764.6	63.3	17.4	36	N	5.7	2.6			0			0	0	Blue sky	
Cuttack	29.99	761.7	30.07	763.8	71.2	21.8	47	NNE	1.0	0.4			0			0	0	Blue sky	
Calcutta, Alipore	30.02	762.6	30.04	763.1	69.8	21.0	48	N	1.0	0.4			0			0	0	Blue sky	
Goalpara	29.62	752.4	30.04	763.0	70.7	21.5	51	Calm	1.8	0.2			0			0	0	Blue sky	
Chittagong	29.92	760.0	30.01	762.3	70.8	21.6	70	W	2.8	1.2			0			0	0	Blue sky	
Sibsagar	29.72	754.8	30.07	763.7	64.0	17.8	81	E	1.2	0.5			0			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.94	760.5	30.37	771.4	30.7	— 0.7	46	NE	0.7	0.3			0			0	0		Prof. Giovanni Clodig.
Milan	29.79	756.7	30.34	770.6	23.4	— 4.8	80	W	2.5	1.1			2			0	0		Prof. Schiaparelli.
Padua	30.26	768.7	30.38	771.6	30.4	— 0.9	71	NNE	5.6	2.5			0			0	0		Prof. Dott. Lorenzoni.
Moncalleri	29.36	745.7	30.31	769.8	27.0	— 2.8	76	ENE	0.7	0.3			0			0	0		Prof. P. F. Denza.
Genoa	30.07	763.8	30.27	768.8	29.5	— 1.4	59	N	9.8	4.4			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.32	719.4	30.34	770.5	25.0	— 3.9	77	W			2		3			0	0		Prof. D. C. Bruno.
Pesaro	30.30	769.5	30.35	770.8	30.6	— 0.8	81	NW	11.9	5.3			2		NE	0	0		Prof. Luigi Guidi.
Florence	29.98	761.5	30.24	768.2	38.5	3.6	40	NE			4					0	0		Cav. F. Meucci.
Leghorn	30.15	765.7	30.23	767.9	36.0	2.2	59	ENE	17.4	7.8			0			0	0		Prof. P. Monte.
Rome	29.97	761.3	30.15	765.8	45.3	7.4	45	N	6.9	3.1			0			0.028	0.7		Prof. P. S. Ferrari.
Lecce	29.87	758.7	30.13	765.2	44.4	6.9	48	NNW	31.8	14.2			5		NNW	0.028	0.7		Prof. C. de Giorgi.
Cosenza	29.23	742.5	30.14	765.5	46.4	8.0	72	NNW	0.7	0.3			10		NW	0.425	10.8		Prof. D. Conti.
Cagliari	29.88	759.0	30.08	763.9	52.3	11.3	42	NW			2		1		S	0	0		Prof. A. Pacinotti.
Palermo	29.87	758.8	30.12	765.1	55.2	12.9	52	NW	7.4	3.3			4		NW	0.004	0.1		Prof. G. Ciacciatore.
Syracuse	30.06	763.5	30.10	764.6	56.8	13.8	59	E	6.3	2.8			6		E	0	0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.63	752.5	30.18	766.5	43.9	6.6	57	NE	4.9	2.2			0			0.016	0.4		Prof. F. Brioschi
Stelvio	22.08	560.8			1.8	—16.8	66	ENE					0			0	0		P. F. Denza.
Valdobbia	22.02	559.2			6.4	—14.2	87	NE					0			0	0		
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.10	764.6	30.12	765.0	27.8	— 2.3	70	NNE	1.6	0.7			1sck			0.001	0.03	Clear	K. Sasaki.
Kioto	29.77	756.1	29.96	761.0	27.8	— 2.3	80						5n			0.050	1.27	Snowing	
Nagasaki, I. M. Obs'y	29.99	761.7	30.21	767.3	32.3	0.2	66	Calm	0	0			2s			0.280	7.11	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.53	750.0	29.61	752.1	35.7	2.1	51	WNW	18.6	8.3		0	0			0.040	1.02	Clear	The Staff.
Wakayama	29.95	760.7	30.00	762.0	33.0	0.6	74	NW	17.4	7.8			2ck		NW	0.003	0.08	Fair	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.75	755.6	29.94	760.5	80.7	27.1	74	NNE	15.0	6.7			10		NNE	0.01	0.3	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.70	754.3	29.95	761.1	55.0	12.8	62	E			2	2cs	0	W		0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascallientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Chazaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.34	770.5	30.34	770.5	26.2	— 3.2		S			3					0	0		
Groningen	30.30	769.6	30.35	771.0				S			1					0	0		
Helder	30.32	770.1	30.32	770.1	15.9	— 9.0		SSE			1					0	0		
Hellevoetsluis	30.34	770.5	30.34	770.5	18.5	— 7.5	97	S			1					0	0		
Utrecht	30.31	769.9	30.36	771.1	12.7	—10.7	90	ENE			2		0			0	0	Clear	H. van der Brink

STATIONS.	BAROMETER. Corrected for instru-m'tal error and tem-perature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direc-tion.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29 72	755.0	29.79	756.6	35.2	1.8	93	SW	3-4	1.5			8			0.252	6.4		
Christiania	29.60	751.8	29.76	755.8	20.7	— 6.3	90	ENE	2	1			3			0	0		
Gjæsvær	29.11	739.4	29.13	740.0	8.6	—13.0		NNW			6		10						
Lodingen	29.31	744.4	29.35	745.6	12.7	—10.7	73	NW			2		6			0.004	0.1		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.57	751.0	29.72	755 0	56.1	13.4	98	SSE	15.4	6.9			8			0.118	3.0	Raining	Dr. J. A. Sampaio.
Campo Major	28.68	728.5	29.69	754.2	48.6	9.2	100	ESE	8.1	3.6			10			0.937	23.8	Rain & fog	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.85	758.1	29.93	760.3	66.0	18.9	72	W	8.1	3.6			3			0.094	2.4		Capt. D. A. de Cunha.
Lisbon, Observatory	29.31	744.5	29.68	753.8	48.0	8.9	100	E	3.8	1.7			8	SW		1.268	32.2		The Staff.
Ponta Delgada, Azores	29.75	755.6	29.82	757.4	57.2	14.0	82	S	11.2	5.0			10			0.098	2.5		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.97	735.8	30.15	765.7	8.2	—13.2	92	WSW	16	7			9			Blank		Light clouds	Capt. Lasarew.
Archangel	29.14	740.1	29.16	740.6	4.6	—15.2	82	S	13	6			10						Capt. Ssoliwerstow.
Astrakhan	30.14	765.6	30.06	763.5	21.9	— 5.6	82	E	18	8			10ks			Blank		Heavy cld's	Capt. Wisganow.
Barnaul	29.59	751.5	30.12	765.1	19.2	— 7.1	74	SW	4	2			10						Meteorological Obs'y.
Dorpat	29.51	749.5	29.77	756.2	12.7	—10.7	94	WSW	11	5			10n					Light snow	Observatory.
Ekaterinburg	28.97	735.8	30.08	764.0	—18.6	—28.1	61	Calm	0	0			0						Meteorological Obs'y.
Kasan	29.78	756.4	30.09	764.3	—16.4	—26.9	82	SSE	2	1		3c							Observatory.
Kertch	29.77	756.1	29.79	756.6	22.8	— 5.1	93	NNE	9	4			10					Snowing	Lagorio.
Kieff	29.28	743.6	29.97	761.3	9.3	—12.6	81	SSW	4	2			10cksn					Light snow	Observatory.
Krotkowo, N. 68°47', E. 48°34'																			Cand. Fatjanow.
Lugan	29.80	756.8	30.02	762.5	10.2	—12.1	77	ENE	9	4			10					Light clouds	Meteorological Obs'y.
Moscow	29.39	746.6	30.00	762.0	6.8	—14.0	71	S	4	2			3ks						Meteorological Obs'y.
Nertchinsk	28.03	711.9	30.79	782.1	—32.6	—35.9	82						0						Meteorological Obs'y.
Nikolaiev	30.01	762.2	30.08	764.0	14.0	—10.0	87	N	9	4			8cs						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	30.10	764.6	30.19	766.8	—14.8	—26.0	74	W	11	5			10n						Lieut. Iwanow.
Nukuss	30.14	765.5	30.38	771.7	36.3	2.4	75	E	7	3			5ks						Dr. Dobrochotow.
Pekin, China	30.13	765.2	30.27	768.8	23 4	— 4.8	76	Calm	0	0			0						Physical Observatory.
St. Petersburg	29.60	751.9	29.62	752.3	9.9	—12.3	93	SW	16	7			10n					Light snow	Central Physical Obs'y.
Tashkend, Laboratory																			Teich, A. M.
Tiflis	28.56	725.5	30.04	762.9	35.1	1.7	80	Calm	0	0			10						Physical Observatory.
Warsaw	29.75	755.7	30.21	767.4	15.4	— 9.2	81	W	11	5			0						Astronomical Obs'y.
Wilna	29.63	752.5	30.08	764.0	9.9	—12.3	85	SW	2	1			5					Light clouds	Berg, Assistant.
Yeniseisk	29.58	751.4	29.89	759.1	19.8	6.8	58	W	20	9			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.18	766.6	33.0	0.6	78	NW			2		10k			0	0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			30.10	764.5	40	4.4	91	NW			3		10			0	0		J. Youngclause.
North Unst, Shetland Isl'ds			29.82	757.4				NW			4	3	5	NW		Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.94	760.4	30.05	763.2	43.2	6.2	73	NE	4.0	1.8			10			0.009	0.22	Covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.84	758.0	29.90	759.5	37.0	2.8	78	S	0.8	0.37			10			0.016	0.4	Snowing	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.80	680.8			24.8	— 4.0	97	NE	4.3	1.94			10			0.354	9.0	Covered	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.56	700.1	29.88	758.9	36.0	2.2	100	N	12.1	5.4			10			0.193	4.9	Raining	The Staff.
Murcia, Met. Obs'y. ‡	29.80	756.9	29.95	760.8	56.5	13.6	83	SE	2.2	1.0		5	5	N		Inap.	Inap.	Misty	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.74	729.9	29.64	752.9	40.8	4.9	63	NE	13.0	5.8			9			0	0	Almost cov'd	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.93	760.3	30.00	762.0	71.3	21.8	89	SSE	4.0	1.8		0	1k			0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	30.01	762.3	30.05	763.6	75.4	24.1	68	E	2.2	1.0						0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.80	756.9	29.90	759.4	62.1	16.7	82	S	15.7	7.0			10		S	0.023	0.6		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.02	762.4	30.11	764.7	73.0	22.8	92	SE	0	0		2c	2k	SE	SE	0	0	Clear	Enrique Gadea, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.31	744.5	29.35	745.5	— 0.1	—17.8	89	W			2		0			0	0		
Umea	29.34	745.1	29.39	746.4	20.5	— 6.4	95	NE			4		10			0.118	3.0	Snowing	
Hernosand	29.40	746.8	29.45	748.1	28.6	— 1.9	94	SSW			4		10			0	0		
Stockholm	29.54	750.3	29.72	754.8	19.0	— 7.2	78	W			4		10			0	0		
Wisby	29.76	755.8	29.82	757.3	23.4	— 4.8	86	W			4		5			0.004	0.1		
SUB-SERIES.																			
Upsala	29.58	751.2	29.66	753.4	15.1	— 9.4	75	SW	5.1	2.3			9			0	0		Nils Ekholm.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.80	731.4	30.33	770.4	20.3	— 6.5	82	NE			2		10			0	0	Covered	The Observatory.
Zurich	28.59	726.1	30.35	771.0	18.1	— 7.7	67	E			2		0			0	0	Clear	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. +4.0 mm.; Ther. —8°.3 cent.; Hum. +5 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.97	761.1	32.4	0.2	100	NW	29	13.0			10		NW	0.492	12.5	Snowing	The Observatory.
Valona			30.08	763.9	49.5	9.7		W			2		5			0.12	3.	Cloudy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.00	762.1	68.5	20.3	56	SW			3		0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.12	765.0	30.21	767.3	11	—11.7	60	N	3	1.3		0	0			0	0	Clear	
Alpena, Michigan	29.50	749.3	30.21	767.3	10	—12.2	79	W	2	0.9			10s		Calm	0.05	1.3	Cloudy	
Attou Id., Alaska‡	29.05	737.9			33	0.6	100	N	26	11.6			10n		N	0.21	5.3		
Atlanta, Georgia	28.94	735.1	30.15	765.8	30	— 1.1	68	NW	6	2.7			10s		Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.21	767.3	30.22	767.6	23	— 5.0	73	NW	4	1.8		2k	0	Calm		0	0	Clear	
Augusta, Georgia	30.06	763.5	30.27	768.8	35	1.7	80	Calm	0	0			10n		Calm	0.06	1.5	Sleeting	
Baltimore, Maryland	30.17	766.3	30.22	767.6	27	— 2.8	64	W	6	2.7		0	Haze		Calm	0	0	Clear	
Barnegat, New Jersey	30.17	766.3	30.19	766.8	22	— 5.6	72	NW	10	4.5		2ck	0	W		Inap.	Inap.	Clear	
Benton, Montana	27.38	695.4			23	— 5.0	100	N	13	5.8			10n		Calm	0.22	5.6	Light snow	
Bismarck, Dakota	28.32	719.3	30.17	766.3	—11	—23.9		Calm	0	0		5c	0	Calm		0	0	Fair	
Boise City, Idaho	27.57	700.3	30.53	775.4	20	— 6.7	85	SE	4	1.8			10s		Calm	0	0	Cloudy	
Boston, Massachusetts	29.92	760.0	30.09	764.3	10	—12.2	88	W	8	3.6		0	0			0	0	Clear	
Brackettville, Texas	29.09	738.9	30.25	768.3	16	— 8.9	83	N	2	0.9		0	0			0	0	Clear	
Brownsville, Texas	30.30	769.6	30.35	770.9	35	1.7	90	N	4	1.8			10s		Calm	0.16	4.1	Cloudy	
Buffalo, New York	29.48	748.8	30.25	768.3	10	—12.2	79	W	5	2.2			10n		Calm	0.04	1.0	Light snow	
Burlington, Vermont	29.90	759.4	30.22	767.6	2	—16.7	72	E	7	3.1		0	0			Inap.	Inap.	Clear	
Cairo, Illinois	29.93	760.2	30.36	771.1	26	— 3.3	75	N	1	0.4			10s		Calm	0	0	Cloudy	
Campo, California	27.41	696.2	29.98	761.5	20	— 6.7	85	W	4	1.8		0	0			0	0	Clear	
Camp Thomas, Arizona	27.32	693.9			17	— 8.3	51	Calm				0	0			0	0	Clear	
Cape Henry, Virginia	30.24	768.1	30.26	768.6	32	0.0	69	NW	25	11.2		2cs	8s	Calm	Calm	0	0	Cloudy	
Cape May, New Jersey	30.15	765.8	30.18	766.6	28	— 2.2	77	NW	23	10.3		1k	2s	NW	NW	0	0	Fair	
Castroville, Texas	29.48	748.8	30.24	768.1	24	— 4.4	87	NW	4	1.8		0	Fog		Calm	0	0	Foggy	
Cedar Keys, Florida	30.05	763.3	30.07	763.8	39	3.9	100	NE	15	6.7			10n		NE	0.58	14.7	Light rain	
Champaign, Illinois	29.40	746.7	30.25	768.3	23	— 5.0	73	SW	2	0.9			10s		SW	0.01	0.3	Cloudy	
Charleston, S. Carolina	30.13	765.3	30.19	766.8	38	3.3	81	N	10	4.5			10n		Calm	0.15	3.8	Light rain	
Charlotte, N. Carolina	29.34	745.2	30.20	767.1	30	— 1.1	68	E	5	2.2			10s		Calm	0	0	Cloudy	
Chattanooga, Tennessee	29.39	746.5	30.25	768.3	26	— 3.3	75	N	4	1.8		10cs	Sm'e	Calm	Calm	0	0	Cloudy	
Cheyenne, Wyoming	23.86	606.0	29.80	756.9	16	— 8.9	83	NW	10	4.5		0	0			0	0	Clear	
Chicago, Illinois	29.50	749.3	30.25	768.3	22	— 5.6	72	N	4	1.8			10s		Calm	0.20	5.1	Cloudy	
Chincoteague, Virginia	30.22	767.6	30.24	768.1	27	— 2.8	88	NW	10	4.5			10s		NW	0	0	Cloudy	
Cincinnati, Ohio	29.61	752.1	30.31	769.9	26	— 3.3	63	NW	5	2.2		8cs	Sm'e	NW	NW	0	0	Cloudy	
Cleveland, Ohio	29.50	749.3	30.30	769.6	15.5	— 9.2	82	NW	3	1.3			10s		NW	0.06	1.5	Cloudy	
Coleman City, Texas	28.39	721.1	30.20	767.1	21	— 6.1	56	SW	8	3.6		0	0			0	0	Clear	
Columbus, Ohio	29.37	746.0	30.27	768.8	25	— 3.9	87	W	5	2.2			10n		Calm	0.01	0.3	Light snow	
Concho, Texas	28.24	717.3	30.07	763.8	17	— 8.3	83	SW	3	1.3		0	0			0	0	Clear	
Corsicana, Texas	29.86	758.4	30.37	771.4	25	— 3.9	62	Calm	0	0		0	0			0	0	Clear	
Davenport, Iowa	29.60	751.8	30.30	769.6	17	— 8.3	83	NE	1	0.4			10s		Calm	Inap.	Inap.	Cloudy	
Dayton, Washington T'y	28.64	727.4	30.48	774.2	15	— 9.4	100	SW	1	0.4			Fog		Calm	0	0	Dense fog	
Deadwood, Dakota	25.23	640.8			18	— 7.8	84	S	1	0.4			10n		Calm	0.05	1.3	Light snow	
Decatur, Texas	29.08	738.6	30.36	771.1	21	— 6.1	86	E	6	2.7		0	0			0	0	Clear	
Delaware Breakwater, Del.	30.19	766.8	30.22	767.6	26	— 3.3	75	W	17	7.6		5cs	0	W		0	0	Fair	
Denison, Texas	29.49	749.0	30.36	771.1	22	— 5.6	86	N	2	0.9		0	0			0	0	Clear	
Denver, Colorado	24.67	626.6	29.89	759.2	13	—10.6	62	S	2	0.9		0	0			0	0	Clear	
Des Moines, Iowa	29.34	745.2	30.29	769.4	19	— 7.2	85	Calm	0	0			10s		Calm	0.05	1.3	Cloudy	
Detroit, Michigan	29.54	750.3	30.28	769.1	16	— 8.9	83	SW	5	2.2			10s		Calm	Inap.	Inap.	Cloudy	
Dodge City, Kansas	27.48	698.0	29.97	761.2	14	—10.0	64	SW	5	2.2			10n		Calm	Inap.	Inap.	Light snow	
Dubuque, Iowa	29.55	750.6	30.32	770.1	15	— 9.4	82	N	1	0.4			10s		Calm	Inap.	Inap.	Cloudy	
Duluth, Minnesota	29.51	749.5	30.27	768.8	2	—16.7	86	Calm	0	0		5cs	0	Calm		Inap.	Inap.	Fair	
Eagle Pass, Texas	29.53	750.0	30.34	770.6	22	— 5.6	72	NW	1	0.4		0	0			0	0	Clear	
Eagle Rock, Texas	25.26	641.6	29.91	759.7	— 6	—21.1	61	N	3	1.3		0	8s		Calm	0.05	1.3	Fair	
Eastport, Maine	29.79	756.7	29.86	758.4	7	—13.9	54	NW	19	8.5		0	0			0	0	Clear	
Edinburg, Texas					47	8.3	70	S			1	0	8ks		S	0	0	Fair	
El Paso, Texas	26.29	667.8			13	—10.6	44	N	1	0.4		0	0			0	0	Clear	
Erie, Pennsylvania	29.48	748.8	30.26	768.6	14	—10.0	82	W	3	1.3			10ks		W	0.04	1.0	Cloudy	
Escanaba, Michigan	29.52	749.8	30.25	768.3	0	—17.8	70	W	3	1.3		0	0			0.01	0.3	Clear	
Florence, Arizona	28.58	725.9	30.18	766.6	34	1.1	34	E	1	0.4		0	5ks		W	0	0	Fair	
Fort Apache, New Mexico	24.98	634.5	30.43	772.9	10	—12.2	38	NE	2	0.9		0	0			0	0	Clear	
Fort Assinniboine, Montana	27.29	693.2			23	— 5.0	100	NW	4	1.8			10n		NW	0.13	3.3	Light snow	
Fort Bennett, Dakota	28.54	724.9			—12	—24.4	50	Calm	0	0		0	0			0	0	Clear	
Fort Buford, Dakota	28.09	713.5	30.13	765.3	3	—16.1	73	NE	5	2.2		2cs	0	W		0	0	Clear	
Fort Custer, Montana	26.82	681.2			26	— 3.3	100	N	6	2.7			10n		Calm	0.08	2.0	Light snow	
Fort Davis, Texas	25.17	639.3	30.13	765.3	17	— 8.3	83	W	4	1.8		0	0			0	0	Clear	
Fort Elliott, Texas	27.41	696.2	29.99	761.7	4	—15.6	48	Calm	0	0		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.72	754.9	30.31	769.9	22	— 5.6	72	NE	2	0.9			10s		Calm	0	0	Cloudy	
Fort Grant, Arizona	25.16	639.0	29.96	761.0	24	— 4.4	48	NE	3	1.3		0	0			0	0	Clear	
Fort Griffin, Texas	28.84	732.5	30.22	767.6	20	— 6.7	56	E	4	1.8		0	0			0	0	Clear	
Fort Keogh, Montana	27.47	697.7			22	— 5.6	100	NW	7	3.1			10n		Calm	0.07	1.8	Light snow	
Fort Macon, North Carolina	30.23	767.8	30.24	768.1	36	2.2	80	N	12	5.4			10s		Calm	0	0	Cloudy	
Fort Missoula, Montana	26.92	683.8			9	—12.8	78	S	1	0.4			10s		Calm	0.01	0.3	Cloudy	
Fort McKavett, Texas	27.95	709.9	30.06	763.5	15	— 9.4	65	SW	2	0.9		0	0			0	0	Clear	
Fort Shaw, Montana	26.49	672.8			24	— 4.4	100	N	17	7.6			10n		Calm	0.19	4.8	Light snow	
Fort Sill, Indian Territory	28.99	736.3	30.20	767.1	18	— 7.8	68	Calm	0	0		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.27	718.0			— 5	—20.6	81	N	4	1.8			10ks		N	0	0	Cloudy	
Fort Verde, Arizona					16	— 8.9	49	N			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.47	723.1	30.17	766.3	21	— 6.1	71	Calm	0	0		0	0			0	0	Clear	
Galveston, Texas	30.25	768.3	30.29	769.4	37	2.8	81	NW	8	3.6			10s		Calm	0.01	0.3	Cloudy	
Grand Haven, Michigan	29.55	750.6	30.27	768.8	11	—11.7	80	E	1	0.4			10s		Calm	0.01	0.3	Cloudy	
Hatteras, North Carolina	30.20	767.1	30.22	767.6	35	1.7	70	N	17	7.6			10s		Calm	0	0	Cloudy	
Helena, Montana	25.87	657.1			24	— 4.4	87	SW	8	3.6			10n		Calm	0.29	7.4	Heavy snow	
Henrietta, Texas	29.25	742.9	30.27	768.8	21	— 6.1	57	NE	4	1.8		0	0			0	0	Clear	
Indianapolis, Indiana	29.42	747.3	30.26	768.6	24	— 4.4	80	W	4	1.8			10n		Calm	Inap.	Inap.	Light snow	
Indianola, Texas	30.33	770.4	30.36	771.1	36	2.2	90	NW	6	2.7			10s		Calm	0.07	1.8	Cloudy	
Jacksboro, Texas	29.07	738.4	30.30	769.6	25	— 3.9	62	Calm	0	0		0	0			0	0	Clear	
Jacksonville, Florida	30.08	764.0	30.13	765.3	39	3.9	91	N	8	3.6			10n		Calm	0.78	19.8	Light rain	
Keokuk, Iowa	29.58	751.3	30.28	769.1	24	— 4.4	74	Calm	0	0			10s		Calm	Inap.	Inap.	Cloudy	
Key West, Florida	29.96	761.0	30.00	762.0	72	22.2	90	S	7	3.1		5k	0	SW		0.14	3.6	Fair	
Kittyhawk, North Carolina	30.22	767.6	30.24	768.1	33	0.6	61	N	20	8.9			10s		Calm	0	0	Cloudy	
Knoxville, Tennessee	29.21	741.9	30.29	769.4	24	— 4.4	74	N	5	2.2		10cs	0	SW		0	0	Cloudy	
La Crosse, Wisconsin	29.50	749.3	30.34	770.6	— 3	—19.4	66	S	8	3.6			10s		Calm	0	0	Cloudy	
La Mesilla, New Mexico	26.16	664.4	30.31	769.9	12	—11.1	61	S	1	0.4		0	0			0	0	Clear	
Laredo, Texas	29.87	758.7	30.24	768.1	36	2.2	90	S	1	0.4			10s		Calm	0.06	1.5	Cloudy	
Leavenworth, Kansas	29.38	746.2	30.28	769.1	22	— 5.6	72	Calm	0	0			10s			0.03	0.8	Cloudy	
Lewiston, Idaho	29.57	751.1	30.26	768.6	25	— 3.9	77	E	3	1.3			10s		Calm	0	0	Cloudy	
Little Rock, Arkansas	29.97	761.2	30.32	770.1	22	— 5.6	86	NW	4	1.8		0	0			0	0	Clear	
Los Angeles, California	29.70	754.4	30.05	763.3	43	6.1	59	NE	8	3.6		0	0			0	0	Clear	
Louisville, Kentucky	29.69	754.1	30.29	769.4	26	— 3.3	75	N	4	1.8		10cs	Sm'e	Calm	Calm	Inap.	Inap.	Cloudy	
Lynchburg, Virginia	29.52	749.8	30.25	768.3	28	— 2.2	77	NW	1	0.4			10s		Calm	0	0	Cloudy	
Madison, Wisconsin	29.20	741.7	30.29	769.4	9	—12.8	78	S	4	1.8			10s		Calm	0.02	0.5	Cloudy	
Marquette, Michigan	29.42	747.3	30.20	767.1	9	—12.8	78	W	4	1.8		0	5s		W	0.04	1.0	Fair	
Mason, Texas	28.57	725.7	30.50	774.7	18	— 7.8	68	NW	2	0.9		0	0			0	0	Clear	
Memphis, Tennessee	29.92	760.0	30.29	769.4	23	— 5.0	86	E	4	1.8		0	0			0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.49	749.0	30.29	769.4	12	—11.1	80	NW	5	2.2		0	5s		Calm	0.03	0.8	Fair	
Mobile, Alabama	30.15	765.8	30.23	767.8	31	— 0.6	100	N	9	4.0			1on		Calm	0.58	14.7	Heavy snow	
Montgomery, Alabama	30.01	762.2	30.26	768.6	31	— 0.6	89	N	2	0.9			1on		Calm	0.31	7.9	Light snow.	
Morgantown, W. Virginia	29.19	741.4	30.24	768.1	27	— 2.8	88	SW	2	0.9			1os		SW	0.02	0.5	Cloudy	
Moorhead, Minnesota	29.25	742.9	30.35	770.9	— 8	—22.2	79	S	2	0.9			1os		Calm	0	0	Cloudy	
Mt. Washington, N. H.	23.24	590.3	29.60	751.8	— 6	—21.1	42	NW	63	28.1		0	0			0	0	Clear	
Nashville, Tennessee	29.74	755.4	30.32	770.1	24	— 4.4	87	NE	2	0.9		10ck	0	SW		Inap.	Inap.	Cloudy	
New Haven, Connecticut	30.03	762.7	30.06	763.5	13	—10.6	62	NW	5	2.2		0	0			0	0	Clear	
New London, Connecticut	30.08	764.0	30.13	765.3	12	—11.1	61	N	6	2.7		0	0			0	0	Clear	
New Orleans, Louisiana	30.19	766.8	30.26	768.6	35	1.7	80	N	6	2.7			1on		Calm	0.40	10.2	Light snow.	
Newport, Rhode Island	30.04	763.0	30.09	764.3	15	— 9.4	82	W	12	5.4		0	0			0	0	Clear	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.10	764.5	30.13	765.3	12	—11.1	61	NW	18	8.0		0	0			0	0	Clear	
New York, New York	29.99	761.7	30.18	766.6	20	— 6.7	85	NW	5	2.2		0	Fog		Calm	Inap.	Inap.	Clear	
Norfolk, Virginia	30.21	767.3	30.28	769.1	30	— 1.1	68	N	8	3.6			1os		Calm	0	0	Cloudy	
North Platte, Nebraska	27.10	688.3	29.96	761.0	— 1	—18.3	85	Calm	0	0		0	Fog		Calm	0	0	Light fog	
Olympa, Washington T'y	30.30	769.6	30.34	770.6	38.0	3.3	91	NE	1	0.4			1os		Calm	0	0	Cloudy	
Omaha, Nebraska	29.07	738.4	30.28	769.1	13	—10.6	81	Calm	0	0			1os		Calm	0.02	0.5	Cloudy	
Oswego, New York	29.85	758.2	30.20	767.1	3	—16.1	100	SE	2	0.9		0	Fog		SE	Inap.	Inap.	Clear	
Pensacola, Florida	30.18	766.6	30.21	767.3	35	1.7	90	N	6	2.7			1on		Calm	0.56	14.2	Light sleet	
Philadelphia, Pa	30.16	766.1	30.22	767.6	24	— 4.4	74	N	8	3.6		8k	Fog	W	Calm	Inap.	Inap.	Cloudy	
Phœnix, Arizona	28.96	735.6	30.91	785.1	25	— 3.9	75	E	4	1.8		0	5ks		E	0	0	Fair	
Pike's Peak, Colorado	17.32	439.9	29.53	750.0	—10	—23.3	54	N	18	8.0		0	2s		Calm	0	0	Clear	
Pilot Point, Texas	29.50	749.3	30.42	772.7	22	— 5.6	86	Calm	0	0		0	0			0	0	Clear	
Ploche, Nevada	23 88	606.5	29.65	753.1	26	— 3.3	52	Calm	0	0			10ks		Calm	0	0	Cloudy	
Pittsburg, Pennsylvania	29.39	746.5	30.26	768.6	23	— 5.0	86	N	2	0.9			1os		NW	0.05	1.3	Cloudy	
Port Huron, Michigan	29.54	750.3	30.27	768.8	14	—10.0	82	W	4	1.8			1on		Calm	0.42	10.7	Light snow.	
Portland, Maine	29.95	760.7	30.00	762.0	14	—10.0	64	NW	4	1.8		0	0			0	0	Clear	
Portland, Oregon	30.25	768.6	30.34	770.6	27	— 2.8	88	E	3	1.3			1os		Calm	0	0	Cloudy	
Portsmouth, N. Carolina					34	1.1	79	NE	22	9.8			10k		Calm	0	0	Cloudy	
Prescott, Arizona	24.67	626.6	30.03	762.7	18	— 7.8	53	Calm	0	0		0	0			0	0	Clear	
Punta Rassa, Florida	29.96	761.0	29.97	761.2	58	14.4	94	NE	6	2.7			1os		E	0.04	1.0	Threatening	
Red Bluff, California	29.63	752.6	29.99	761.7	38.0	3.3	91	NW	4	1.8			Fog		Calm	0	0	Dense fog	
Rio Grande City, Texas	30.15	765.8	30.38	771.6	37	2.8	90	Calm	0	0			1os		Calm	0.08	2.0	Cloudy	
Rochester, New York	29.54	750.3	30.21	767.3	15	— 9.4	82	W	8	3.6			1os		Calm	0.07	1.8	Cloudy	
Roseburg, Oregon	29.66	753.4	30.26	768.6	31.5	— 0.3	100	Calm	0	0			Fog		Calm	0	0	Dense fog	
Sacramento, California	29.92	760.0	30.00	762.0	43	6.1	100	E	2	0.9			Fog			0	0	Dense fog	
St. Louis, Missouri	29.68	753.9	30.30	769.6	20	— 6.7	92	W	5	2.2			1on		Calm	Inap.	Inap.	Light snow.	
St. Paul, Minnesota	29.35	745.5	30.27	768.8	7	—13.9	89	Calm	0	0			Fog		Calm	0.02	0.5	Dense fog	
Salt Lake City, Utah	25.58	649.7	29.91	759.7	26	— 3.3	40	NW	4	1.8		8k	0	W		0	0	Cloudy	
San Antonio, Texas	29.59	751.6	30.34	770.6	30	— 1.1	89	Calm	0	0		0	0			0	0	Clear	
San Diego, California	30.00	762.0	30.08	764.0	40	4.4	56	NE	2	0.9		0	0			0	0	Clear	
Sandusky, Ohio	29.55	750.6	30.27	768.8	20	— 6.7	85	Calm	0	0			1os		Calm	0.11	2.8	Cloudy	
Sandy Hook, New Jersey	30.14	765.5	30.18	766.6	20	— 6.7	70	NW	16	7.2		0	0			0	0	Clear	
San Francisco, California	29.91	759.7	29.97	761.2	50	10.0	86	SE	6	2.7			1os		S	0	0	Threatening	
Santa Fé, New Mexico	23.11	587.0	29.65	753.1	5	—15.0	75	Calm	0	0		0	0			0	0	Clear	
Savannah, Georgia	30.12	765.0	30.22	767.6	39	3.9	82	N	2	0.9			1on		Calm	0.37	9.4	Light rain	
Shreveport, Louisiana	30.06	763.5	30.32	770.1	26	— 3.3	75	NW	4	1.8		0	0			0	0	Clear	
Silver City, New Mexico	24.19	614.4	30.99	787.1	10	—12.2	38	N	1	0.4		0	0			0	0	Clear	
Smithville, North Carolina	30.19	766.8	30.23	767.8	36	2.2	61	N	9	4.0			1os		Calm	0	0	Cloudy	
Socorro, New Mexico	25.46	646.7	29.32	744.7				N	2	0.9		0	0			0	0	Clear	
Springfield, Illinois	29.57	751.1	30.30	769.0	24	— 4.4	81	N	2	0.9			1on			0.01	0.3	Light snow.	
Springfield, Massachusetts	30.00	762.0	30.14	765.5	4	—15.6	48	Calm	0	0		0	Haze		Calm	0	0	Clear	
Stockton, Texas	27.05	687.1	30.05	763.3	23	— 5.0	86	SW	8	3.6		0	0			0	0	Clear	
St. Vincent, Minnesota	29.35	745.5	30.25	768.3	— 2	—18.9	84	SE	2	0.9			1os		Calm	0	0	Cloudy	
Thatcher's Island, Mass	30.05	763.3	30.11	764.8	16	— 8.9	66	W	18	8.0		0	0			0	0	Clear	
Toledo, Ohio	29.53	750.0	30.27	768.8	20	— 6.7	86	SW	3	1.3			1os		Calm	0.03	0.8	Cloudy	
Tucson, Arizona	27.59	700.8	30.24	768.1	24	— 4.4	61	S	4	1.8		0	0			0	0	Clear	
Umatilla, Oregon	30.18	766.6	30.73	780.5	16	— 8.9	83	NE	12	5.4			1os		Calm	Inap.	Inap.	Cloudy	
Uvalde, Texas	29.31	744.5	30.19	766.8	33	0.6	61	N	2	0.9		5c	0	N		0	0	Fair	
Vicksburg, Mississippi	30.02	762.5	30.30	769.6	34	1.1	70	Calm	0	0			1os		SW	0	0	Cloudy	
Visalia, California	29.56	750.8	29.94	760.5	40.5	4.7	87	E	3	1.3		0	0			0	0	Clear	
Washington, D. C.	30.10	764.5	30.22	767.6	24	— 4.4	87	Calm	0	0		2cs	Sm'o	W	Calm	0	0	Fair	
Wickenburg, Arizona					21	— 6.1	71	NW			1	0	2s		Calm	0	0	Clear	
Wilmington, N. Carolina	30.17	766.3	30.22	767.6	36	2.2	55	NE			2		1os		Calm	0	0	Cloudy	
Winnemucca, Nevada	25.58	649.7	29.94	760.5	24	— 4.4	74	NE	8	3.6		0	0			0	0	Clear	
Wood's Holl, Mass	30.02	762.5	30.07	763.8	14	—10.0	64	NW	24	10.7		0	0			0	0	Clear	
Yankton, Dakota	28.93	734.8	30.36	771.1	10	—12.2	79	Calm	0	0			1os		Calm	0.01	0.3	Cloudy	
Yuma, Arizona	29.91	759.7	30.06	763.5	36	2.2	53	NE	2	0 9		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia																			
Buff Bay Town, Jamaica.‡	29.84	757.9	30.16	766.1	67	19.4	90	E				2c	2k			0.10	2.5		Thomas Herran.
Havana, Cuba, W. I.	29.97	761.2	30.02	762.5	73	22.8	85	Calm	0	0		0	2ks		Calm	0	0	Foggy	Charles Hasselbrink.
Jakobshavn, Greenland	30.02	762.5	30.08	764.0	- 16.6	—27.		Calm			0		0			0.327	8.3		
Kingston, Jamaica, W. I.	30.00	762.0	30.01	762.2	71.5	21.9	80	N	1	0.4		0	0			0	0	Clear	Maxwell Hall.
Navassa, W. I.	29.84	757.9	29.92	760.0	78.5	25.8	70	NE	12.5	5.7		8k	5s	E	NE	0	0	Cloudy	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	77	25.0	86	E			2	5ck	4s	E		0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.92	760.0	78	25.6	95	Calm			0		Fog			0	0	Dense fog	Francesco J. Cisneros
Rivas, Nicaragua					75	24		SE			3	0	1ks		SE	0	0		Earl Flint.
Santiago de Cuba, W. I.																			Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	30.37	771.4	30.43	772.9	—24.2	—31.2		W			2		1			0	0		
York Factory, B. A.	30.11	764.8	30.17	766.3	—39.0	—39.4		NW	13	5.8		2c	0	W		0	0	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
H. M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, N. 35° 57′, E. 14° 36′	30.12	765.0	61	16.1	71	WNW			1		9					1	NW	D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon N. 19° 04′, E. 72° 20′	29.95	760.7	79	26.1	78	NNW			4		0					1	N	Blue sky	Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. S. Hope.
H. M. S Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. J. F. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.98	761.5	66.5	19.2		WNW			3		3	NW						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 32′, E. 81° 22′	29.87	758.7	78	25.6		N			2		3	N				2	NNE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.92	760.0	79	26.1	78	N			4		0							Squally	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Chimbote, Peru	29.87	758.7	66.5	19.2	92	Calm			0		8							Misty	Comm. E. E. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. O. C. P. Fitzgerald
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 29° 27′, E. 122° 04′	30.31	769.9	43.9	6.6	68	S			2		0							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 14° 45′, E. 53° 32′	30.06	763.5	73	22.8	81	NNE			4		2	NE				2	NE	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 40° 39′, W. 10° 00′	29.55	750.6	52.5	11.4	96	NE			6		5	NW				3	Con.	D. clouds	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Dominica, W. I.	30.04	763.0	75.5	24.2	77	E			1		2	E						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis, N. 38° 42′, W. 9° 06′	29.66	753.4	52	11.1	?	E			1		9	Calm						D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 56′	29.67	753.6	76	24.4	73	ESE			1		1					2	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis, N. 15° 10′, E. 56° 44′	30.12	765.0	71	21.7	59	ENE			5		5	E				3	E	D. clouds	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos, N. 13° 05′, W. 90° 36′	30.07	763.8	77.5	25.3	81	NE			1		3					Roll	S	D. clouds	Capt. C. G. Fane,
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	30.11	764.8	67.5	19.7	47	NNW			1		0							Blue sky	Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Mindello, Cape Verd Id.	30.09	764.3	76.3	24.6	87	ESE			4		2			0	0	3		D. clouds	S. C. da Silva Costa, Comd't.
Sado, St. Thomas, St. Thomas Id.	29.93	760.2	84.2	29.0	78	WSW			3		2			0	0	2		Blue sky	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

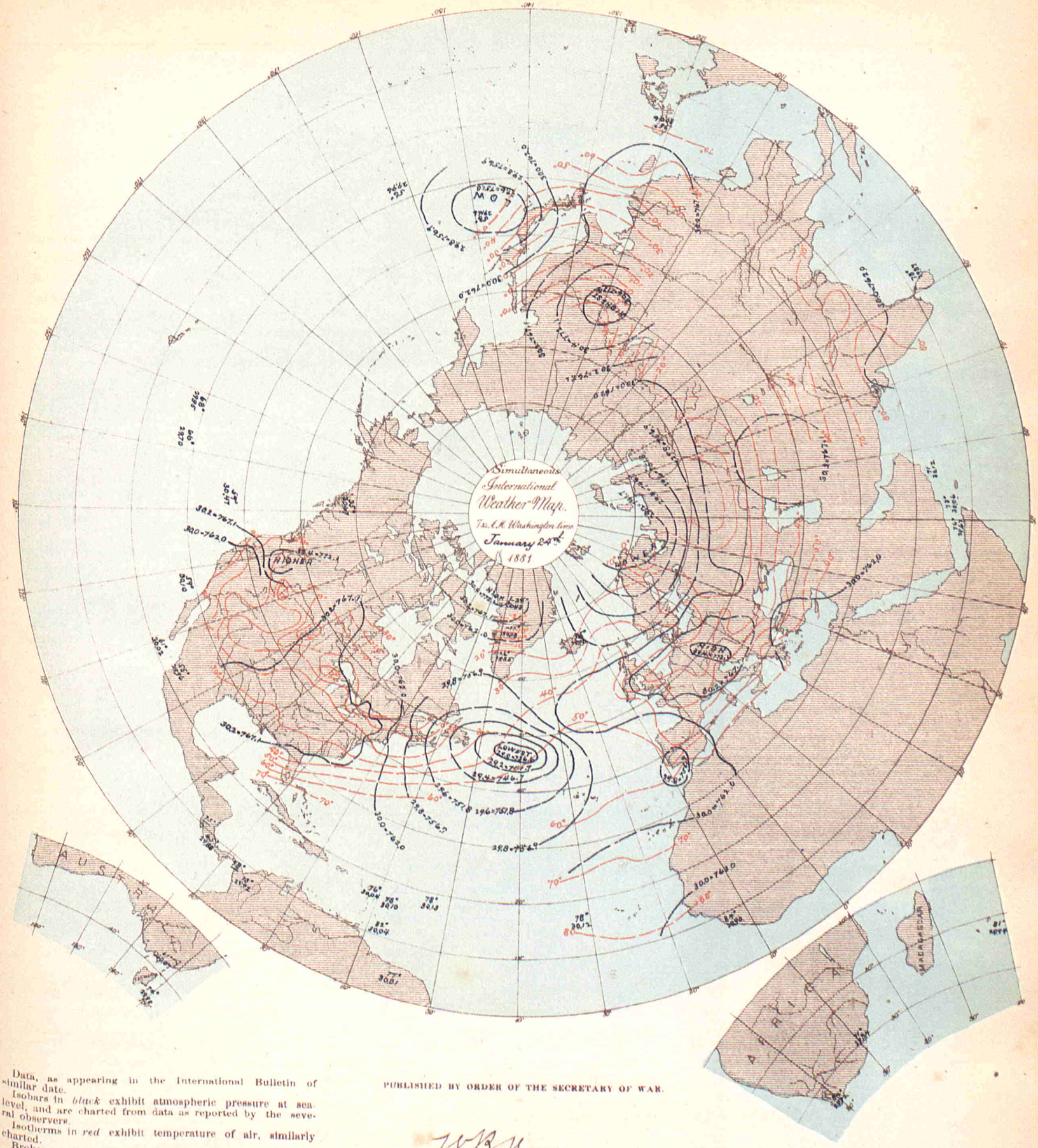
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.32	770.1	35	1.7	80	N	5	2.2			10			0	0			Cloudy	
N. Yard, Portsmouth, N. H.	30.02	762.5	12	—11.1	80	NW	18	8.0			0			0	0			Clear	
Naval Hospital, Yokohama, Japan	29.44	747.8	33.5	0.8	58	NW			1		0			Slight				Clear.	
Adams, Callao, Peru	29.91	759.7	68	20.0	95	Calm			0		10					Long		Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	29.98	761.5	46	7.8	84	Calm			0		10			0	0			Foggy	
Alert, Hong-Kong, China	30.11	764.8	65	18.3	78	NNE			3		2		Calm	0	0	Sm'h		Hazy	
Alliance, Mantanzas, Cuba, W.I.	30.02	762.5	71	21.7	95	Calm			0		0			0	0	Sm'h		Clear.	
Ashuelot, Tientsin, China	30.25	768.3	25	— 3.9	87	NE			2		0							Clear.	
Colorado, New York, N. Y.	30.17	766.3	21	— 6.1		NW	2	0.9			2		Calm	0	0			Misty	
Constitution, N. Yard, League I'd., Pa			24	— 4.4		Calm	0	0			5		NW					Fair	
Franklin, Off N. Yard, Norfolk, Va	30.19	766.8	32	0.0		NNW	8	3.6			10			0	0			Cloudy.	
Galena, Villafranca, France	30.18	766.6	47	8.3	62	SE			3		5		ESE			Mod.	E	Fair	
Independence, N. Yard, Mare I'd, Cal.	29.99	761.7	51	10.6	93	E	2.4	1.1			0			0	0			Clear	
Jamestown, Sitka, Alaska	30.67	779.0	35	1.7	100	NE			1		8			0.02	0.5			Cloudy.	
Kearsarge, Port Royal, Jamaica, W.I.	30.01	762.2	75	23.9	77	NNW			2		0					Sm'h		Clear.	
Lackawanna, Callao, Peru	30.05	763.3	68	20.0	95	SSE			1		8		SSE	0	0			Fair.	
Marion, Straits of Magellan	29.84	757.9	54	12.2	100	S			1		10		Calm	1 h'r	driz.	Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	30.24	768.1	13	—10.6		SW			1		10		W					Cloudy	
Minnesota, New York, N. Y.	30.18	766.6	22	— 5.6		NW			2		5							Fair	
Monocacy, Shanghai, China	30.33	770.4	36	2.2	55	SE			1		0							Clear	
New Hampshire, Port Royal, S. C.	30.16	766.1	39	3.9	91	NNE	9	4.0			10		Calm	0.38	9.7			Raining	
Nipsic, Hyeres Roadstead, France	30.13	765.3	48	8.9	63	E			5		8					Sm'h		Squally	
Onward, Chimbote Bay, Peru	29.83	757 7	71	21.7	80	S			4		5		N			Long	N;W	Fair	
Palos, Shanghai, China	30.35	770.9	36	2.2	80	SSW			1		0							Clear	
Passaic, Washington, D. C.	30.28	769.1	22	— 5.6	72	SW			2		2		SW					Fair	
Pensacola, Mazatlan, Mexico	29.96	761.0	55	12.8	68	N			1		0					Long	W	Clear	
Portsmouth, Washington, D. C.	30.23	767.8	22	— 5.6	100	SE			1		2							Clear.	
Powhatan, New York, N. Y.	30.16	766.1	21	— 6.1	85	NW			3									Hazy	
Quinnebaug, Naples, Italy	30.16	766.1	46	7.8	62	ENE			5		2		NE			Chop	ENE		
Richmond, N. 22° 28′, E. 116° 36′	30.27	768.8	58	14.4	94	ENE			5		0			0	0	Sm'h		Clear	
Saratoga, Baltimore, Md	30.21	767.3	25	— 3.9	100	NW			1		2		Calm	0	0			Clear	
Shenandoah, Montevideo, Uruguay	30.19	766.8	69	20.6	65	NE			4		8					Sm'h		Fair	
St. Louis, League Island, Pa	30.18	766.6	23	— 5.0	86	NW	2	0.9			8		NW	0	0			Cloudy	
Swatara, Kobe, Japan	29.86	758.4	33	0.6	70	WNW			4		0					Mod.	W	Blue sky	
Tennessee, Port Royal, Jamaica, W.I.	30.03	762.7	75	23.9	90	NNW	7	3.1			2		Calm	0	0	Sm'h		Clear	
Trenton, Villafranca, France	30.15	765.8	51	10.6	46	SE			1-4		5			0	0	Sm'h		Fair	
Vandalia, Bridgetown, Barbadoes, W.I	30.04	763.0	77	25.0	86	E			1		5		E					Fair	
Wabash, Boston, Massachusetts	30.10	764.5	8	—13.3	77	NNW	6	2.7			0			0	0			Hazy	
Wachusetts, Panama, Panama	29.50	749.3	78	25.6	91	NW			2		5		N	0	0	Sm'h		Fair.	
Wyoming, N. 40° 47′, E. 14° 13′	30.14	765.5	54	12.2	55	ENE			4		2		NE			Sm'h		Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡ S. 26° 03′, E. 6° 58′	30.05	763.3	70.9	21.6	70	ESE			4		4							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 35° 27′, W. 22° 00′	29.82	757.4	62	16.7	77	W			6		6							D. clouds	Capt. A. J. Brown.
Ship Blychswood																			Capt. E. J. Molony.
British Merchant ‡																			Capt. E. Heggum.
Chin Yang, N. 26° 22′, W. 22° 53′	30.06	763.5	69.5	20.8	76	Calm			0		4							Showery	Capt. H. Youlden.
S. S. Cipero, N. 17° 15′, W. 53° 50′	30.13	765.3	78	25.6		ESE			3		2					1	ESE	Blue sky	W. N. Lailey.
City of Agra, ‡ S. 43° 42′, W. 38° 48′	29.91	759.7	52.5	11.4	90	WSW			6		10							Overcast	Capt. T. Young.
Barque Commewyne, ‡ N. 15° 23′, W. 59° 42′	30.10	764.5	77.7	25.4	84	ENE			5		7							D. clouds	Capt. W. Scott.
Barque Coppename, N. 18° 10′, W. 32° 02′	30.12	765.0	77.8	25.4	96	ENE			4		1							Blue sky	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡ S. 33° 44′, E. 27° 50′	29.94	760.5	77	25.0	69	SW			2		1							Blue sky	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡ N. 52° 23′, W. 32° 28′	29.83	757.7	43	6.1	92	E			6		6					7	ESE	D. clouds	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, N. 25° 39′, W. 21° 15′	30.13	765.3	67.3	19.6	85	W			2		9					3-4	NNW	Misty	Capt. H. W. Dyke.
Barque Mertola, N. 50° 31′, W. 8° 27′	30.16	766.1	44.9	7.2	91	SE			5		4							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 42° 20′, W. 9° 36′	29.61	752.1	48.5	9.2	82	ENE			3		10							Overcast	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			
WHITE STAR LINE. *Ismay, Imrie & Co.*																			Capt. W. H. P. Hains.
S. S. Adriatic																			
S. S. Britanic, N. 51° 17′, W. 28° 22′ †	30.21	767.3	50	10.0		SE			4		8		SE			Mod.	SE	Squally	Capt. J. W. Jennings.
S. S. Celtic, N. 43° 34′, W. 46° 09′ †	29.37	746.0	41	5.0		WNW			5		5		NW	0	0	Mod.	NW	Fair	Capt. H. Perry.
S. S. Germanic, N. 50° 35′, W. 18° 08′ †	30.17	766.3	48	8.9		E			2		5?		E	Showers		Sm'h		Clear?	Capt. Benj. Gleadell.
S. S. Republic																			Capt. Ch. W. Kennedy.
																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, N. 49° 17′, W. 19° 45′	30.06	763.5	50.9	10.5		E			3		2		E	0	0	Mod.	ESE	Clear	Capt. H. Baur.
S. S. Köln, N. 50° 13′, W. 20° 37′	30.23	767.8	40.1	4.5		ENE			4		10		ENE	0	0	Sm'h	ENE	Hazy	Capt. F. Pfeiffer
S. S. Leipzig																			Capt. G. Meyer.
S. S. Ohio																			
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolh Fredholm ‡																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. Philadelphia, Pa.	30.03	762.7	25	— 3.9	87	NW			3		2		SW					Clear	Capt. J. W. Shackford.
S. S. Indiana, ‡ St. George's Channel...†	30.05	763.3	40	4.4	82	S			3		2		SE	0	0			Clear	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 48° 07′, W. 40° 38′...*†	28.93	734.8	47	8.3	92	W			4		10		W	Hea	vy	H'vy	WNW	Cloudy	Wm. Shakford, 1st Off'r.
S. S. Pennsylvania, Liverpool, England.....†	30.16	766.1	30	— 1.1		S			1		10		W	0	0			Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 29° 22′, W. 115° 51′.....†	30.10	764.5	59	15.0	49	NW			2		0			0	0	G'tl	WNW	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 26° 49′, E. 122° 21′ .....†	30.32	770.1	62	16.7	66	Var.			2		0			0	0	Light	E		Capt. H. Davison.
S. S. Gaelic, N. 38° 00′, W. 130° 48′..†*	30.47	773.9	59	15.0	76	NNW			3		5?		NW			Sl't	NW	Clear?	Capt. W. H. Kidley.
S. S. Oceanic, San Francisco, Cal.....†	30.30?	769.6?	53	11.7	80	Var.			2		2		S	0	0			Foggy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia, Astoria, Oregon.....†	30.24	768.1	36	2.2	80	E			2									Clear	Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, N. 36° 25′, W. 121° 50′.....†	29.96	761.0	53	11.7	93	N			2		10		W			H'vy	SW	Cloudy	Capt. J. N. Ingalls.
S. S. Idaho, Port Townsend, Wash. T.†	30.32	770.1	38	3.3	90	W			2		10					Mod.	SW	Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, N. 35° 46′, W. 121° 35′....†	30.10	764.5	52	11.1	86	SE			1		8		SE			Sm'h		Cloudy	Thos. Wallace.
S. S. State of California, Astoria, Oregon.....†	30.27	768.8	35	1.7	?	NE			4		5?							Cloudy?	Capt. G. Debney
S. S. Victoria, off Victoria, Vancouver Id†*	30.39	772.0	36	2.2	100	N			2		5		Calm					Fair	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.	29.95	760.7	73	22.8	95	NE			2		10		NE	Ra	in			Raining	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 22° 27′, W. 108° 34′....†	30.02	762.5	61	16.1	55	ESE			2		0					Mod.	N	Clear	Capt. D. S. Austin.
S. S. City of Peking, N. 29° 56′, E. 161° 44′.....†	29.96	761.0	56	13.3	75	WNW			2		0			0	0	Mod.	WNW	Clear	Capt. G. G. Berry.
S. S. City of Sidney, N. 28° 59′, W. 144° 02′	29.70	754.4	66	18.9	84	SSE			5		10		SE	0	0	Long	NW	Misty	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 35° 33′, E. 146° 45′	29.46	748.3	53	11.7	86	WSW			8		10		W	0	0	R'gh	WSW	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima‡																			Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, Panama, Panama.....†	29.77	756.1	79	26.1	91	NNW			2		5?		NNW	0	0			Clear?	
S. S. Zealandia, N. 25° 49′, W. 149° 00′....	29.95	760.7	68	20.0	79	W			6		5?		NW			Mod.	W	Cloudy?	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland, ‡ Flushing.....†	30.24	768.1	32	0.0	79	S			3		2		E			Sm'h		Foggy	Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhyniand, ‡ N. 47° 56′, W. 33° 50′.....	29.26	743.2	50	10.0	86	ESE			9		10		ESE	0.2	5.	Very h'vy	ESE	Storming	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 43° 34′, W. 50° 10′.....	29.27	743.4				W			7		10			Lig	ht	R'gh	W	Cloudy	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby Bentley, N. 34° 47′, W. 76° 06′.....†	30.14	765.5	40	4.4		N			2		10			0	0	Long	NNW	Threatening	Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 34° 19′, W. 75° 57′.....	30.15	765.8	46	7.8	77	NE	11	4.9			10ks		NE	0	0	Mod.	NE	Overcast	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, ‡ Ponce, Porto Rico ....†	30.31	769.9	78	25.6		E			5		2			0	0	Sm'h		Fair	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va.†	30.23	767.8	32	0.0	69	NNW	2	0.9			8kn			0	0			Cloudy	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Spain.....†.	29.57	751.1	57	13.9	?	WNW			5		10		W	Hea	vy			Rainy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 25, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.05	763.2	67.1	19.5	81	SW			3		3			0	0	Pretty fair..	Dr. Ollive.
Nemours			29.92	759.9	67.6	19.8	70	N			0		1			0	0	Very fair....	Raynard.
Algie s			29.99	761.7	66.9	19.4	47	W			2		1			0	0	Very fair....	Nicolas.
La Calle			30.05	763.3	64.8	18.2	80	SW			3		4			0	0	Cloudy.....	Fonfréde.
Tunis			30.07	763.6															Jacques.
Sfax			30.16	766.1															Gau.
Saida			30.03	762.7	64.0	17.8	57	N			2		1			0	0	Very fair....	Dumas.
Tebessa			30.07	763.7	68.7	20.4	20	Calm			0		8			0	0	Very cloudy	Watrin.
Gerville																			Lonchamp.
Laghouat			30.12	765.0	70.2	21.2	87	E			1		0			0	0	Clear.....	Herbin.
Biskra			30.13	765.4	66.6	19.2	68	NW			1		8			0	0	Very cloudy	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.88	758.9	29.97	761.2	62.0	16.7	91	WNW	11	4.9			0			0	0	Very fine....	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania			30.00	762.0	74	23.3		S			2		3k			0.09	2.3	D. clouds....	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.88	759.0	30.50	774.7	10.4	—12.0	89	W			2		10			0.398	10.1		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.52	749 8	30.35	770.8	21.2	— 6.0	87	WNW	1.3	0.6			1			0	0		Dr. Wiersbicki.
Eperies	29.50	749.4	30.48	774.1	14.7	— 9.6	81	Calm			0		0			0	0		Julius Mikolik.
Gratz‡	29.03	737.3	30.41	772.3	16.0	— 8.9	66	SE			3		0			0	0		Andreas Rospini.
Hermannstadt	29.00	736.7	30.60	777.3	11.1	—11.6	100	WNW			1		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.68	728.4	30.14	765.6	13.5	—10.3	97	Calm			0		0			0	0		The Staff.
Lemberg	29.28?	743.8?	29.95?	760.8?	25.2	— 3.8	62	NW			2		9			0	0		Dr. T. Stanecki.
Pola	30.18	766.5	30.30	769.5	34.0	1.1	70	E			2		9			0.276	7.0		I. R. HydrographicOffice
Szathmar	30.09	764.2	30.55	776.0	14.4	— 9.8	84	SW			2		0			0	0		Beicht Peter, S. J.
Szegedin	30.21	767.4	30.52	775.3	9.3	—12.6	96	Calm			0		0			0	0		Karl Stancel.
Trieste	30.21	767.2	30.31	769.8	32.0	0.0	81	ESE			1		0			0	0	Clear.	P. Busin.
Vienna	29.52	749.8	30.27	768.9	19.8	— 6.8	70	SE			5		0			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.76	755 9	29.98	761.6	5.5	—14.7	97	SSE			1		0			0	0	Foggy.....	Royal Observatory
Furnes																			M. E. de Cae.
Maeseyck	29.88	759.0	30.01	762.2	19.0	— 7.2	79	ENE			2		0			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 31, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.80	756.9	29.90	759.4	35.6	2.0	65	WSW	6	2.7		2				0	0	Misty	W. Boswell.
Armagh, Observatory	29.76	755.9	30.00	762.0	28.0	— 2.2	86	WSW	1	0.4		10						Foggy	S. Call.
Bidston, Liverpool Obs'y			30.01	762.2	19.4	— 7.0	91	ESE	5	2.2		1						Misty	John Hartnup.
Bolton, Sharples	29.45	748.0	30.00	762.0	20.2	— 6.6	98	S	4	1.8								Foggy	Thomas Mackereth.
Bradford, Yorkshire	29.58	751.3	29.98	761.5	20.9	— 6.2	73	SE			1		10			0	0	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.02	762.5	30.04	763.0	81	27.2	70	NE			2		3					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			29.97	761.2	23.2	— 4.9	97	E			0.4		10					Overcast	John McLaren.
Chatham, School M. E.	29.85	758.2	29.99	761.7	27.2	— 2.7	91	NE			2		7					Gloomy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.70	754.4	29.93	760.2	27.8	— 2.3	85	NE			4		10					Overcast	The Staff.
Fort Napier, Natal	27.52	699.0	29.73	755.1	84.1	28.9	75	NE			1		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9	86	30.0	83	NE			1		5					D. clouds	C. E. Keane.
Galway, Queen's College			29.90	759.4	27	— 2.8	88	N			2		4					Blue sky	J. O'Donaghadue.
Gibraltar, Mediterranean	29.93	760.2	29.98	761.5	63.4	17.4	94	W			3		6					D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.75	755.6	29.96	761.0	25.2	— 3.8	99	NW			1		2					Dense fog	D. G. MacLean.
Greenwich, Royal Obs'y	29.81	757.2	29.99	761.7	27.5	— 2.5	80	ENE			3		8					D. clouds	The Staff.
Guernsey	29.62	752.3	29.84	757.9	33.5	0.8	84	NE			5		5					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.95	760.7	29.99	761.7	27.0	— 2.8	70	NE	14	6.3			9					Gloomy	The Met'g'l Office.
Leicester, Museum	29.70	754.4	29.98	761.5	20.2	— 6.6	97	NE			2		10					Misty	J. E. Carryer.
Malta, Mediterranean	30.01	762.2	30.09	764.3	63.0	17.2	80	E			2		7					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			29.97	761.2	72.0	22.2	96	NW			2		7					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.48	748.8	30.05	763.3	14.0	—10.0	100	ENE			1		10					Dense fog	Robert Pate.
Oxford, Radcliffe Obs'y	29.75	755.6	30.01	762.2	18.9	— 7.3	?	NNE			1		10					Overcast	The Staff.
Plymouth	29.86	758.4	29.93	760.2	25.2	— 3.8	81	NE			2		3					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.74	755.4	40	4.4	91	W	33	14.8			7					Showery	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.40	772.1	30.47	773.9	31.6	— 0.2	60	N			3		6			Blank		D. clouds	Serg't W. H. Lyne.
Sheffield	29.72	754.9	30.03	762.7	11.0	—11.7	100	Calm			0		10			0	0	Foggy	W. F. Cooper.
Silloth Rectory	29.96	761.0	29.99	761.7	24.6	— 4.1	50	Calm			0		10			0	0	Overcast	Rev. F. Redford, A. M.
Stonyhurst, Observatory			30.00	762.0	23.0	— 5.0	98	NNE	4	1.8			0					Misty	Rev. S. J. Perry.
Strathfield Turgiss	29.74	755.4	29.97	761.2	25.0	— 3.9	98	NE			1		0					Blue sky	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution			29.93	760.2	30	— 1.1	79	NE			1		0					Blue sky	W. Newcombe.
Valencia, Observatory	29.91	759.7	29.94	760.5	40.5	4.7	71	E	12	5.4			4					D. clouds	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	29.84	757.9	29.88	758.9	— 3.5	—19.7		NW	11	4.9		0	0			0	0	Clear	Hon. J. Ferguson.
Chatham, N. B.*	29.77	756.1	29.84	757.9	— 7	—21.7	92	W	1	0.4		0	0			0	0	Clear	G. A. Blair.
Charlottetown, P. E. Island	29.74	755.4	29.79	756.7	— 3	—19.4	100	W	10	4.5		0	0			0	0	Clear	H. J. Cundall, C. E.
Chicontime, Quebec					—17.9	—27.7		NW			1	4ck	0			0	0	Fair	Rev. V. A. Huard.
Cornwall, Ontario	29.81	757.2	30.02	762.5	15.0	— 9.4	93	W			1		10s			0	0	Cloudy	James Smith, M. A.
Dalhousie, N. B	29.78	756.4	29.81	757.2	— 6.5	—21.4		W			4	0	0			0	0	Clear	H. A. Johnson.
Father Point, Quebec*	29.95	760.7	29.97	761.2	— 4	—20.0	76	N	2	0.9		0	0			0	0	Clear	J. McWilliams.
Fredericton, N. B	29.92	760.0	29.99	761.7	— 6.9	—21.6	96	W	7	3.1		0	0			0	0	Clear	Prof. Harrison
Fort Garry, Manitoba*	29.42	747.3	30.37	771.4	— 8	—22.2	96	N	2	0.9		Haze	Haze			0	0	Hazy	James Stewart.
Granton, Ontario	28.96	735.6	30.16	766.1	15.5	— 9.2	91	W			1		10n			0	0	Cloudy	James Grant.
Halifax, N. S.*	29.78	756.4	29.93	760.2	1	—17.2	94	W	6	2.7		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario	29.74	755.4	30.16	766.1	17.1	— 8.3	85	SW			2	0	8ks			0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.73	755.1	30.10	764.5	17	— 8.3	84	SW	4	1.8			10s			0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	29.61	752.1	29.65	753.1	3.0	—16.1	86	N	1	0.4		2k	0	N		0	0	Fair	C. H. Rigby.
Montreal, Quebec*	29.80	756.9	30.01	762.2	14	—15.6	82	SW	16	7.2			10ks		NW	Inap.	Inap	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.28	743.7	30.02	762.5	21	— 6.1	93	W	12	5.4			10n		W	0.03	0.8	Light snow	Rev. R. Moseley.
Peterboro, Ontario	29.30	744.2	30.11	764.8	14.6	— 9.7	55	W			1	0	9k			0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.43	747.5	30.18	766.6	16	— 8.9	85	SW	5	2.2			10n			Inap.	Inap.	Cloudy	H. Morgan.
Port Stanley, Ontario	29.49	749.0	30.19	766.8	17	— 8.3	86	W	12	5.4			10n		W	Inap.	Inap.	Cloudy	M. Payne.
Quebec, Quebec*	29.65	753.1	30.01	762.2	— 4	—20.0	65	W			1		10n		W	0	0	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.50	749.3	30.00	762.0	2	—16.7	81	Calm	0	0		0	5s		W	0.07	1.8	Clearing	W. H. McIntyre.
St. Andrews	29.96	761.0	30.01	762.2	1	—17.2	91	NW	1	0.4		0	0			0	0	Clear	
St. John's, N. B	29.81	757.2	30.00	762.0	0.0	—17.8	100	NW	6	2.7		0	0			0	0	Clear	G. Murdock, C. E.
Saugeen, Ontario*	29.31	744.5	30.07	763.8	19	— 7.2	95	SW	17	7.6			10s			0.08	2.0	Cloudy	K. Stewart.
Stratford, Ontario	28.79	731.3	30.18	766.6	14.0	—10.0	94	SW	10	4.5			10s			0	0	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.61	752.1	29.65	753.1	1	—17.2	91	W	8	8.6		0	2ks		W	0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.74	755.4	30.15	765.8	16	— 8.9	97	W	10	4.5			10n			Inap.	Inap.	Cloudy	Magnetic Observatory.
Windsor, N. S	29.79	756.7	29.89	759.2	3.5	—15.8	100					1k	0	E		0	0	Clear	
Woodstock, Ontario	29.01	736.8	30.16	766.1	15.6	— 9.0	93	SW	11	4.9			10s			0.10	2.5	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*	29.93	760.2	30.00	762.0	15	— 9.4	70	NW	10	4.5		8k	0	NW		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.05	737.9	29.22	742.2	22	— 5.6	100	W	1	0.4		2k	2s			0.40	10.2	Fair	John Delany.
St. Pierre, N. F			29.28	743.7	15.8	— 9.0		NW			6					0	0		N. F. Land, Comd't.

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

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

Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.99	761.7	30.02	7625	85.0	29.4	55	S	21.4	9.6		0	2cs			0	0		The Staff, for D. Gill.
Cape St. Francis Lt. House	29.95	760.7			72.4	22.4	82	SW	10.4	4.6			7cs			0	0	Cloudy	John Duthie.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.41	772.4	30.43	773.0	33.1	0.6	78	NNE	1.8	0.8			0			0	0	Clear	M. Marc Dechevrens, S. J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.18	665.0	29.90	759 4	68.4	20.2	81	NE			2	9d		NE		0	0	Cloudy	Federico Maison.

DANISH SERIES.

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

Copenhagen	29.95	760.8	30.00	762.0	27.3	— 2.6	96	WSW	20	9			10					Foggy	
Fanöe	29.98	761.6	30.00	762.1	32.7	0.4	83	W			2		9						
Godthaab, Greenland	29.81	757.1	29.85	758.2	26.6	— 3.0	78	ENE			4		9						
Stykkisholm, Iceland	30.08	764.0	30.12	765.1	— 4.4	—20.2	86	NE			8		10						
Thorshavn	29.57	751.0	29.60	751.9	25.5	— 3.6	80	NE	18	8			10					Snowing	
Vestervig	29.80	756.8	29.89	759.2	34.3	1.3	100	SW			2		9						

FRENCH SERIES.

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

Agen, Normal School	29.14	740.1	29.80	757.0	43.5	6.4	88	SSE			2		10n	E	NE	0.110	2.8	Sprinkling	M. Labroue, Director.
Alençon	29.32	744.6	29.87	758.6	21.2	-6	95	N			3		10n		S	0	0	Misty	M. Nicot, Director.
Arras, Engineer School	29.69	754.1	29.97	761.1	19.4	—7.0	94	Calm	0	0									M. Klein, Commandant.
Avignon, Normal School	29.88	758.9	29.95	760.9	33.8	1	89	N			1		10					Snowy	M. Giraud, Director.
Bar-sur-Seine	29.32	744.8	29.91	759.6	32.0	0.0	98	SSE			1		10			0	0	Covered	M. Saillard, Director.
Beauvais, Normal School	29.65	753 0	29.92	759.9	20.8	—5.2	74	E			1		10			0	0	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.07	738.4	29.93	760.2	27.7	—2.4	100	ENE			2		10n			0	0	Covered	M. Gobin, Director.
Bordeaux, Observatory	29.44	747.8	29.71	754.6	46.0	7.8	89	S			1		10	W	SW	0.185	4.7	Covered	M. Rayet, Director.
Bourges, Normal School	29.18	741.2	29.76	755 8	32.4	0.2	97	W			2		5n		W			Snowing	M. Postel, Director.
Brest, Naval Observatory	29.59	751.6	29.84	757.8	30.2	—1.0	86	NNE			2		6		NE	0	0		M. de Rermaree, Dir.
Caen, Normal School	29.69	754.2	29.76	756.0	44.8	7.1	80	SW			1		10			0	0	Covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.63	752.6	29.97	761.1	23.0	—5.0		E			2		10			0	0	Covered	M. Jadot, Director.
Charleville, Normal School	29.41	747.0	29.96	760.9	25.5	—3.6	100	SSE			1		2			0	0	¼ covered	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.35	720.1	29.72	754.9	45.0	7.2	56	SSE			1		5			0.028	0.7		M. Alluard, Director.
Cluny, Normal School	29.06	738.0	29.93	760.2	28.0	—2.2	79	W			1		1		W	0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	29.09	738.9	30.03	762.8	14.7	—9.6		E			4		n		E	0	0		Dr. Coulet, Director.
Gap, Normal School	27.50	698.6	30.18	766.6	24.8	—4	55	E			1		10		S	0.31	8.	Snowing	M. Jeangirard, Director.
Gréasque, du. Rhone	28.84	732.5	29.98	761.5	36.0	2.2	87	SE			3		10		SE	0.04	1.	Snow & sleet	M. Kina, Director.
Grenoble, Normal School	29.17	741.0	29.99	761.7	26.2	—3.2		E			1		10n			0.217	5.50	Snowing	M. Ablard, Director.
Guéret, Normal School	28.11	714.0	29.75	755.6	40.1	4.5	78	SW			2					0	0		M. Rivoir, Director.
Lamballe, Normal School	29.46	748.2	29.74	755.4	26.2	—3.2	98	NNE			2		10		NNE	0	0	Covered	M. Ollitrault, Director.
Lescar, Normal School	29.22	742.3	29.92	760.0	33.4	0.8		SE					5		N	0.031	0.80	Cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.69	754.1	29.79	756 7	25.2	—3.8	87	N			1		10		NE			Snowing	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.84	732.5	29.92	759.9	26.1	—3.3	87	N			1		8					Snowing	M. André, Director.
Mans, Normal School	29.48	748.8	29.80	757.0	24.4	—4.2	95	N			3		10			0.12	3.	Snowing	M. Piboen, Director.
Marseille, Observatory	29.61	752.2	29.89	759.2	40.5	4.7	79	E			4		10		ESE	0.031	0.80		M. Stephan, Director.
Montlouis l'Instituteur	24.55	623.5	29.78	756.5	32.4	0.2	100	SW	11.2	5.0			10	W		0.031	0.8		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.84	757.9	29.95	760.8	34.5	1.4	100	N			2		10					Snowing	M. Galzin, Director.
Nancy, Normal School	29.20	741.6	30.02	762.6	16.9	—8.4	88	NE			1		10			0	0	Covered	M. Hasse.
Nantes, Observatory	29.61	752.2	29.78	756.3	23.7	—4.6	95	NE			2		10			0	0	Snowing	M. Larocque, Dir.
Nice	30.02	762.4	30.05	763.3	39.6	4.2	83	N			2		10	NE	N			Rain & snow	Capt. Boissière, Director.
Perpignan, Observatory	29.69	754.1	29.80	756.8	48.2	9.0	82	S	20.6	9.2			10	SE	SE	0.079	2.0		Dr. Fines.
Pic-du-Midi, Plantade	22.20	564.0			25.2	—3.8							10		SW	0.075	1.9	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.85	732.7	29.95	760.8	26.6	—3.0	87	Calm			0		10					Snowing	M. Tallieu.
Puy de Dôme O s'y, Summit	24.80	629.8			28.0	—2.2	94	SSW			4		8k			0.071	1.8	Foggy	M. Alluard, Director
Rochefort, Naval Obs'y	29.66	753.4	29.69	754.2	37.2	2.9	93	E			2		10			0.63	16.	Raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.48	748.8	29.70	754.4	33.4	0.8	96	NE			1		10			0.12	3.	Snowing	M. Mouillot, Director.
Rodez, Normal School	27.65	702.3	29.87	758.7	34.5	1.4	78	E			4		10		E			Rain & snow	M. Richard, Director.
Rouen, Normal School	29.78	756.3	29.86	758.5	27.7	—2.4	80	NE			1		10		E	0	0	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.69	754.1	29.85	758.1	18.7	—7.4	94	E			1		10		E	0	0	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.69	754.2	29.85	758.4	28.0	—2.2	82	ESE			1		10						M. Renou, Director.
Toulouse, Observatory	29.09	738.8	29.81	757.1	44.4	6.9	91	SSE			4		10			0	0	Covered	M. Bailland, Director.
Tours	29.52	749.8	29.72	751.8				E			1		10			0	0	Snowy	M. de Tastes.
Versailles, Observatory	29.35	745.6	29.85	758.1	23.7	—4.6	90	E			1					0	0		Dr. A. Bérigny, Director.
Sun-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	29.21	742.0	30.08	763.9	12.6	—10.8	80	NW			5		3k	NW		0	0		Prof. Dr. Hoh.
Berlin	29.98	761.6	30.17	766.3	19.0	— 7.2	76	SE			1		0			0	0		Prof. Dr. Arndt.
Breslau	29.71	754 7	30.25	768.3	23.7	— 4.6	65	SSE			3		0			0	0		Royal University Obs'y.
Carlsruhe	29.62	752.3	30.08	764.0	18.7	— 7.4	66	N			1		0			0	0		Albert Senz.
Cassel	29.47	748.4	30.08	764.0	3.9	—15.6	67	E			0		0			0	0		Dr. H. Möhl.
Frankfort on the Main	29.81	757.1	30.20	767.1	18.5	— 7.5	47	NE			2		1			0	0		Physical Society.
Friedrichshafen	28.55	725.2	30.11	764.9	11.5	—11.4	50	NNW			3		4	W		0.043	1.1		Chief Telegrapher Wilhelm.
Hamburg	30.05	763.3	30.12	765.1	12.6	—10.8	76	SE			1		0			0	0		Dr. R. Kleeman.
Kiel	30.08	764.0	30.10	764.4	12.9	—10.6	87	Calm			0		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.72	755.0	30.18	766.6	15.1	— 9.4	69	S			1		0			0	0		Prof. Dr. Bruhns.
Magdeburg	29.91	759.7	30.15	765.9	11.7	—11.3	82	S			1		0			0	0	Foggy	Dr. Assmams.
Memel	29.95	760.8	30.00	762.0	31.3	— 0.4	72	W			6		10n						Reinbrecht & Issermann.
Munich	28.14	714.8	30.00	762.0	12.7	—10.7	71	N			1		1			0	0		Central Station.
Neufahrwasser	30.16	766.0	30.17	766.4	23.7	— 4.6	63	SSW			1		2			0.016	0.4		A Lothes.
Neustadt, Palatinate	29.41	747.0	29.94	760.4	18.0	— 7.8		ENE			1		0			0	0		Dicknether.
Stuttgart	29.04	737.5	30.00	761.9	19.4	— 7.0	59	N			1		0			0.016	0.4		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Wassenburg, Bavaria	28.47	723.2	30.01	762.2	22.5	— 5.3	74	Calm			0		1			0	0		Prof. Kemlein.
Wustrow	30.09	764.2	30.11	764.8	16.5	— 8.6	100	SE			3s		3s			0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Velocity.		Force	Clouds. Amount and kind.		Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.04	762.9	30.45	773.3	40.6	4.8	.....	NE	.....	.....	2.0	.....	10	.....	.....	.....	.....	Covered.....	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.04	763.1	30.10	764.4	77.7	25.4	34	WSW	6.0	2.7	.....	.....	0	.....	.....	0	0	Blue sky.....	
Deesa	29.58	751.2	30.05	763.3	83.4	28.6	17	WSW	6.4	2.9	.....	.....	0	.....	.....	0	0	Blue sky.....	
Bombay	29.97	761.2	30.01	762.2	83.6	28.7	52	W	10.0	4.5	.....	.....	0	.....	.....	0	0	Blue sky.....	
Poona, Yarrowda	28.15	714.9	30.00	762.0	82.2	27.9	19	NE	7.0	3.1	.....	.....	0	.....	.....	0	0	Blue sky.....	
Belgaum	27.45	697.2	29.99	761.8	77.8	25.4	23	NE	7.0	3.1	.....	.....	0	.....	.....	0	0	Blue sky.....	
Lahore	29.35	745.6	30.12	765.0	70.7	21.5	33	Calm	0.6	0.3	.....	.....	0	.....	.....	0	0	Blue sky.....	
Roorkee	29.18	741.3	30.11	764.8	68.8	20.4	35	Calm	1.2	0.5	.....	.....	0	.....	.....	0	0	.....	
Agra	29.58	751.3	30.15	765.8	78.3	25.7	24	W	3.1	1.4	.....	.....	0	.....	.....	0	0	.....	
Nagpur	29.02	737.2	30.08	764.0	77.2	25.1	22	ENE	2.8	1.2	.....	.....	0	.....	.....	0	0	Blue sky.....	
Jubbulpore	28.74	729.9	30.14	765.4	72.0	22.2	25	Calm	1.9	0.8	.....	.....	0	.....	.....	0	0	Blue sky.....	
Lucknow	29.73	755.2	30.12	765.1	70.2	21.2	27	N	1.0	0.4	.....	.....	0	.....	.....	0	0	Blue sky.....	
Allahabad	29.80	756.9	30.13	765.2	66.8	19.3	54	Calm	1.1	0.5	.....	.....	0	.....	.....	0	0	Blue sky.....	
Patna	29.91	759.8	30.10	764.6	68.6	20.3	58	W	0.7	0.3	.....	.....	0	.....	.....	0	0	Blue sky.....	
Hazaribagh	28.04	712.2	30.12	765.0	64.8	18.2	36	N	4.0	1.8	.....	.....	0	.....	.....	0	0	Blue sky.....	
Cuttack	30.00	762.0	30.08	764.1	71.9	22.1	51	NNE	1.2	0.5	.....	.....	0	.....	.....	0	0	Blue sky.....	
Calcutta, Alipore	30.04	763.1	30.06	763.6	68.2	20.1	58	NE	1.0	0.4	.....	.....	0	.....	.....	0	0	Blue sky.....	
Goalpara	29.65	753.2	30.07	763.7	70.8	21.6	54	Calm	1.8	0.8	.....	.....	0	.....	.....	0	0	Blue sky.....	
Chittagong	29.96	760.9	30.07	763.8	70.8	21.6	68	Calm	3.4	1.5	.....	.....	0	.....	.....	0	0	Blue sky.....	
Sibsagar	29.77	756.2	30.12	765.1	62.9	17.2	80	NE	1.1	0.5	.....	.....	0	.....	.....	0	0	Blue sky.....	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.88	759.0	30.31	769.9	31.1	— 0.5	60	Calm	0	0	.....	.....	6	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.79	756.6	30.34	770.5	25.3	— 3.7	82	SSE	2.5	1.1	.....	.....	10	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	30.20	767.1	30.32	770.0	29.3	— 1.5	86	NNE	8.0	3.6	.....	.....	10	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.34	745.1	30.28	769.2	30.7	— 0.7	82	E	3.1	1.4	.....	.....	10	.....	.....	0	0	.....	Prof. P. F. Denza.
Genoa	30.00	762.1	30.20	767.1	28.8	— 1.8	79	N	13.0	5.8	.....	.....	10	S	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.29	718.6	30.30	769.7	25.0	— 3.9	84	W	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	30.22	767.6	30.27	768.9	30.9	— 0.6	79	N	4.3	1.9	.....	.....	10	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.90	759.4	30.16	766.1	34.3	1.3	81	NE	.....	.....	2	.....	10	.....	.....	0	0	.....	Cav. F. Meucci.
Leghorn	30.04	763.0	30.13	765.2	30.4	— 0.9	.....	ENE	16.8	7.5	.....	.....	10	.....	.....	0.197	5.0	.....	Prof. P. Monte.
Rome	29.88	759.0	30.06	763.5	34.3	1.3	92	NNE	12.5	5.6	.....	.....	10	.....	.....	0.106	2.7	.....	Prof. P. S. Ferrari.
Lecce	30.04	762.9	30.29	769.4	43.3	6.3	47	SSE	4.9	2.8	.....	.....	7	.....	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.36	745.8	30.27	768.8	38.5	3.6	73	SW	0.7	0.3	.....	.....	10	WSW	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.65	753.1	29.84	758.0	62.8	17.0	70	SE	.....	.....	4	.....	8	S	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.74	755.4	29.99	761.7	64.4	18.0	50	SW	16.1	7.2	.....	.....	9	.....	.....	0	0	.....	Prof. G. Cacciatore.
Syracuse	30.14	765.6	30.19	766.7	54.7	12.6	88	ESE	28.0	12.5	.....	.....	10	ESE	.....	0.228	5.8	.....	Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R	29.61	752.0	30.16	766.0	37.4	3.0	62	N	6.3	2.8	.....	.....	10k	N	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.09	560.9	.....	.....	4.6	—15.2	68	SW	.....	.....	.....	.....	4	.....	.....	0	0	.....	P. F. Denza.
Valdobbia	21.93	558.1	.....	.....	7.3	—13.7	92	N	.....	.....	.....	.....	10	.....	.....	‖2.756	70.0‖	.....	

‖ Unmelted snow.

JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	30.04	763.0	30.06	763.5	27.1	— 2.7	72	N	3.9	1.7	.....	.....	4n	.....	.....	0.245	6.22	Snowing.....	K. Sasaki.
Kioto	29.67	753.6	29.86	758.4	25.6	— 3.0	87	.....	.....	.....	.....	.....	2n	.....	.....	‖.080	2.03	Snowing	.....
Nagasaki, I. M. Obs'y	29.94	760.5	30.15	765.8	33.2	0.7	83	N	13.8	6.2	.....	.....	9s	.....	.....	0.110	2.79	Cloudy.....	S. Takehayashi.
Tokei Obs'y, Yeddo	29.55	750.6	29.62	752.3	27.7	— 2.4	27	NW	11.7	5.2	.....	0	0	.....	.....	0	0	Clear.....	The Staff.
Wakayama	29.84	757.9	29.90	759.4	30.2	— 1.0	65	N	12.0	5.4	.....	.....	10ck	.....	.....	0.012	0.30	Cloudy..	S. Iwahashi.

MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.72	754.9	29.91	759.7	81.7	27.6	65	NNE	10.5	4.7	.....	6	1	S	.....	0.02	0.5	Cloudy.....	A. N. Figon.

MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Colima	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. Banda, C. E.
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanaxuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Leal.
Mazatlan	29.68	753.9	29.95	760.6	62.5	16.9	67	NNW	.....	.....	1	6cs	0	.....	.....	0	0	½ Cloudy...	F. Quijano, C. E.
Mexico, Central Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff.
Morelia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Fena, M. D.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Castrillon.

NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	30.01	762.2	30.01	762.2	12.9	—10.6	.....	ENE	.....	.....	2	.....	.....	.....	.....	0.020	0.5	.....	.....
Groningen	.....	.....	.....	.....	11.7	— 11.3	.....	ESE	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Helder	30.08	764.0	30.03	764.0	16.0	— 8.9	.....	SSE	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.00	762.1	30.00	762.1	12.2	—11.0	90	E	.....	.....	2	.....	.....	.....	.....	0	0	.....	.....
Utrecht	30.01	762.2	30.06	763.4	17.1	— 8.3	74	ESE	.....	.....	2	.....	0	.....	.....	0	0	Clear.....	H. van der Brink

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorologic al Institute at Christiania.																			
Bergen	29.56	750.9	29.63	752.5	39.2	4.0	87	SW	18.3	8.2			10			0.197	5.0	Light rain	
Christiania	29.47	748.5	29.62	752.4	27.1	— 2.7	87	NNE	0	0			10			0	0	Light fog	
Gjæsvær	29.24	742.6	29.26	743.2	12.6	—10.8		WNW			4		10						
Lodingen	29.22	742.3	29.27	743.5	14.7	— 9.6	81	ESE			4		8			0.098	2.5		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	28.87	733 2	29.02	737.2	55.8	13.2	93	NW	11.9	5.3			7			0.157	4.0		Dr. J. A. Sampaio.
Campo Major	28.92	734.5	29.93	760.2	52.9	11.6	88	ESE	8.1	3.6			9			0.287	7.3		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.89	759.2	29.98	761.5	64.6	18.1	78	W	8.7	3.9			9			0.122	3.1		Capt. D. A. de Cunha.
Lisbon, Observatory	29.56	750.8	29.92	760.0	55.0	12.8	86	E	1.8	0.8			8	SW		0	0		The Staff.
Ponta Delgada, Azores	29.10	739.2	29.17	741.0	58.3	14.6	78	SW	43.0	19.2			10			1.087	27.6		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.31	744.4	30.53	775.5	— 1.8	—18.8	82	Calm	0	0			3						Capt. Lasarew.
Archangel	29.42	747.3	29.44	747.8	0.7	—17.4	82	WSW	18	8			5ks						Capt. Sselliwerstow.
Astrakhan	30.02	762.4	29.93	760.3	18.5	— 7.5	92	N	16	7			10n			Blank		Heavy cl'ds.	Capt. Wisgnow.
Barnaul	30.00	762.1	30.56	776.3	6.6	—14.1	83	W	2	1			1						Meteorological Obs'y.
Dorpat	29.48	748.9	29.74	755.3	31.3	— 0.4	94	SW	11	5			10n					Light snow.	Observatory.
Ekaterinburg	29.15	740.4	30.24	768.0	— 4.9	—20.5	63	WSW	9	4			10s						Meteorological Obs'y.
Kasan	29.86	758.4	30.17	766.2	— 2.9	—19.4	86	S	11	5		6c							Observatory.
Kertch	30.39	772.0	30.41	772.5	14.4	— 9.8	87	NW	7	3			10						Lagorio.
Kieff	29.63	752.6	30.33	770.4	12.4	—10.9	86	SSW	4	2		c;ck	9cs;ks						Observatory.
Krotkowo, N. 68°47', E. 48°34'																			Cand. Fatjanow.
Lugan	30.10	764.5	30.33	770.3	6.1	—14.4	74	NNW	13	6			9					Light clouds	Meteorological Obs'y.
Moscow	29.45	748.0	30.04	763.1	13.6	—10.2	73	SW	13	6			8ks						Meteorological Obs'y.
Nertchinsk	27.76	705.2	30.40	772.1	—14.1	—25.6	85						0						Meteorological Obs'y.
Nikolaiev	30.39	771.9	30.46	773.7	9.0	—12.8	76	NNE	9	4			0						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.99	761.7	30.08	763.9	—19.1	—28.4	69	W	4	2			5k						Lieut. Iwanow.
Nukuss	29.70	754.4	29.94	760.4	46.8	8.2	78	SE	4	2		6ck							Dr. Dobrochotow.
Pekin, China	30.26	768.7	30.41	772.3	21.2	— 6.0	82	Calm	0	0			0						Physical Observatory.
St. Petersburg	29.63	752.5	29.64	752.9	20.1	— 6.6	89	SSE	7	3			10n						Central Physical Obs'y.
Tashkend, Laboratory																			Teich, A. M.
Tiflis	28.48	723.4	29.95	760.8	36.1	2.3	52	NW	45	20			5ks						Physical Observatory.
Warsaw	29.85	758.3	30.31	769.9	21.2	— 6.0	69	SW	7	3			0						Astronomical Obs'y.
Wilna	29.68	753.8	30.12	765.1	23.5	— 4.7	87	WSW	4	2			9						Berg, Assistant.
Yeniseisk	30.28	769.0	30.61	777.5	—13.5	—25.3	73	Calm	0	0			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.97	761.2	34.0	1.1	78	W			2		0			0	0	Clear.	Andrew Gibb.
Monach Lt. House, Hebrides			29.83	757.7	42	5.6	91	WSW			4	5	5	SW		0.2	5.		J. Youngclause.
North Unst, Shetland Isl'ds			29.55	750.6				W			6		10			Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.75	755.6	29.85	758.3	53.6	12	80	WSW	3.6	1.6			6			1.443	36.64		Antonio Rave, Director.
Bilbao, Met. Obs'y	29.80	756.9	29.86	758.4	54.7	12.6	52	W	2.6	1.17		4	2	E		0.035	0.9	Cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.88	682.8			38.3	3.5	74	SW	5.0	2.25			6			0.276	7.0	Cloudy	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.66	702.6	29.92	760.0	48.0	8.9	73	SW	21.7	9.7		0	7			0.609	15.4	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.78	756.3	29.93	760.1	64.0	17.8	73	NE	1.6	0.7		0	2			0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.90	734.0	29.80	757.0	47.1	8.4	82	SW	0	0			8			0.012	0.3	Almost cov'd	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	30.02	762.4	30.08	764.1	72.0	22.2	89	N	21.5	9.6			10n		NNE	0.457	11.6	Cloudy	Benito Vines, S. J.
Manilla, Phillippine Islands	30.01	762.3	30.06	763.6	73.5	23.1	59	E	2.9	1.3						0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.94	760.5	30.04	763.0	63.0	17.2	83	SW	7.3	3.3		3	4	SW	SW	0.135	3.4		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.00	762.0	30.09	764.3	72.3	22.4	95	S	0	0		5k	4kn	SE	SE	0.020	0.50	Raining	Enrique Gadea, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.45	748.1	29.49	749.1	— 2.2	—19.0	100	E			2		10			0	0		
Umea	29.32	744.7	29.37	746.0	15.8	— 9.0	100	Calm			0		10			0.071	1.8		
Hernösand	29.34	745.1	29.39	746.4	25.7	— 3.5	72	SW			2		5			0.020	0.5		
Stockholm	29.47	748.6	29.65	753.1	28.8	— 1.8	68	WSW			2		1			0	0		
Wisby	29.72	754.9	29.78	756.4	32.4	0.2	92	WSW			6		0			0	0		
SUB-SERIES.																			
Upsala	29.52	749.9	29.61	752.1	23.9	— 4.5	88	SW	15.2	6.8			4	W		0	0		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.52	724.5	30.04	763.1	24.3	— 4.3	87	SSW			1		10					Snowing	The Observatory.
Zurich	28.31	719.1	30.10	764.4	14.7	— 9.6	77	N			3		5			0.071	1.8	Cloudy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —2.8 mm.; Ther. —6°.2 cent.; Hum. +10 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.53	775.5	30.9	— 0.6	85	N	17	7.5			8		N	0	0		The Observatory.
Valona			30.18	766.6	43.7	6.5		NE			2		5			0	0	Cloudy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.11	764.8	60.1	15.6	55	W			3		8n		W	0.075	1.91		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum't'l error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	30.10	764.5	30.19	766.8	17	— 8.3	91	W	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Alpena, Michigan	29.35	745.5	30.05	763.3	10	—12.2	79	SW	6	2.7	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Attou Id., Alaska	29.08	738.6	.....	.....	35	1.7	100	S	4	1.8	.....	0	8s	.....	SW	0.09	2.3	.....	.....
Atlanta, Georgia	29.04	737.6	30.27	768.8	26	— 3.3	76	NW	9	4.0	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Atlantic City, New Jersey	30.18	766.6	30.20	767.1	16	— 8.9	82	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Augusta, Georgia	30.12	765.0	30.34	770.6	32	0.0	89	Calm	0	0	.....	.....	10s	.....	Calm	0.40	10.2	Cloudy	
Baltimore, Maryland	30.18	766.6	30.23	767.8	25	— 3.9	75	NW	3	1.3	.....	.....	10s;fg	.....	Calm	0	0	Cloudy	
Barnegat, New Jersey	30.15	765.8	30.17	766.3	14	—10.0	82	NW	17	7.6	.....	0	0	.....	.....	0	0	Clear	
Benton, Montana	27.77	705.4	.....	.....	1	—17.2	100	NE	20	8.9	.....	.....	10n	.....	Calm	0.16	4.1	Light snow	
Bismarck, Dakota	28.41	721.6	30.27	768.8	— 2	—18.9	.....	Calm	0	0	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Boise City, Idaho	27.16	689.8	30.12	765.0	20	— 6.7	85	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Boston, Massachusetts	29.96	761.0	30.13	765.3	6	—14.4	76	W	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Brackettville, Texas	29.02	737.1	30.16	766.1	27	— 2.8	76	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Brownsville, Texas	30.20	767.1	30.25	768.3	45	7.2	76	NE	2	0.9	.....	10cs	0	Calm	.....	0	0	Cloudy	
Buffalo, New York	29.41	747.0	30.17	766.3	15	— 9.4	82	SW	7	3.1	.....	.....	10n	.....	Calm	0.04	1.0	Light snow	
Burlington, Vermont	29.83	757.7	30.15	765.8	13	—10.6	62	S	11	4.9	.....	.....	10s	.....	SW	0	0	Cloudy	
Cairo, Illinois	30.01	762.2	30 43	772.9	26	— 3.3	75	Calm	0	0	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Campo, California	27.30	693.4	29.87	758.7	45	7.2	92	SW	10	4.5	.....	.....	10n	.....	SW	0.42	10.7	Light rain	
Camp Thomas, Arizona	27.16	689.8	.....	.....	27	— 2.8	64	Calm	.....	.....	0	0	5s	.....	Calm	0	0	Fair	
Cape Henry, Virginia	30.19	766.8	30.21	767.3	29	— 1.7	78	N	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Cape May, New Jersey	30.17	766.3	30.20	767.1	21	— 6.1	71	N	25	11.2	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Castroville, Texas	29.45	748.0	30.22	767.6	23	— 5.0	60	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Cedar Keys, Florida	30.25	768.3	30.28	769.1	38	3.3	91	NW	14	6.3	.....	.....	10s	.....	Calm	1.12	28.2	Cloudy	
Champaign, Illinois	29.42	747.3	30.28	769.1	21	— 6.1	71	SW	5	2.2	.....	.....	10s	.....	SW	0.06	1.5	Cloudy	
Charleston, S. Carolina	30.21	767.3	30.27	768.8	33	0.6	89	NW	8	3.6	.....	.....	10s	.....	NW	0.75	19.1	Threatening	
Charlotte, N. Carolina	29.36	745.7	30.23	767.8	26	— 3.3	88	W	4	1.8	.....	2cs	Fog	Calm	Calm	Inap.	Inap.	Fair	
Chattanooga, Tennessee	29.49	749.0	30.35	770.9	26	— 3.3	75	NW	9	4.0	.....	2k;ks	0	NW;C	.....	0	0	Fair	
Cheyenne, Wyoming	23.95	608.3	29.89	759.2	10	—12.2	58	N	2	0.9	.....	0	0	.....	.....	0.03	0.8	Clear	
Chicago, Illinois	29.47	748.5	30.22	767.6	20	— 6.7	70	W	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
Chincoteague, Virginia	30.20	767.1	30.22	767.6	21	— 6.1	86	NW	18	8.0	.....	1k	0	Calm	.....	0	0	Clear	
Cincinnati, Ohio	29.64	752.8	30.34	770.6	26	— 3.3	75	SW	6	2.7	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Cleveland, Ohio	29.45	748.0	30.24	768.1	19	— 7.2	85	SW	8	3.6	.....	.....	10n	.....	SW	Inap.	Inap.	Light snow	
Coleman City, Texas	28.47	723.1	30.28	769.1	24	— 4.4	61	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Columbus, Ohio	29.38	746.2	30.29	769.4	22	— 5.6	86	W	8	3.6	.....	.....	10s	.....	W	0.01	0.3	Cloudy	
Concho, Texas	28.20	716.3	29.97	761.2	27	— 2.8	64	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Corsicana, Texas	29.86	758.4	30.37	771.4	28	— 2.2	66	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Davenport, Iowa	29.58	751.3	30.28	769.1	14	—10.0	82	NW	8	3.6	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Dayton, Washington T'y	28.19	716.1	29.56	761.0	18	— 7.8	84	Calm	0	0	.....	.....	Fog	.....	Calm	0	0	Dense fog	
Deadwood, Dakota	25.41	645.4	.....	.....	6	—14.4	76	SW	4	1.8	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
Decatur, Texas	29.02	737.1	30.28	769.1	29	— 1.7	78	SE	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Delaware Breakwater, Del.	30.17	766.3	30.20	767.1	23	— 5.0	86	NW	25	11.2	.....	2k	0	NW	.....	0	0	Clear	
Denison, Texas	29.46	748.3	30.32	770.1	26	— 3.3	88	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Denver, Colorado	24.73	628.1	29.95	760.7	14	—10.0	72	S	1	0.4	.....	.....	10n	.....	Calm	0.03	0.8	Light snow	
Des Moines, Iowa	29.34	745.2	30.30	769.6	18	— 7.8	84	NW	3	1.3	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Detroit, Michigan	29.47	748.5	30.19	766.8	18	— 7.8	84	SW	7	3.1	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
Dodge City, Kansas	27.47	697.7	29.97	761.2	12	—11.1	61	SW	1	0.4	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Dubuque, Iowa	29.50	749.3	30.27	768.8	12	—11.1	80	SW	9	4.0	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Duluth, Minnesota	29.36	745.7	30.09	764.3	11	—11.7	80	S	4	1.8	.....	0	2s	.....	Calm	0	0	Clear	
Eagle Pass, Texas	29.47	748.5	30.26	768.6	26	— 3.3	75	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Eagle Rock, Texas	25.16	639.0	29.81	757.2	— 8	—22.2	58	N	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Eastport, Maine	29.94	760.5	30.01	762.2	4	—15.6	74	W	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Edinburg, Texas	.....	.....	.....	.....	46	7.8	87	SE	.....	.....	1	.....	10s	.....	Calm	0	0	Cloudy	
El Paso, Texas	25.17	664.7	.....	.....	22	— 5.6	72	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Erie, Pennsylvania	29.43	747.5	30.20	767.1	20	— 6.7	85	SW	6	2.7	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Escanaba, Michigan	29.34	745.2	30.05	763.5	6	—14.4	76	S	4	1.8	.....	5k	2s	Calm	Calm	0	0	Cloudy	
Florence, Arizona	28.42	721.9	30.02	762.5	42	5.6	74	SE	3	1.3	.....	.....	10ks	.....	SW	0	0	Cloudy	
Fort Apache, New Mexico	24.84	630.9	30.29	769.4	35	1.7	19	SE	6	2.7	.....	2c	0	Calm	.....	0	0	Fair	
Fort Assinniboine, Montana	27.73	704.3	.....	.....	0	—17.8	70	NW	22	9.8	.....	.....	10s	.....	NW	0.01	0.3	Cloudy	
Fort Bennett, Dakota	28.63	727.2	.....	.....	3	—16.1	73	NW	5	2.2	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Fort Buford, Dakota	28.26	717.8	30.34	770.6	2	—16.7	100	W	5	2.2	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy	
Fort Custer, Montana	27.27	692.6	.....	.....	4	—15.6	74	SW	7	3.1	.....	.....	10s	.....	Calm	0.25	6.3	Cloudy	
Fort Davis, Texas	25.11	637.8	30.07	763.8	30	— 1.1	89	W	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Fort Elliott, Texas	27.27	692.6	29.76	755.9	9	—12.8	36	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Gibson, Indian T'y	29.73	755.1	30.32	770.1	17	— 8.3	83	E	8	3.6	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Fort Grant, Arizona	25.06	636.5	29.86	758.4	37	2.8	31	N	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Griffin, Texas	28.80	731.5	30.16	766.1	27	— 2.8	64	SE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Fort Keogh, Montana	27.83	706.9	.....	.....	3	—16.1	100	NW	8	3.6	.....	.....	10n	.....	Calm	0.07	1.8	Light snow	
Fort Macon, North Carolina	30.20	767.1	30.21	767.3	30	— 1.1	78	N	16	7.2	.....	0	0	.....	.....	0.25	6.3	Clear	
Fort Missoula, Montana	26.96	684.8	.....	.....	12	—11.1	80	E	26	11.6	.....	5k	0	Calm	.....	0	0	Fair	
Fort McKavett, Texas	27.84	707.1	29.88	758.9	27	— 2.8	76	SW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Fort Shaw, Montana	26.90	683.2	.....	.....	— 1	—18.3	100	N	22	9.8	.....	10cs	0	Calm	.....	0.19	4.8	Cloudy	
Fort Sill, Indian Territory	28.90	734.0	30.08	764.0	27	— 2.8	76	Calm	0	0	.....	0	0	.....	.....	.....	.....	Clear	
Fort Stevenson, Dakota	28.43	722.1	.....	.....	— 4	—20.0	82	N	6	2.7	.....	.....	10ks	.....	N	0	0	Cloudy	
Fort Verde, Arizona	.....	.....	.....	.....	35	1.7	80	SW	.....	.....	1	.....	10s	.....	S	0	0	Cloudy	
Fredericksburg, Texas	28.45	722.6	30.13	765.3	25	— 3.9	75	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Galveston, Texas	30.30	769.6	30.34	770.6	43	6.1	67	E	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Grand Haven, Michigan	29.46	748.3	30.15	765.8	23	— 5.0	86	W	20	8.9	.....	.....	10s	.....	W	0.03	0.8	Cloudy	
Hatteras, North Carolina	30.16	766.1	30.18	766.6	32	0.0	79	N	22	9 8	.....	0	5ks	.....	N	0.19	4.8	Fair	
Helena, Montana	25.19	665.2	.....	.....	— 3	—19.4	100	NW	18	8.0	.....	.....	10n	.....	Calm	0.18	4.6	Light snow	
Henrietta, Texas	29.18	741.1	30.18	766.6	30	— 1.1	68	S	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Indianapolis, Indiana	29.45	748.0	30.29	769.4	20	— 6.7	77	NW	4	1.8	.....	.....	10s	.....	Calm	Inap.	Inap	Cloudy	
Indianola, Texas	30.30	769.6	30.33	770.4	39	3.9	91	N	9	4.0	.....	2k	0	W	.....	0	0	Fair	
Jacksboro, Texas	29.03	737.3	30.23	767.8	33	0 6	61	S	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Jacksonville, Florida	30.25	768.3	30.30	769.6	39	3.9	82	NW	8	3.6	.....	.....	10s	.....	Calm	1.40	35.6	Cloudy	
Keokuk, Iowa	29.59	751.6	30.29	769.4	22	— 5.6	79	W	5	2.2	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Key West, Florida	30.10	764.5	30.13	765.3	65	18.3	84	N	24	10.7	.....	.....	10s	.....	N	0.65	16.5	Cloudy	
Kittyhawk, North Carolina	30.20	767.1	30.23	767.8	31	— 0.6	69	N	10	4.5	.....	.....	10ks	.....	N	0.01	0.3	Cloudy	
Knoxville, Tennessee	29.26	743.2	30.34	770.6	27	— 2.8	76	N	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
La Crosse, Wisconsin	29.42	747.3	30.24	768.1	5	—15.0	75	S	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
La Mesilla, New Mexico	26.05	661.7	30.20	767.1	19	— 7.2	84	Calm	0	0	.....	1c	0	Calm	.....	0	0	Clear	
Laredo, Texas	29.81	757.2	30.18	766.6	37	2.8	81	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Leavenworth, Kansas	29.42	747.3	30.34	770.6	18	— 7.8	84	S	3	1.3	.....	.....	10s	.....	.....	0.02	0.5	Cloudy	
Lewiston, Idaho	29.30	744.2	30.00	762.0	18	— 7.8	67	NE	3	1.3	.....	0	2s	.....	NE	0	0	Clear	
Little Rock, Arkansas	30.08	764.0	30 42	772.7	23	— 5.0	86	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Los Angeles, California	29.55	750.6	29.89	759.2	48	8.9	85	NE	4	1.8	.....	0	4s	.....	Calm	0	0	Fair	
Louisville, Kentucky	29.72	754.9	30.32	770.1	28	— 2.2	77	SW	6	2.7	.....	.....	10s;sm	.....	C;W	Inap.	Inap.	Cloudy	
Lynchburg, Virginia	29.54	750.3	30.27	768.8	26	— 3.3	75	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Madison, Wisconsin	29.12	739.6	30.20	767.1	13	—10.6	81	W	7	3.1	.....	.....	10s	.....	Calm	Inap.	Inap	Cloudy	
Marquette, Michigan	29.24	742.7	30.01	762.2	12	—11.1	61	W	10	4.5	.....	5ck	0	W	.....	0	0	Fair	
Mason, Texas	28.54	724.9	30.41	772.4	31	— 0.6	79	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Memphis, Tennessee	30.08	764.0	30.45	773.4	23	— 5.0	86	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.41	747.0	30.20	767.1	13	—10.6	81	W	11	4.9	.....	2ck	5s	W	Calm	Inap.	Inap.	Fair	
Mobile, Alabama	30.31	769.9	30.39	771.9	29	— 1.7	78	NW	4	1.8	.....	0	2s	.....	N	0.04	1.0	Clear	
Montgomery, Alabama	30.15	765.8	30.41	772.4	29	— 1.7	89	N	4	1.8	.....	0	0	.....	.....	0.35	8.9	Clear	
Morgantown, W. Virginia	29.22	742.2	30.28	769.1	26	— 3.3	75	SW	3	1.3	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy	
Moorhead, Minnesota	29.19	741.4	30.28	769.1	— 5	—20.6	63	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Mt. Washington, N. H.	23.26	590.8	29.62	752.3	— 9	—22.8	100	NW	66	29.5	.....	.....	Fog	.....	NW	0	0	Dense fog	
Nashville, Tennessee	29.81	757.2	30.38	771.0	27	— 2.8	76	W	2	0.9	.....	.....	10ks	.....	W	0	0	Cloudy	
New Haven, Connecticut	30.04	763.0	30.17	766.3	8	—13.3	78	N	9	4.0	.....	0	0	.....	.....	0	0	Clear	
New London, Connecticut	30.10	764.5	30.16	766.1	11	—11.7	60	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
New Orleans, Louisiana	30.30	769.0	30.36	771.1	40	4.4	65	N	4	1.8	.....	0	0	.....	.....	0.01	0.3	Clear	
Newport, Rhode Island	30.05	763.3	30.11	764.8	17	— 8.3	83	NW	6	2.7	.....	0	Haze	.....	.....	0	0	Clear	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	30.10	764.5	30.13	765.3	21	— 6.1	71	NW	12	5.4	.....	0	0	.....	.....	0	0	Clear	
New York, New York	30.00	762.0	30.19	766.8	16	— 8.9	83	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Norfolk, Virginia	30.17	766.3	30.23	767.8	29	— 1.7	67	N	4	1.8	.....	5ck	0	N	.....	0	0	Fair	
North Platte, Nebraska	27.15	689.6	29.95	760.7	11	—11.7	80	SW	7	3.1	.....	2c	0	Calm	.....	0	0	Clear	
Olympia, Washington T'y	29.62	752.3	29.66	753.4	36.0	2.2	90	S	1	0.4	.....	.....	1on	.....	Calm	0.06	1.5	Light rain	
Omaha, Nebraska	29.06	738.1	30.25	768.3	18	— 7.8	84	Calm	0	0	.....	.....	1on	.....	Calm	0.01	0.3	Light snow	
Oswego, New York	29.80	756.9	30.14	765.5	20	— 6.7	70	SW	10	4.5	.....	.....	1on	.....	Calm	0.16	4.1	Light snow	
Pensacola, Florida	30.37	771.4	30.40	772.1	30	— 1.1	89	N	5	2.2	.....	1k	0	N	.....	0.06	1.5	Clear	
Philadelphia, Pa	30.15	765.8	30.21	767.3	16	— 8.9	83	NW	12	5.4	.....	0	Fog	.....	Calm	0	0	Clear	
Phœnix, Arizona	28.80	731.5	30.69	779.5	34	1.1	70	S	3	1.3	.....	0	8ks	.....	E	0	0	Cloudy	
Pike's Peak, Colorado	17.33	440.2	29.54	750.3	— 9	—22.8	56	SW	22	9.8	.....	.....	Fog	.....	Calm	0.17	4.3	Dense fog	
Pilot Point, Texas	29.47	748.5	30.38	771.6	25	— 3.9	62	SE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Ploche, Nevada	23.78	604.0	29.56	750.8	21	— 6.1	71	S	5	2.2	.....	.....	8n	.....	Calm	Inap.	Inap.	Light snow	
Pittsburg, Pennsylvania	29.39	746.5	30.26	768.6	22	— 5.6	86	NW	10	4.5	.....	.....	10s	.....	NW	0.05	1.3	Cloudy	
Port Huron, Michigan	29.45	748.0	30.17	766.3	18	— 7.8	84	SW	11	4.9	.....	.....	10s	.....	Calm	0.08	2.0	Cloudy	
Portland, Maine	30.02	762.5	30.07	763.8	10	—12.2	58	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Portland, Oregon	29.68	753.9	29.76	755.9	26.5	— 3.1	70	E	12	5.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	34	1.1	61	NE	23	10.3	.....	0	0	.....	.....	0.04	1.0	Clear	
Prescott, Arizona	24.54	623.3	29.90	759.4	34	1.1	61	S	3	1.3	.....	5k	0	SE	.....	0	0	Fair	
Punta Rassa, Florida	30.16	766.1	30.18	766.6	53	11.7	86	N	16	7.2	.....	.....	10ks	.....	W	Inap.	Inap.	Cloudy	
Red Bluff, California	29.50	749.3	29.86	758.4	40.0	4.4	91	S	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Rio Grande City, Texas	30.07	763.8	30.30	769.6	42	5.6	74	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Rochester, New York	29.49	749.0	30.15	765.8	16	— 8.9	83	W	5	2.2	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Roseburg, Oregon	29.11	739.4	29.68	753.9	32.5	0.3	94	SW	6	2.7	.....	1ck	2s	SW	SW	0	0	Fair	
Sacramento, California	29.80	756.9	29.88	758.9	41	5.0	91	E	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
St. Louis, Missouri	29.74	755.4	30.36	771.1	21	— 6.1	93	W	7	3.1	.....	.....	10n	.....	Calm	0.01	0.3	Light snow	
St. Paul, Minnesota	29.27	743.4	30.19	766.8	4	—15.6	74	SW	6	2.7	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Salt Lake City, Utah	25.49	647.4	29.82	757.4	24	— 4.4	61	Calm	0	0	.....	.....	10n	.....	Calm	0.11	2.8	Light snow	
San Antonio, Texas	29.58	751.3	30.33	770.4	27	— 2.8	88	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
San Diego, California	29.85	758.2	29.93	760.2	52	11.1	86	S	8	3.6	.....	.....	10ks	.....	SW	0.06	1.5	Cloudy	
Sandusky, Ohio	29.51	749.5	30.23	767.8	22	— 5.6	86	SW	6	2.7	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Sandy Hook, New Jersey	30.15	765.8	30.19	766.8	17	— 8.3	67	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
San Francisco, California	29.81	757.2	29.87	758.7	47	8.3	88	S	2	0.9	.....	.....	Fog	.....	SW	0	0	Dense fog	
Santa Fé, New Mexico	23.09	586.5	29.63	752.6	16	— 8.9	66	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Savannah, Georgia	30.19	766.8	30.29	769.4	35	1.7	90	N	10	4.5	.....	.....	10ks	.....	N	0.77	19.6	Cloudy	
Shreveport, Louisiana	30.09	764.3	30.35	770.9	28	— 2.2	77	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Silver City, New Mexico	24.14	613.1	30.65	778.5	19	— 7.2	54	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Smithville, North Carolina	30.22	767.6	30.25	768.3	27	— 2.8	76	N	5	2.2	.....	0	0	.....	.....	0.71	18.0	Clear	
Socorro, New Mexico	25.30	642.6	29.30	745.7	22	— 5.6	58	SW	10	4.5	.....	.....	10s	.....	Calm	0	0	Cloudy	
Springfield, Illinois	29.60	751.8	30.32	770.1	25.5	— 3.6	81	SW	6	2.7	.....	.....	10s	.....	.....	Inap.	Inap.	Cloudy	
Springfield, Massachusetts	30.02	762.5	30.17	766.3	— 4	—20.0	65	W	2	0.9	.....	0	Haze	.....	Calm	0	0	Clear	
Stockton, Texas	26.96	684.8	29.96	761.0	27	— 2.8	76	SW	12	5.4	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.37	746.0	30.28	769.1	— 5	—20.6	100	NW	12	5.4	.....	10cs	0	Calm	.....	0	0	Cloudy	
Thatcher's Island, Mass	30.07	763.8	30.12	765.0	15	— 9.4	48	W	13	5.8	.....	2k	0	W	.....	0	0	Clear	
Toledo, Ohio	29.48	748.8	30.22	767.6	22	— 5.6	86	W	15	6.7	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Tucson, Arizona	27.42	696.5	29.97	761.2	41	5.0	25	S	1	0.4	.....	0	8s	.....	Calm	0	0	Fair	
Umatilla, Oregon	29.73	755.1	30.26	768.6	17	— 8.3	75	E	3	1.3	.....	.....	10s	.....	SW	0	0	Cloudy	
Uvalde, Texas	29.24	742.7	30.14	765.5	27	— 2.8	48	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Vicksburg, Mississippi	30.13	765.3	30.41	772.4	30	— 1.1	78	Calm	0	0	.....	0	Sm'e	.....	Calm	0	0	Clear	
Visalia, California	29.48	748.8	29.86	758.4	41	5.0	91	N	2	0.9	.....	.....	10ks	.....	Calm	0	0	Cloudy	
Washington, D. C.	30.11	764.8	30.23	767.8	23	— 5.6	86	NE	2	0.9	.....	.....	10s	.....	N	0	0	Cloudy	
Wickenburg, Arizona	.....	.....	.....	.....	34	1.1	70	W	.....	.....	1	0	8s	.....	Calm	0	0	Cloudy	
Wilmington, N. Carolina	30.19	766.8	30.25	768.3	30	— 1.1	67	N	4	1.8	.....	Haze	0	Calm	.....	0.45	11.4	Clear	
Winnemucca, Nevada	25.42	645.7	29.78	756.4	20	— 6.7	70	NE	7	3.1	.....	5ck	0	NE	.....	0	0	Fair	
Wood's Holl, Mass	30.05	763.3	30.09	764.3	17	— 8.3	67	N	11	4.9	.....	0	0	.....	.....	0	0	Clear	
Yankton, Dakota	28.89	733.8	30.36	771.1	— 2	—18.9	67	Calm	0	0	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Yuma, Arizona	29.73	755.1	29.88	758.9	43	6.1	51	N	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.06	560.3	.....	.....	51.5	10.8	69	Calm	0	0	.....	5cs;k	0	.....	.....	0.05	1.5	Fair	Thomas Herran.
Buff Bay Town, Jam ica	29.88	758.9	30.20	767.1	66	18.9	79	E	.....	.....	.....	2c	Haze	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	30.05	763.5	30.11	764.8	73	22 8	90	N	13.2	5.9	.....	.....	10n	.....	N	0.64	16.3	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	30.02	762.5	30.08	764.0	—17	.....	.....	N	.....	.....	2	.....	0	.....	.....	0.098	2.5	.....	
Kingston, Jamaica, W. I.	30.05	763.3	30.05	763.5	68.6	20.3	81	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	Maxwell Hall.
Navassa, W. I.	29.96	761.0	30.04	763.0	77	25.0	63	E	10	4.5	.....	5cs	5s	SE	E	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	78	25.6	86	E	.....	.....	2	3c	4k	Calm	.....	0.170	4.32	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.96	761.0	80	26.7	85	Calm	.....	.....	0	0	2k	.....	.....	0	0	Fair	Francesco J. Cisneros
Rivas, Nicaragua	.....	.....	.....	.....	75	24	.....	SE	.....	.....	3	0	3ks	.....	SE	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.06	763.5	30.08	764.0	75	24.4	76	Calm	0	0	.....	0	0	.....	.....	0	0	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	30.04	762.9	30.10	764.5	4.9	—20.5	.....	W	.....	.....	4	.....	0	.....	.....	0	0	.....	
York Factory, B. A.	29.82	757.4	29.87	758.7	—29.0	—33.9	.....	W	6	2.7	.....	2c	0	SW	.....	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
M.H. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, N. 35° 56′, E. 14° 34′	30.12	765.0	63	17.2	78	SE			5		3					3	SE	D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 19° 49′, E 70° 25′	29.95	760.7	80	26.7	62	N			1		0					1	N	Blue sky	Comm. G. W. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.75	755.6	65.5	18.6		SSW			1		9	S						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 32′, E. 81° 22′	29.87	758.7	78	25.6		NE			1		2	N				1	N	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.99	761.7	80	26.7	74	NNW			2–4		3							Squally	Capt. R. D. King.
H. M. S. Falcon,																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Chimbote, Peru	29.86	758.4	69	20.6	90	Calm			0		7							Misty	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. O. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 29° 33′, E. 122° 09′	30.40	772.1	43.5	6.4	68	N			3		0							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 13° 29′ E. 48° 47′	30.06	763.5	76	24.4	86	S			1		2	ENE				2	ENE	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 42° 08′, W. 9° 30′	29.77	756.1	55	12.8	87	S			4		10	W				3	S	Squally	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Dominica, W. I.	30.01	762.2	75	23.9	90	E			1		7	E						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis, N. 38° 42′, W. 9° 06′	29.88	758.9	59	15.0	88	E			1		7	SW						D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 45° 56′	29.78	756.4	77	25.0	69	ESE			1		0					1	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis, N. 16° 08′, E. 61° 05′	30.15	765.8	76.5	24.7	77	ENE			4		7	E				2	E	D. clouds	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 13° 05′, W. 59° 36′	30.05	763.5	78	25.6	80	E			1		3							D. clouds	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	30.10	764.5	69.5	20.8	57	S			1		0							Blue sky	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Santiago, Cape Verd Id	30.05	763.4	78.8	26.0	78	NE			2		8					1		Blue sky	S. C da Silva Costa, Comd't.
Sado, N. 0° 27′, E. 6° 45′	29.95	760.7	83.3	28.5	76	W			3		10			0	0	2	W	D. clouds	G. A de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
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H. M. Frigate Vanadis																			

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

UNITED STATES NAVAL SERIES.

By authority of the Secretary of the Navy.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

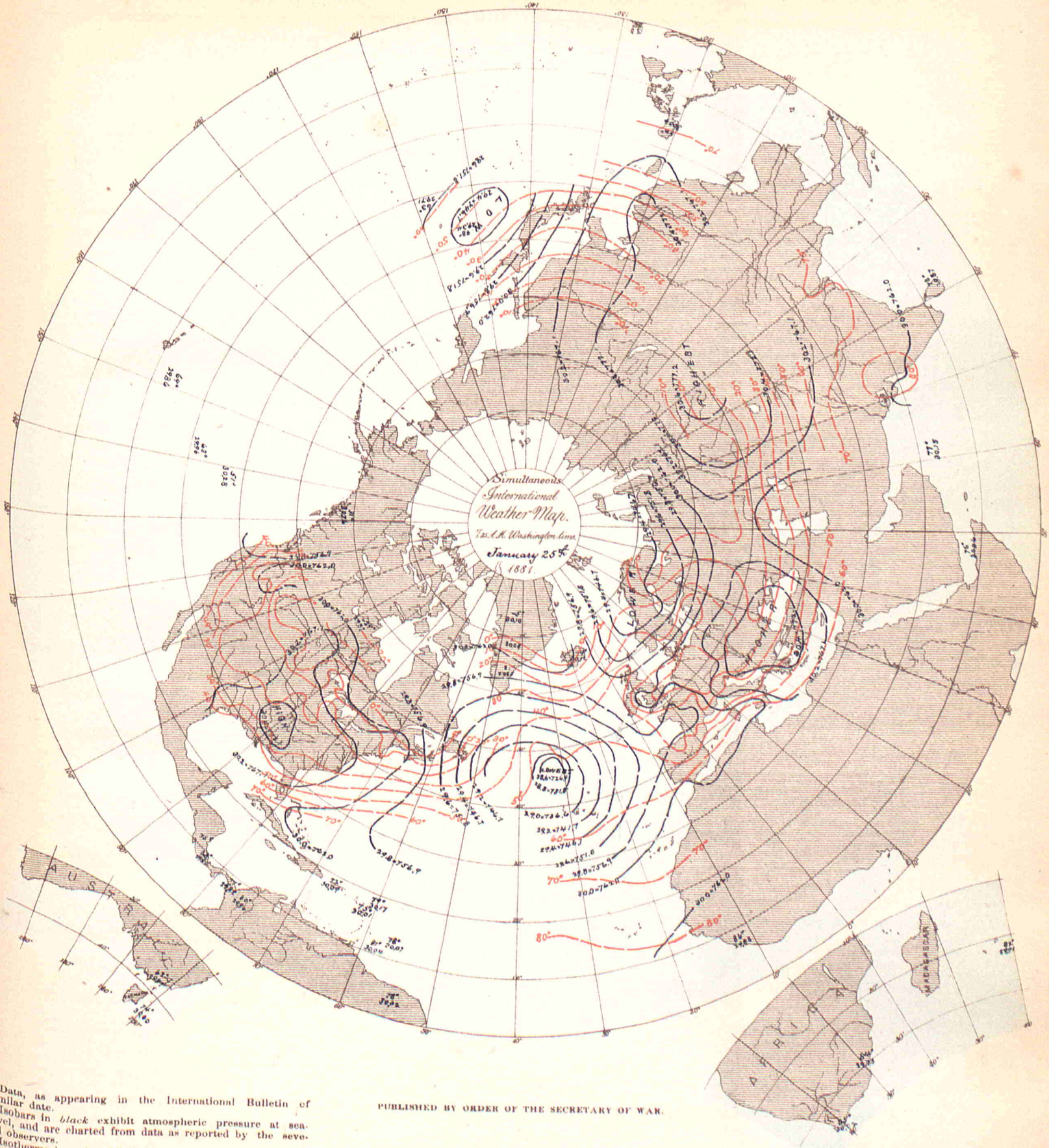
N. Yard, Pensacola, Fla	30.49	774.4	32	0.0	90	N	1	0.4			2		N	0	0			Fair	
N. Yard, Portsmouth, N. H.	30.06	763.5	14	—10.0	82	NW	7	3.1			0			0	0			Clear	
Naval Hospital, Yokohama, Japan	29.46	748.3	29.5	— 1.4	30	N			1		0			0	0			Clear.	
Adams, Callao, Peru	29.90	759.7	66	18.9	94	Calm			0		10					Long		Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	29.83	757 7	42	5.6	83	Calm			0		0			0	0			Clear	
Alert, Hong-Kong, China *	30.08	764.0	64	17.8	78	ENE			2		0			0	0	Sm'h		Hazy	
Alliance, Matanzas, Cuba, W.I.	30.08	764.0	72	22.2	95	SW			1		8		SW	0	0	Sm'h		Cloudy	
Ashuelot, Tientsin, China	30.40	772.1	25	— 3.9	100	SE			2		0							Clear	
Colorado, New York, N. Y.	30.16	766.1	15	— 9.4	82	N	4	1.8			5			0	0			Misty	
Constitution, N. Yard, League I'd., Pa			13	—10.6		Calm	0	0			0							Clear	
Franklin, Off N. Yard, Norfolk, Va	30.15	765.8	31	— 0.6		NNW	7.2	3.2			2		N	0	0			Fair	
Galena, Villafranca, France	30.03	762.7	41	5.0	100	NW			2		10					Sm'h		Cloudy	
Independence, N. Yard, Mare I'd, Cal.	29.87	758.7	40	4.4	48	E	3.6	1.6			0			0	0			Clear	
Jamestown, Sitka, Alaska *	30.76	781.3	31	— 0.6		ENE			1		10			0	0	Sm'h		Cloudy	
Kearsarge, Port Royal, Jamaica, W.I.	30.05	763.3	72	22.2	80	NNW			1		2					Sm'h		Fair	
Lackawanna, Callao, Peru †	30.03	762.7	67	19.4	95	N			1		10		N	0	0			Cloudy	
Marion, Straits of Magellan	29.78	756.4	53	11.7	93	SSW			1		10			Light		Sm'h		Drizzling	
Michigan, Erie, Pennsylvania	30.18	766.6	19	— 7.2		W			3		10							Snowing	
Minnesota, New York, N. Y.	30.19	766.8	17	— 8.3	83	N			2-3		0							Hazy	
Monocacy, Shanghai, China	30.41	772.4	36	2.2	70	N			2		0							Clear.	
New Hampshire, Port Royal, S. C.	30.26	768.6	35	1.7	90	NNW	12	5.4			10		Calm	0.71	18.0			Overcast	
Nipsic, Hyeres Roadstead, France	30.02	762.5	41	5.0	91	E			7		10		E			R'gh		Raining	
Onward, Chimbote Bay, Peru †	29.87	758.7	71	21.7	85	S			3		5		N			Long	N:W	Fair	
Palos, Shanghai, China	30.43	772.9	41	5.0	74	N			3-5		5		N					Fair	
Passaic, Washington, D. C.	30.24	768.1	25	— 3.9	87	NE			1		10		NW					Cloudy	
Pensacola, Mazatlan, Mexico	29.93	760.2	6	17.8	58	NW			1-2		5							Fair	
Portsmouth, Washington, D. C.	30.20	767.1	23	— 5.0	100	NE			1		10							Cloudy	
Powhatan, New York, N. Y.	30.18	766.6	15	— 9.4		NE			2		2							Hazy	
Quinnebang, Naples, Italy	30.10	764.5	43	6.1	67	NNE			3		10		Calm			Sm'h			
Richmond, N. 22° 12′, E. 114° 21′	30.25	768.3	63	17.2	89	NE			1		0			0	0	Sm'h		Clear	
Saratoga, Baltimore, Md	30.23	767.8	22	— 5.6	100	NW			2		10		Calm	0	0			Hazy	
Shenandoah, Montevideo, Uruguay *	30.01	762.2	69	20.6	75	NE			4		10					Mod.	NE	Cloudy	
St. Louis, League Island, Pa	30.21	767.3	12	—11.1	100	NW	3	1.3			0			0	0			Clear	
Swatara, Kobe, Japan †	29.75	755.6	30	— 1.1	78	WNW			4		0					Sm'h		Squally	
Tennessee, Port Royal, Jamaica, W.I.	30.07	763.8	73	22.8	90	NW	9	4.0			2		Calm	0	0	Sm'h		Clear	
Trenton, Villafranca, France *	30.02	762.5	41	5.0	82	NW			2-3		10			5 hr's	rainy	Sm'h		Rainy	
Vandalia, Bridgetown, Barbadoes, W.I	30.06	763.5	81	27.2	74	ENE			2		2		E					Fair	
Wabash, Boston, Massachusetts	30.15	765.8	6	—14.4	52	WNW	5	2.2			0			0	0			Clear	
Wachusetts, Panama, Panama *	29.49	749.0	77	25.0	91	NW			2		2		N	Lt. s	hwr's	Sm'h		Fair	
Wyoming, N. 42° 46′, E. 10° 02′	30.10	764.5	42	5.6	91	ENE			4		10					R'gh	E	Raining	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	* Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡ S. 24° 43′, E. 5° 12′	30.06	763.5	73.2	22.9	79	SE			4		6							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 33° 40′, W. 21° 19′	29.67	753.6	65	18.3	89	SW			8		6							D. clouds	Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
British Merchant. ‡																			Capt. E. J. Molony.
Chin Yang, ‡ N. 25° 35, W. 23° 08′	30.10	764.5	69.7	20.9	61	WSW			1		5							D. clouds	Capt. N. Youlden.
S. S. Clipero, N. 14° 45′, W. 56° 35′	30.07	763.8	78	25.6		ESE			2		5					2	ESE	D. clouds	Capt. W. N. Lailey.
City of Agra, ‡ S. 41° 24′, W. 34° 44′	30.03	762.7	51.5	10.8	69	SSW			4		6							D. clouds	Capt. T. Young.
Barque Commowyne, ‡ N. 17° 47′, W. 60° 09′	30.17	766.3	78.6	25.9	77	ENE			4		8							D. clouds	Capt. W. Scott.
Barque Coppename, N. 17° 08′, W. 34° 12′	30.14	765.5	80.8	27.1	96	ENE			4		3							D. clouds	Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra, ‡ S. 35° 24′, E. 25° 44′	29.97	761.2	76	24.4	69	W			5		8							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡ N. 50° 38′, W. 38° 55′	28.97	735.8	48	8.9	85	W			3		8					6	E;S	Raining	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 24° 47′, W. 21° 30′	30.16	766.1	69	20.6	86	W			2	4c		W				3	NNW	D. clouds	Capt. H. W. Dyke.
Barque Merlola, N. 48° 54′, W. 9° 47′	29.84	757.9	44.5	6.9	92	ESE			5		10							Overcast	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 45° 35′, W. 8° 29′	29.78	756.4	44.5	6.9	76	NE			3		10							Overcast	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
Moravian																			
S. S. Peruvian																			Capt. W. H. Smith, R.N.R.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			
S. S. Britanic, N. 50° 08′, W. 37° 21′ †	29.19	741.4	54	12.2		Var.			2		10		N			Mod.	SE	Raining	Capt. J. W. Jennings.
S. S. Celtic, N. 46° 05′, W. 39° 15′ †	29.01	736.8	48	8.9		NNE			5		5		NE	0	0	Mod.	E	Fair	Capt. H. Perry.
S. S. Germanic, St. George's Channel. †	30.00	762.0	41	5.0		E			4		2		E	Showers		Sm'h		Clear	Capt. Benj. Gleadell.
S. S. Republic																			Capt. Ch. W. Kennedy.
																			Capt. B. 1. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, N. 48° 35′, W 26° 26′	29.07	738.6	52.7	11.5		SE			4		10		SE	0	0	Very h'vy	SE	Misty	Capt. H. Baur.
S. S. Köln, N 52° 03′, E 2° 51′	29.99	761.7	29.3	— 1.5		ENE			3		2		ENE	0	0	Mod.	ENE	Clear	
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			Capt. Albert Fredholm.
Ship Pern ‡																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.-				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Philadelphia, Pa	29.99	761.7	17	— 8.3	83	NW			3		2		NW					Clear.	Capt. J. W. Shackford.
S. S. Indiana, ‡ St. George's Channel, Eng.†	29.86	758.4	26	— 3.3	28	S			3		5		S	0	0			Partly clear	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 46° 43′, W. 47° 04′...*†	28.97	735.8	33	0.6	79	WNW			5		10		WNW	Snow squalls		L'ge	WNW	Snowing	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, Liverpool, England ††	29.97	761.2	23	— 5.0		S			1		10		W	0	0			Dense fog	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 33° 08′, W. 117° 54′....†	29.93	760.2	57	13.9	81	WSW			4		5		WSW	Little		G'tl	W	Rainy	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 24° 02′, E. 119° 03′.....†	30.25	768.3	65	18.3	68	N			5		0			0	0	Light	NE		Capt. H. Davison.
S. S. Gaelic, N. 38° 07′, W. 136° 22′.. *†	30.28	769.1	57	13.9	94	NW			2		10		N			Sl't	NE	Cloudy	Capt. W. H. Kidley.
S. S. Oceanic, San Francisco, Cal	30.30	769.6	54	12.2	80	SE			2		5		SE	0	0			Cloudy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			Capt. J. M. Lachlan.
S. S. Geo. W. Elder																			
S. S. Columbia, N. 41° 45′, W. 124° 44′....†	29.75	755.6	48	8.9	78	W			5		10		W			Sm'h	W	Threatening	Capt. Fred. Bolles
S. S. Oregon																			Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal..... †	29.80	756.9	47	8.3	92	NE			1		10							Foggy	Capt. J. N. Ingalls.
S. S. Idaho, Seattle, Wash. Ter.....†	29.62	752.3	38	3.3	90	W			2		10					Mod.	SW	Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba..																			
S. S. Senator, N. 34° 10′, W. 119° 20′....†	29.90	759.4	61	10.6	93	ESE			2		8		ESE			Sm'h		Drizzling	Thos. Wallace.
S. S. State of California, Portland, Oregon.....†	29.70	754.4	27	— 2.8	98	E			4		8		SE					Cloudy..	Capt. G. Debney.
S. S. Victoria, off Victoria, Vancouvers Id† *	29.76	756.0	32	0.0	90	NW			3		10		Calm			Light	W	Cloudy	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.....†	29.95	760.7	70	21.1	100	S			2		10		S					Light rain	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Mazatlan, Mexico.....†	29.97	761.2	63	17.2	62	NE			1		5?		SW			Sm'h	NW	Clear?	Capt. D. S. Austin.
S. S. City of Peking, N. 30° 05′, E. 157° 36′.....†	29.71	754.6	63	17.2	72	WSW			5		10		W	0	0	Mod.	WNW	Overcast	Capt. G. G. Berry.
S. S. City of Sidney, N. 30° 47, W. 140° 31′.....†	29.96	761.0	63	17.2	78	SE			4		10		SE	0	0	H'vy	NW	Threatening	Capt. H. C. Dearborn
S. S. City of Tokio, N. 36° 05′, E. 152° 32′.....†	29.34	745.2	48	8.9	85	WSW			8		10		W	0	0	H'vy	W	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima																			Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, Panama, Panama.....†	29.82	757.4	80	26.7	91	NW			3		5?		NW	0	0			Clear?	
S. S. Zealandia, N. 24° 12′, W. 153° 33′.....	29.86	758.4	69	20.6	65	S			4		8		S			H'vy	WNW	Cloudy	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland, ‡ Flushing, Netherlands.†	29.91	759.7	16	— 8.9		ENE			2		0					Sm'h		Hazy	Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland, ‡ N. 48° 10′, W. 31° 45′.....	28.54	724.9	50	10.0	86	E			8		10		E	0.3	8.	V'nt	ESE	Threatening	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 44° 21′, W. 53° 05′.....	29.56	750.8				W			8		10			Snow	sleet	H'vy	W	Cloudy	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Morehead City, N. C....†	30.16	766.1	50	10.0		NNW			2		0			0.3	8.			Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 34° 37′, W. 75° 40′.....†	30.13	765.3	46	7.8	84	N	15	6.7			8k		N	0.53	14.	R'gh	N	D. clouds	Capt. J. Jorgensen,
Sch'r Annie R. Lewis.																			Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, ‡ Ponce, Porto Rico.....†	30.32	770.1	77	25.0		E			2		2			0	0	Sm'h		Fair	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va†	30.21	767.3	32	0.0	100	N	2	0.9		2k	2s			0	0			Clear	
Ship Jumna																			Capt. James S. Gawin
Bark Sunbeam, ‡ Lisbon, Portugal.....†	29.82	757.4	61	16.1	100	SSW			4		8			Moderate				Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 26, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower	Rain-fall or melted snow in the past 24 hours.		Weather	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.08	764.0	66.6	19.2	74	SW			6		7			0	0	Very cloudy	Dr. Ollive.
Nemours			29.94	760.5	63.5	17.5	88	NE			0		3			0	0	Pretty fair.	Raynard.
Algie s			29.98	761.5	63.0	17.2	54	Calm			0		4			0	0	Cloudy	Nicolas.
La Calle			30.02	762.4	74.1	23.4	55	WSW			1		1			0	0	Very fair	Fonfrède.
Tunis			30.02	762.5															Jacques.
Sfax			30.13	765.3															Gau.
Saida			30.02	762.5	66.7	19.3	16	WSW			4		3			0	0	Pretty fair.	Dumas.
Tebessa			30.08	764.0	66.2	19.0	27	Calm			0		0			0	0	Clear	Watrin.
Gerville																			Lonchamp.
Laghouat			30.14	765.5	65.5	18.6	47	SW			1		2						Herbin.
Biskra			30.13	765.4	67.6	19.8	61	E			1		0			0	0	Fair	Baudassé.
																0	0	Clear	
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.65	753.1	29.74	755.4	79.5	26.4	45	SE	4	1.8			2			0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.77	756.1	74	23.3		NW			3		2k			0	0	Lightning	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.43	747.4	30.02	762.6	17.6	— 8.0	97	Calm			0		10			0.094	2.4	Snowing	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.25	743.0	30.09	764.3	12.9	—10.6	100	WNW	2.5	1.1			3			0	0		Dr. Wiersbicki.
Eperies	29.17	740.8	30.14	765.5	10.0	—12.2	93	Calm			0		10s			0	0		Julius Mikolik.
Gratz‡	28.69	728.7	30.04	762.9	20.1	— 6.6	58	S			2		7			0	0		Andreas Rospini.
Hermannstadt	28.53	724.6	30.07	763.8	18.0	— 7.8	97	S			4		10			0.093	2.35		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.58	725.9	30.04	763.0	14.0	—10.0	97	Calm			0		10			0	0		The Staff.
Lemberg	29.05	737.9	30.12	765.0	20.1	— 6.6	58	SE			1		1			0	0		Dr. T. Stanecki.
Pola	29.74	755.5	29.86	758.5	36.7	2.6	91	WNW			2		10			0.189	4.8		I. R. HydrographicOffice
Szathmar	29.63	752.6	30.09	764.2	23.4	— 4.8	93	SE			2		7			0	0		Beicht Peter, S. J.
Szegedin	29.74	755.5	30.05	763.2	20.1	— 6.6	95	E			1		10			0	0		Karl Stancel.
Trieste	29.79	756.6	29.89	759.2	36.5	2.5	65	Calm			0		10			Inap.	Inap.	Snowing	P. Busin.
Vienna	29.31	744.5	30.09	764.3	15.4	— 9.2	84	SE			2		10			Inap.	Inap.		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.55	750.6	29.75	755.9	33.8	1.0	85	S			1		10		S	0.098	2.5		Royal Observatory
Furnes																			M. E. de Cae.
Maeseyck	29.66	753.3	29.78	756.5	33.3	0.7	85	E			2		7			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed January 31, 1882.

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

BRITISH SERIES.

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

Aberdeen	29.53	750.0	29.64	752.8	26.7	— 2.9	76	SSW	9	4.0			0			0.030	0.76	Misty	W. Boswell.
Armagh, Observatory	29.31	744.5	29.56	750.8	25.1	— 3.8	84	ENE	6	2.7			1					D. clouds	S. Call.
Bidston, Liverpool Obs'y			29.62	752.3	18.8	— 7.3	100	ESE	10	4.5			7					Misty	John Hartnup.
Bolton, Sharples	29.08	738.6	29.64	752.8	23.0	— 5.0	100	E	4	1.8			0					Blue sky	Thomas Mackereth.
Bradford, Yorkshire	29.21	741.9	29.60	751.8	21.1	— 6.1	68	SE			1		10			0	0	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.01	762.2	30.04	763.0	80	26.7	78	NE			2		3					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			29.65	753.1	19.6	— 6.9	95	E			0.2		10					Overcast	John McLaren.
Chatham, School M. E.	29.56	750.8	29.69	754.1	19.2	— 7.1	87	NE			1		10			Blank		Gloomy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.16	740.7	29.39	746.5	38.9	3.8	80	SE			6		10					Overcast	The Staff.
Fort Napier, Natal	27.69	703.3	29.91	759.7	77.1	25.1	70	SE			2		2					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.88	758.9	86	30.0	80	SE			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			29.29	744.0	30	— 1.1	89	E			4		10					Overcast	J. O'Donaghadue.
Gibraltar, Mediterranean	29.88	758.9	29.93	760.2	62.3	16.8	95	SSW			4		7					D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.43	747.5	29.63	752.6	23.0	— 5.0	92	N			1							Foggy	D. G. MacLean.
Greenwich, Royal Obs'y	29.50	749.3	29.68	753.9	23.5	— 4.7	91	ENE			1		10			Blank		Overcast	The Staff.
Guernsey	29.28	743.7	29.51	749.5	34	1.1	76	ESE			4		10					Misty	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.63	752.6	29.67	753.6	24.4	— 4.2	87	NE	5	2.2			10					Foggy	The Met'g'l Office.
Leicester, Museum	29.45	748.0	29.72	754.9	19.5	— 6.9	100	NE			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.90	759.4	29.98	761.5	67.6	19.8	76	SW			2		4					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.19	766.8	72.0	22.2	73	NE			3		7					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.11	739.4	29.67	753.6	17.8	— 7.9	100	ENE			1		10					Light fog	Robert Pate.
Oxford, Radcliffe Obs'y	29.38	746.2	29.64	752.8	21.2	— 6.0	?	ENE			1		10					Overcast	The Staff.
Plymouth	29.38	746.2	29.46	748.3	35.8	2.1	91	SE			5		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.55	750.6	34.5	1.4	93	SW	8	3.6			0					Blue sky	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.24	768.1	30.31	769.9	32.1	0.1	75	E			1		9			Blank		Gloomy	Serg't W. H. Lyne.
Sheffield	29.40	746.7	29.70	754.4	23.1	— 4.9	99	E			1		6			0	0	Misty	W. F. Cooper.
Silloth Rectory	29.58	751.3	29.61	752.1	21.4	— 5.9	68	E			1		7			0	0	D. clouds	Rev. F. Redford, A. M.
Stonyhurst, Observatory			29.65	753.1	22.3	— 5.4	84	NNE	4	1.8			0					Blue sky	Rev. S. J. Perry.
Strathfield Turgiss	29.46	748.3	29.68	753.9	25.2	— 3.8	94	E			2		10					Foggy	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution			29.30	744.2	40	4.4	91	SE			6		10					Raining	W. Newcombe.
Valencia, Observatory	29.17	740.9	29.20	741.7	40.1	4.5	73	E	36	16.1			10					Gloomy	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B	29.66	753.4	29.70	754.4	3.5	—15.8		NW	7	3.1			10s			0	0	Cloudy	Hon. J. Ferguson.
Chatham, N. B.*	29.54	750.3	29.61	752.1	9	—12.8	87	W	9	4.0			10n		W	0.01	0.3	Light snow	G. A. Blair.
Charlottetown, P. E. Island	29.54	750.3	29.59	751.6	8	—13.3	89	W	9	4.0			2c	2s		0	0	Fair	H. J. Cundall, C. E.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario	29.75	755.6	29.95	760.7	17.0	— 8.3	73	W			2	0	8s			0.02	0.5	Cloudy	James Smith, M. A.
Dalhousie, N. B	29.59	751.6	29.63	752.6	6.5	—14.2		W			3		10s			0	0	Cloudy	H. A. Johnson.
Father Point, Quebec*	29.73	755.1	29.75	755.6	3	—16.1	59	NW	25	11.2			10n			0	0	Threatening	J. McWilliams.
Fredericton, N. B	29.72	754.9	29.79	756.7	5.3	—14.8	93	NW	9	4.0		0	0			0	0	Clear	Prof. Harrison
Fort Garry, Manitoba*	29.55	750.6	30.48	774.2	— 3	—19.4	100	N	16	7.2			10n			0	0	Cloudy	James Stewart.
Granton, Ontario	28.80	731.5	30.00	762.0	10.6	—11.9	88	W			2		10n			0	0	Cloudy	James Grant.
Halifax, N. S.*	29.57	751.1	29.71	754.6	17	— 8.3	75	W	14	6.3		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario	29.63	752.6	30.05	763.3	15.1	— 9.4	91	SW			2	10k	0	SW		0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.64	752.8	30.00	762.0	19	— 7.2	85	SW	7	3.1			10s			Inap.	Inap	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	29.54	750.3	29.58	751.3	9.0	—12.8	85	W	2	0.9		7k	0	W		0	0	Fair	C. H. Rigby.
Montreal, Quebec*	29.74	755.4	29.95	760.7	17	— 8.3	71	SW	17	7.6			10n			0.01	0.3	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.14	740.1	29.88	758.9	18	— 7.8	92	SW	24	10.7			10n		SW	0.27	6.9	Light snow	Rev. R. Moseley.
Peterboro, Ontario	29.15	740.4	29.96	761.0	15.1	— 9.4	73	SW			1		10n			0	0	Light snow	J. F. Jeffers, M. A.
Port Dover, Ontario	29.34	745.2	30.09	764.3	15	— 9.4	100	SW	6	2.7			10n			0.01	0.3	Threatening	H. Morgan.
Port Stanley, Ontario	29.41	747.0	30.11	764.8	14	—10.0	82	W	20	8.9			10n		W	Inap.	Inap.	Cloudy	M. Payne.
Quebec, Quebec*	29.56	750.8	29.91	759.7	8	—13.3	100	NW			3		8n		NW	0	0	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.39	746.5	29.89	759.2	8	—13.3	78	Calm	0	0		0	2s		W	0.22	5.6	Fair	W. H. McIntyre.
St. Andrews	29.78	756.4	29.84	757.9	17	— 8.3	87	W	8	3.6		0	0			0	0	Clear	
St. John's, N. B	29.61	752.1	29.79	756.7	14.0	—10.0	82	W	19	8.5		0	0			0	0	Clear	G. Murdock, C. E.
Saugeen, Ontario*	29.17	740.9	29.93	760.2	17	— 8.3	90	SW	30	13.4			10s			0.17	4.3	Light snow	K. Stewart.
Stratford, Ontario	28.65	727.7	30.04	763.0	9.3	—12.6	91	SW	13	5.8			10s			0	0	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.49	749.0	29.54	750.3	12	—11.1	84	W	10	4.5		5c	5ks	E	W	0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.63	752.6	30.04	763.0	17	— 8.3	88	SW	18	8.0			10n			0.02	0.5	Cloudy	Magnetic Observatory.
Windsor, N. S	29.58	751.3	29.68	753.9	17.7	— 7.9	97					1k	0	E		0	0	Clear	
Woodstock, Ontario	28.93	734.8	30.08	764.0	11.8	—11.2	90	SW	17	7.6			10s			0.20	5.1	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*	29.80	756.9	29.86	758.4	26	— 3.3	79	NW	30	13.4		5k	0	NW		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.25	742.9	29.42	747.3	22	— 5.6	100	SE	1	0.4		2k	2s			0	0	Fair	John Delany.
St. Pierre, N. F.			29.44	747.8	16.5	— 8.6		W			2					0	0		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.94	760.5	29.98	761.5	80.0	25.7	57	S	16.7	7.5		0	1			0	0	Vapory	The Staff, for D. Gill.
Cape St. Francis Lt. House	30.11	764.8			17.8	— 7.9	75	SE	16.0	7.2			10s			0.154	3.91	Rainy	John Duthie.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.20	767.1	30.23	767.8	41.2	5.1	78	SE	4.3	1.9			10			0	0	Covered	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.21	665.7	29.93	760.2	65.8	18.8	85	NE			2		2d		NE	0	0	Clear.	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.89	759.3	29.94	760.5	23.2	— 4.9	81	SW	13	6			0						
Faröe	29.83	757.7	29.85	758.2	17.1	— 8.3	79	SE			4		1						
Godthaab, Greenland	29.93	760.2	29.97	761.3	32.4	0.3	98	S			4		10					Snowing	
Stykkisholm, Iceland	30.11	764.9	30.16	766.0	— 5.4	—20.8	86	Calm			0		0						
Thorshavn	29.63	752.7	29.67	753.6	19.9	— 6.7	81	NE	20	9			7						
Vestervig	29.74	755.5	29.84	757.9	24.4	— 4.2	97	S			4		0						
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.02	737.0	29.68	753.8	42.1	5.6	82	SE			3		8			0.016	0.4	Almost cov.	M. Labroue, Director.
Alençon	29.16	740.7	29.71	754.7	30.9	—0.6	88	S			1		10			0.220	5.6	Foggy	M. Nicot, Director.
Arras, Engineer School	29.47	748.5	29.75	755.6	30.6	—0.8	96	SE											M. Klein, Commandant.
Avignon, Normal School	29.84	758.0	29.92	760.0	39.2	4	90	N			1		10			0.291	7.4	Covered	M. Giraud, Director.
Bar-sur-Seine ‖	29.24	742.6	29.81	757.2	37.6	3.1	72	S			1		5kn			0.118	3.0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.48	748.8	29.76	755.9	32.7	0.4	87	SE			1		10			0.04	1.	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.01	736.8	29.93	760.3	36.7	2.6	90	ENE			1		5cn		NW	0.08	2.	Cloudy	M. Gobin, Director.
Bordeaux, Observatory	29.34	745.2	29.60	751.9	41.4	5.2	97	SE			2		10			0.213	5.4	Raining	M. Rayet, Director.
Bourges, Normal School	29.13	739.8	29.69	754.0	41.0	5	61	S			1		5n		S	0.673	17.1	Raining	M. Postel, Director.
Brest, Naval Observatory	29.17	740.9	29.41	747.1	35.2	1.8	81	SSE			2		10		S			Raining	M. de Rermaree, Dir.
Caen, Normal School	29.45	748.1	29.53	750.0	32.7	0.4	100	S			1		10			0	0	Covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.49	749.0	29.82	757.4	37.8	3.2	93	Calm			0		10			0	0	Covered	M. Jadot, Director.
Charleville, Normal School	29.27	743.5	29.81	757.1	31.6	—0.2	92	S			1		10			0	0	Covered	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.38	720.8	29.75	755.7	42.4	5.8	56	S			1		5			0	0		M. Alluard, Director.
Cluny, Normal School	28.98	736.1	29.88	758.4	42.8	6	72	S			2		1		W	0	0	Clear	M. de Villemontée, Dir.
Cómmercy, Normal School	28.97	735.7	29.86	758.5	33.1	0.6	86	SE			4		kn	SE	SE	0	0		Dr. Coulet, Director.
Gap, Normal School	27.22	691.4	29.83	757.6	35.6	2	82	N			1	c			E	0.79	20.		M. Jeangirard, Director.
Gréasque, du. Rhone	28.82	732.0	29.96	761.0	41.0	5	84	E			2		10		SE	0.16	4.		M. Kina, Director.
Grenoble, Normal School	29.14	740.2	29.95	760.6	32.7	0.4		ESE			1		Fog			0.378	9.60	Foggy	M. Ablard, Director.
Guéret, Normal School	28.15	715.0	29.76	755.8	42.8	6	75	SE			1		10			0.20	5.	Light rain	M. Rivoir, Director.
Lamballe, Normal School	29.16	740.7	29.45	747.9	30.9	—0.6	93	NNE			2		10		NNE	0	0	Covered	M. Ollitrault, Director.
Lescar, Normal School	29.10	739.0	29.78	756.3	43.3	6.3		S			3		10			0.016	0.40	Covered	M. Chauvin, Director.
Lorient, Naval Observatory	29.48	748.9	29.59	751.5	36.3	2.4	96	ESE			8		10					Raining	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.79	731.2	29.84	757.9	40.1	4.5	77	S			3		cs	SW	WNW	0.335	8.5		M. André, Director.
Mans, Normal School	29.37	746.0	29.69	754.2	32.0	0.0	95	ESE			4		10			0.067	1.7	Covered	M. Piboen, Director.
Marseille, Observatory	29.63	752.5	29.90	759.4	50.5	10.3	78	E			1		5		WNW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24 58	624.2	29.81	757.2	33.8	1.0	100	W	11.2	5.0			10	NW		0.087	2.2		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.77	756.2	29.89	759.1	36.9	2.7	100	N			2		10			1.77	4.5	Covered	M. Galzin, Director.
Nancy, Normal School	29.08	738.6	29.87	758.8	35.6	2.0	82	NE			1		8n			0	0	Foggy	M. Hasse.
Nantes, Observatory	29.40	746.8	29.56	750.8	39.2	4	94	E			1		10			0.441	11.2	Light rain	M. Larocque, Dir.
Nice	29.91	759.7	29.94	760.5	44.6	7.0	83	NE			2		10	W	NE	0.602	15.3	Covered	Capt. Boissière, Director.
Perpignan, Observatory	29.72	754.8	29.82	757.5	42.4	5.8	82	NE	3.8	1.7			10			0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.23	564.7			34.9	1.6							10		SW	0.402	10.2	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.84	732.5	29.94	760.5	39.2	4.0	83	Calm			0		10			0.24	6.	Covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.82	630.5			25.3	—3.7	96	SW			4		8			0.169	4.3	Foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.57	751.1	29.60	751.9	40.8	4.9	90	SE			2		10			1.65	27.	Raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.34	745.1	29.56	750.7	36.7	2.6	96	E			3		10					Raining	M. Mouillot, Director.
Rodez, Normal School	27.62	701.5	29.81	757.2	39.9	4.4	74	E			2		10		E	0.039	1.0	Covered	M. Richard, Director.
Rouen, Normal School	29.58	751.3	29.63	752.5	31.3	—0.4	89	SSE			1		10		SE	0	0	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.47	748.4	29.62	752.4	29.5	—1.4	92	WSW			1		10	S	W	0	0	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.58	751.2	29.74	755.4	34.3	1.3	84	SSE			1		10		SE			Covered	M. Renou, Director.
Toulouse, Observatory	29.05	737.9	29.77	756.2	45.1	7.3	85	SSE			6		10			0	0	Covered	M. Baillaud, Director.
Tours	29.45	748.0	29.65	753.0	36.9	2.7	89	SE			2		8	Calm	W	0.240	6.1	¾ covered	M. de Tastes.
Versailles, Observatory	29.23	742.4	29.72	754.8	32.0	0.0		S			1		10			0.181	4.61	Covered	Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

‖ Observation taken 25 minutes late.

GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.08	738.6	29.94	760.4	13.8	—10.1	80	NW			4		3k	NW		0	0		Prof. Dr. Hoh.
Berlin	29.80	757.0	29.99	761.7	17.8	— 7.9	64	SE			1		0			0	0		Prof. Dr. Arndt.
Breslau	29.51	749.5	30.04	763.0	19.6	— 6.9	54	SE			2		0			0	0		Royal University Obs'y.
Carlsruhe	29.53	750.0	29.98	761.4	27.3	— 2.6	79	S			0		0			0	0		Albert Senz.
Cassel	29.28	743.8	29.89	759.2	9.3	—12.6	80	S			2		4	S		0	0		Dr. H. Möhl.
Frankfort on the Main	29.68	753.8	30.07	763.7	21.2	— 6.0	58	ESE			1		10			0	0		Physical Society.
Friedrichshafen	28.47	723.1	29.97	761.3	29.1	— 1.6	64	NE			2		10	W		0	0		Chief Telegrapher Wilhelm.
Hamburg	29.89	759.1	29.96	760.9	10.2	—12.1	81	SE			4		0			0	0		Dr. R. Kleeman.
Kiel	29.91	759.8	29.93	760.2	12.9	—10.6	73	S			2		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.52	749.8	29.98	761.4	14.7	— 9.6	71	SE			1		0			0	0		Prof. Dr. Bruhns.
Magdeburg	29.74	755.5	29.99	761.7	10.8	—11.8	85	E			1		0			0	0	Hazy	Dr. Assmams.
Memel	30.01	762.2	30.06	763.4	14.0	—10.0	97	S			2		10n					Foggy	Reinbrecht & Issermann.
Munich	28.05	712.4	29.90	759.5	23.2	— 4.9	86	N			1		10			0.094	2.4	Light fog	Central Station.
Neufuhrwasser	30.08	763.9	30.09	764.3	10.4	—12.0	74	SSE			1		0			0	0		A Lothes.
Neustadt, Palatinate	29.32	744.7	29.84	758.0	25.5	— 3.6		SE			2		5			0	0		Dicknether.
Stuttgart	28.92	734.6	29.86	758.4	29.3	— 1.5	80	N			1		8	NW		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.39	721.1	29.92	759.9	24.6	— 4.1	87	Calm			0		10			0	0		Prof. Kemlein.
Wustrow	29.95	760.7	29.97	761.3	8.8	—12.9	80	SE			2		0			0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.88	758.9	30.28	769.1	46.8	8.2		NE			1.0		10					Covered	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.02	762.6	30.08	763.9	79.7	26.5	27	WSW	7.0	3.1			0			0	0	Blue sky	
Deesa	29.55	750.7	30.03	762.8	83.0	28.3	14	NW	7.2	3.2			0			0	0	Blue sky	
Bombay	29.97	761.1	30.00	762.1	81.9	27.7	52	WNW	12.0	5.4			0			0	0	Blue sky	
Poona, Yarrowda	28.14	714.7	30.00	761.9	80.8	27.1	14	NNE	3.0	1.3			0			0	0	Blue sky	
Belgaum	27.44	696.8	29.98	761.4	77.2	25.1	21	ENE	9.0	4.0			0			0	0	Blue sky	
Lahore	29.31	744.4	30.07	763.7	72.8	22.7	28	W	1.1	0.5			0			0	0	Blue sky	
Roorkee	29.14	740.2	30.07	763.8	67.8	19.9	44	Calm	1.1	0.5			0			0	0		
Agra	29.53	750.0	30.11	764.7	74.3	23.5	33	W	2.8	1.2			0			0	0		
Nagpur	28.99	736.2	30.04	763.0	78.5	25.8	17	ENE	2.8	1.2			0			0	0	Blue sky	
Jubbulpore	28.71	729.1	30.11	764.8	69.7	20.9	26	E	2.0	0.9			0			0	0	Blue sky	
Lucknow	29.70	754.4	30.09	764.2	69.8	21.0	27	Calm	0.8	0.4			0			0	0	Blue sky	
Allahabad	29.76	756.0	30.09	764.2	67.5	19.7	52	Calm	1.1	0.5			0			0	0	Blue sky	
Patna	29.90	759.3	30.08	764.1	68.8	20.4	56	W	0.4	0.2			0			0	0	Blue sky	
Hazaribagh	28.01	711.1	30.08	764.1	65.8	18.8	26	NNW	4.8	1.9			0			0	0	Blue sky	
Cuttack	29.97	761.2	30.05	763.3	72.6	22.6	52	NNE	1.3	0.6			0			0	0	Blue sky	
Calcutta, Alipore	30.01	762.3	30.03	762.8	68.5	20.3	58	NNE	3.0	1.3			0			0	0	Blue sky	
Goalpara	29.61	752.2	30.03	762.7	70.8	21.6	55	SE	2.7	1.2			0			0	0	Blue sky	
Chittagong	29.93	760.2	30.02	762.5	71.8	22.1	66	W	3.6	1.6			0			0	0	Blue sky	
Sibsagar	29.71	754.6	30.06	763.6	62.7	17.1	82	NE	1.6	0.7			0			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.47	748.5	29.90	759.4	34.7	1.5	74	Calm	0	0			9			0	0		Prof. Giovanni Clodig.
Milan	29.44	747.7	29.98	761.6	27.3	— 2.6	98	WSW	4.9	2.2			6			0.213	5.4		Prof. Schiaparelli.
Padua	29.81	757.1	29.92	760.0	32.7	0.4	73	WNW	8.7	3.9			5	WNW		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.02	737.2	29.97	761.3	30.0	— 1.1	77	ESE	0.7	0.3			0			0	0		Prof. P. F. Denza.
Genoa	29.73	755.1	29.93	760.1	38.3	3.5	59	N	9.4	4.2			0			0.142	3.6		Prof. G. M. Garibaldi.
Mondovi	27.98	710.7	29.99	761.8	28.4	— 2.0	88	E			2		0			0	0		Prof. D. C. Bruno.
Pesaro	29.89	759.2	29.94	760.5	31.1	— 0.5	79	NW	17.4	7.8			10			0	0		Prof. Luigi Guidi.
Florence	29.72	754.8	29.98	761.5	36.5	2.5	86	NE			2		10			0.079	2.0		Cav. F. Meucci.
Leghorn	29.83	757.6	29.91	759.8	36.3	2.4	75	NE	13.0	5.8			10			0.177	4.5		Prof. P. Monte.
Rome	29.67	753.7	29.85	758.2	54.5	12.5	80	WSW	20.6	9.2			10	W		0.594	15.1		Prof. P. S. Ferrari.
Lecce	29.67	753.7	29.93	760.2	56.5	13.6	90	WSW	28.0	12.5			10	SW		0	0		Prof. C. de Giorgi.
Cosenza	29.06	738.2	29.97	761.2	55.0	12.8	70	NW	0.7	0.3			10	NNW		0.394	10.0		Prof. D. Conti.
Cagliari	29.71	754.5	29.90	759.4	61.5	16.4	69	NW			2		2	W		0	0		Prof. A. Pacinotti.
Palermo	29.72	754.9	29.97	761.2	66.0	18.9	52	SW	15.4	6.9			5			0	0		Prof. G. Ciaccialore.
Syracuse	29.97	761.2	30.01	762.3	61.9	16.6	89	SSE	8.7	3.9			10	SSW		0.154	3.9		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29 35	745.6	29.88	758.9	56.8	13.8	85	SSW	18.6	8.3			10k	SSW		0.937	23.8		Prof. F. Brioschi.
Stelvio	22.00	558.8			15.8	— 9.0	81	NE					3			0.787	20.0		P. F. Denza.
Valdobbia	21.87	555.6			12.0	—11.1	82	N					0			7.874‖	200.0‖		
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.23	767.8	30.25	768.3	27.0	— 2.8	81	NNE	4.2	1.9			0			0.001	0.03	Clear	K. Sasaki.
Kioto	29.96	761.0	30.15	765.8	30.5	— 0.8	71						10n			0.002	0.05	Snowing	
Nagasaki, I. M. Obs'y	30.03	762.7	30.25	768.3	31.4	— 0.3	78	Calm	0	0			0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.87	758.7	29.94	760.5	32.4	0.2	46	NW	10.2	4.6		0	0			0	0	Clear	The Staff.
Wakayama	30.11	764.8	30.17	766.3	33.1	0.6	98	NW	5.1	2.3			4ck;ks		NW	0	0	Fair	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.77	756.1	29.96	761.0	82.4	28.0	62	NNE	9.8	4.4		2	2		NNE	0	0	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.77	756.0	30.03	762.7	68.0	20.0	74	NW			1		10n		SSW	0	0	Covered	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fenn, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.75	755.7	29.75	755.7	27.1	— 2.7		SE			2					0	0		
Groningen	29.78	756.3	29.83	757.7				ESE								0	0		
Helder	29.79	756.7	29.79	756.7	17.2	— 8.2		ESE			2					0	0		
Hellevoetsluis	29.76	755.8	29.76	755.8	22.6	— 5.2	92	SE			1					0	0		
Utrecht	29.75	755.6	29.80	756.8	22.1	— 5.5	80	ESE			2		8			0	0	Very cloudy	H. van der Brink

‖ Unmelted snow.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.56	750.7	29.62	752.3	37.8	3.2	76	S	22.1	9.9			10			0.244	6.2	Light rain	
Christiania	29.46	748.3	29.61	752.1	35.6	2.0	66	SSW	9	4			7			0	0		
Gjæsvær	29.22	742.3	29.25	742.9	14.9	— 9.5		NW			6		8						
Lodingen	29.46	748.2	29.50	749.4	17.2	— 8.2	91	SE			4		10			0.102	2.6	Light snow.	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.21	741.9	29.37	745.9	56.1	13.4	77	NW	3.8	1.7			4			0.256	6.5		Dr. J. A. Sampaio.
Campo Major	28.67	728.2	29.67	753.7	51.4	10.8	97	SSW	8.7	3.9			10			0.661	16.8		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.78	756.5	29.87	758.7	65.8	18.8	68	WSW	11.9	5.3			10			0.346	8.8		Capt. D. A. de Cunha.
Lisbon, Observatory	29.28	743.6	29.63	752.7	58.6	14.8	87	SW	25.5	11.4			7	SW		0.728	18.5		The Staff.
Ponta Delgada, Azores	29.40	746.8	29.47	748.6	58.6	14.8	70	W	23.7	10.6			3			0.157	4.0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.95	735.4	30.10	764.4	22.3	— 5.4	68	E	22	10			10						Capt. Lasarew.
Archangel	29.29	744.0	29.31	744.5	1.4	—17.0	82	E	2	1			8ks						Capt. Sselliwerstow.
Astrakhan	30.04?	753.1?	29.96?	751.0?	12.0	—11.1	75	NW	18	8			10cp			Blank			Capt. Wisganow.
Barnaul	30.12	765.0	30.69	779.4	1.6	—16.9	78	Calm	0	0			0						Meteorological Obs'y.
Dorpat	29.63	752.7	29.89	759.2	27.1	— 2.7	92	SW	13	6			10n						Observatory.
Ekaterinburg	29.21	741.9	30.30	769.5	— 3.8	—19.9	67	ESE	4	2			9c					Light clouds	Meteorological Obs'y.
Kasan	29.90	759.4	30.20	767.1	1.4	—17.0	84	SSE	2	1			10						Observatory.
Kertch	30.49	774.4	30.51	774.9	13.1	—10.5	83	NW	7	3			10						Lagorio.
Kieff	29.65	753.0	30.34	770.7	15.1	— 9.4	78	SSW	11	5			0						Observatory.
Krotkowo, N. 63°47′, E. 48°34′																			Cand. Fatjanow.
Lugan	30.30	769.6	30.53	775.4	4.3	—15.4	72	Calm	0	0			0						Meteorological Obs'y.
Moscow	29.52	749.8	30.11	764.7	22.5	— 5.3	71	NW	7.8	3.5			4ks						Meteorological Obs'y.
Nertchinsk	27.83	706.9	30.45	773.3	—11.4	—24.1	83						0						Meteorological Obs'y.
Nikolaiev	30.46	773.6	30.53	775.4	14.2	— 9.9	71	ESE	9	4			0						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.84	757.9	29.93	760.1	—22.4	—30.2	70	Calm	0	0			0						Lieut. Iwanow.
Nukuss	29.93	760.2	30.17	766.3	39.2	4.0	77	NW	11	5			9ks						Dr. Dobrochotow.
Pekin, China	29.87	758.8	30.02	762.4	27.0	— 2.8	79	Calm	0	0			0						Physical Observatory.
St. Petersburg	29.72	754.9	29.74	755.3	30.6	— 0.8	92	W	13	6			10n					Light snow	Central Physical Obs'y.
Tashkend, Laboratory																			Teich, A. M.
Tiflis	28.78	730.9	30.28	769.2	28.2	— 2.1	55	NW	45	20			10s						Physical Observatory.
Warsaw	29.68	753.8	30.14	765.6	10.6	—11.9	71	SE	7	3			0						Astronomical Obs'y.
Wilna	29.76	755.8	30.22	767.5	15.1	— 9.4	70	SW	2	1			1					Light clouds	Berg, Assistant.
Yeniseisk	30.39	772.0	30.73	780.5	—13.7	—25.4	80	Calm	0	0			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.66	753.4	25.9	— 2.8	95	E			1		1	S		0.04	1.0	Clear	Andrew Gibb.
Monach Lt. House, Hebrides			29.51	749.5	39	3.9	82	SSW			4		10			0	0		J. Youngclause.
North Unst, Shetland Isl'ds			29.55	750.6				E			6		10			Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.72	754.8	29.83	757.6	54.7	12.6	72	E	0.2	0.11			4			0	0	Hazy	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.50	749.4	29.56	750.8	57.4	14.1	63	SE	3.5	1.58			10			0.039	1.0	Covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.61	676.0			50.7	10.4	70	S	8.5	3.79			9			0	0	Almost cov'd	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.47	697.8	29.70	754.3	52.5	11.4	84	S	25.9	11.6			10			0.028	0.7	Covered	The Staff.
Murcia, Met. Obs'y ‡	29.67	753.7	29.83	757.6	57.4	14.1	83	NE	1.1	0.5		4	5	SE		0	0	Almost cl'dy	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.45	722.7	29.34	745.1	53.6	12.0	91	SW	22.4	10.0			8			0.622	15.8	Rainy	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.10	764.6	30.17	766.2	71.5	21.9	92	NE	3.6	1.6			10n		NE	0.591	15.0	Raining	Benito Vines, S. J.
Manilla, Phillippine Islands	29.99	761.8	30.04	763.1	75.2	24.0	63	ENE	0.7	0.3						0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.76	755.8	29.86	758.4	58.5	14.7	97	S	26.0	11.6			10		S	0.265	6.7	Raining	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.04	763.1	30.13	765.4	66.6	19.2	91	SE	0	0			3cs	3k	SE	SE	0	0	D. clouds	Enrique Gadea, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.60	751.9	29.64	752.9	—18.0	—27.8	100	SW			2		0			0	0		
Umea	29.65	753.1	29.70	754.4	— 9.8	—23.2	50	Calm			0		6			0	0		
Hernosand	29.65	753.1	29.70	754.4	18.5	— 7.5	81	Calm			0		10			0	0		
Stockholm	29.53	750.1	29.71	754.6	35.6	2.0	75	SSW			4		10			0	0		
Wisby	29.77	756.2	29.83	757.7	33.8	1.0	88	W			6		10			0	0		
Sub-Series.																			
Upsala	29.55	750.6	29.64	752.8	34.7	1.5	82	SW	12.3	5.5			9		WSW	0	0		Nils Ekholm.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.47	723.0	29.93	760.3	39.9	4.4	58	SW			2		3			0.646	16.4	Vapory	The Observatory.
Zurich	28.25	717.5	29.98	760.9	33.8	1.0	75	NW			1		2			0.236	6.0	Foggy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —4.3 mm.; Ther. +2°.5 cent.; Hum. —19 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.36	771.2	31.8	— 0.1	97	ENE	17	7.5			10		N	0	0		The Observatory.
Valona			29.91	759.6	58.8	14.9		S			3		5			0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.28	769.0	54.0	12.2	59	NNW			2	6c				0.03	0.8		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force o—10	CLOUDS. Amount and kind. Up'er o—10	Lo'er o—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.03	762.7	30.12	765.0	18	— 7.8	84	SW	2	0.9			10s		SW	0	0	Cloudy	
Alpena, Michigan	29.25	742.9	29.95	760.7	11	—11.7	80	NW	11	4.9		0	5s		NW	0	0	Fair	
Attou Id., Alaska‡																			
Atlanta, Georgia	29.19	741.4	30.42	772.7	29	— 1.7	67	NW	6	2.7		2c	0	Calm		0	0	Clear	
Atlantic City, New Jersey	30.27	768.8	30.28	769.1	20	— 6.7	69	W	5	2.2		0	0			0	0	Clear	
Augusta, Georgia	30.22	767.6	30.44	773.2	28	— 2.2	88	Calm	0	0		0	Haze		Calm	0	0	Clear	
Baltimore, Maryland	30.23	767.8	30.29	769.4	27	— 2.8	64	W	4	1.8			10s;fg		W;O	0	0	Cloudy	
Barnegat, New Jersey	30.22	767.6	30.24	768.1	22	— 5.6	72	NW	12	5.4		0	Haze		Calm	0	0	Clear	
Benton, Montana	27.76	705.1			— 6	—21.1	61	NE	7	3.1		0	5s		Calm	0.05	1.3	Fair	
Bismarck, Dakota	28.69	728.7	30.55	776.1	— 7	—21.7		NW	26	11.6		0	0			0	0	Clear	
Boise City, Idaho	27.18	690.4	30.14	765.5	32	0.0	84	SE	8	3.6			10n		Calm	Inap.	Inap.	Light snow	
Boston, Massachusetts	29.90	759.4	30.06	763.5	14	—10.0	64	W	13	5.8		2c	8s	Calm	NW	0	0	Cloudy	
Brackettville, Texas	29.12	739.6	30.22	767.6	47	8.3	92	E	7	3.1			10s		E	0	0	Cloudy	
Brownsville, Texas	30.18	766.6	30.22	767.6	57	13.9	100	Calm	0	0			10n		Calm	0.48	12.2	Heavy rain	
Buffalo, New York	29.31	744.5	30.06	763.5	15	— 9.4	82	SW	12	5.4			10ks		SW	0.02	0.5	Cloudy	
Burlington, Vermont	29.75	755.6	30.06	763.5	21	— 6.1	86	S	3	1.3			10s		SW	Inap.	Inap.	Cloudy	
Cairo, Illinois	30.05	763.3	30.47	773.9	30	— 1.1	78	Calm	0	0			10s		W	0	0	Cloudy	
Campo, California	27.46	697.5	30.03	762.7	28	— 2.2	88	S	3	1.3		5cs	0	W		0.10	2.5	Fair	
Camp Thomas, Arizona	27.49	698.2			20	— 6.7	70	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.28	769.1	30.30	769.6	24	— 4.4	74	SW	8	3.6		0	0			0	0	Clear	
Cape May, New Jersey	30.24	768.1	30.27	768.8	26	— 3.3	76	NW	20	8.9		2c	0	W		0	0	Fair	
Castroville, Texas	29.52	749.8	30.26	768.6	46	7.8	92	E	9	4.0			10n		Calm	0.01	0.3	Light rain	
Cedar Keys, Florida	30.34	770.6	30.36	771.1	36	2.2	80	N	6	2.7		1c	0	Calm		0	0	Clear	
Champaign, Illinois	29.46	748.3	30.34	770.6	11	—11.7	45	W	18	8.0		0	0			0.03	0.8	Clear	
Charleston, S. Carolina	30.32	770.1	30.39	771.9	34	1.1	79	W	4	1.8		0	0			0	0	Clear	
Charlotte, N. Carolina	29.45	748.0	30.33	770.4	25	3.9	100	W	2	0.9			Fog		Calm	0	0	Dense fog	
Chattanooga, Tennessee	29.62	752.3	30.49	774.4	25	— 3.9	87	SW	4	1.8		2cs	Sm'e	Calm	Calm	0	0	Fair	
Cheyenne, Wyoming	24.17	613.9	30.11	764.8	2	—16.7	44	SW	8	3.6			10s		Calm	0	0	Cloudy	
Chicago, Illinois	29.46	748.3	30.21	767.3	18	— 7.8	68	W	10	4.5		0	0			0.01	0.3	Clear	
Chincoteague, Virginia	30.30	769.6	30.32	770.1	25	— 3.9	75	NW	4	1.8		0	5s		Calm	0	0	Fair	
Cincinnati, Ohio	29.65	753.1	30.35	770.9	26	— 3.3	75	SW	8	3.6		2cs	2s	W	Calm	0.01	0.3	Fair	
Cleveland, Ohio	29.37	746.0	30.14	765.5	20.5	— 6.4	85	SW	18	8.0			10n		Calm	0.03	0.8	Light snow	
Coleman City, Texas	28.58	725.9	30.36	771.1	35	1.7	70	NW	4	1.8			10s		Calm	0	0	Cloudy	
Columbus, Ohio	29.35	745.5	30.26	768.6	21	— 6.1	86	SW	7	3.1			10n		Calm	Inap.	Inap.	Light snow	
Concho, Texas	28.42	721.9	30.19	766.8	39	3.9	73	NE	2	0.9			10s		Calm	0	0	Cloudy	
Corsicana, Texas	29.99	761.7	30.48	774.2	42	5.6	74	Calm	0	0			8ks		Calm	0	0	Cloudy	
Davenport, Iowa	29.66	753.4	30.39	771.9	0	—17.8	70	W	10	4.5		0	0			0.01	0.3	Clear	
Dayton, Washington T'y	28.29	718.6	30.05	763.3	22	— 5.6	72	NE	2	0.9			10s		Calm	0	0	Cloudy	
Deadwood, Dakota	25.66	651.8			—14	—25.6	45	NE	1	0.4		0	0			0	0	Clear	
Decatur, Texas	29.24	742.7	30.49	774.4	34	1.1	90	NE	6	2.7		0	0			0	0	Clear	
Delaware Breakwater, Del.	30.26	768.6	30.28	769.1	24	— 4.4	87	SW	10	4.5		0	5s		SW	0	0	Fair	
Denison, Texas	29.66	753.4	30.52	775.2	29	— 1.7	89	NW	4	1.8		0	0			0	0	Clear	
Denver, Colorado	25.03	635.8	30.25	768.3	— 8	—22.2	78	S	1	0.4		0	0			0.03	0.8	Clear	
Des Moines, Iowa																			
Detroit, Michigan	29.34	745.2	30.07	763.8	12	—11.1	80	SW	12	5.4			10s		Calm	Inap.	Inap.	Cloudy	
Dodge City, Kansas	27.88	708.1	30.50	774.7	4	—15.6	74	N	7	3.1		0	0			0.02	0.5	Clear	
Dubuque, Iowa	29.54	750.3	30.32	770.1	3	—16.1	73	SW	8	3.6		2c	2s	Calm	Calm	Inap.	Inap.	Fair	
Duluth, Minnesota	29.44	747.8	30.20	767.1	6	—14.4	88	SW	5	2.2			10s		SW	0.04	1.0	Cloudy	
Eagle Pass, Texas	29.54	750.3	30.30	769.6	48	8.9	85	SE	3	1.3			10s		Calm	0	0	Cloudy	
Eagle Rock, Texas	25.33	603.4	29.98	761.5	0	—17.8	70	NW	4	1.8			10s		W	0	0	Threatening	
Eastport, Maine	29.75	755.6	29.82	757.4	16	— 8.9	66	SW	9	4.0		0	0			0	0	Clear	
Edinburg, Texas					47	8.3	100	N			1		10n		Calm	0.56	14.2	Heavy rain	
El Paso, Texas	26.39	670.3			21	— 6.1	71	S	2	0.9		0	1s		Calm	0	0	Clear	
Erie, Pennsylvania	29.34	745.2	30.10	764.5	20	— 6.7	85	W	17	7.6			10s		Calm	0.02	0.5	Cloudy	
Escanaba, Michigan	29.33	745.0	30.06	763.5	3	—16.1	73	W	12	5.4		2c	2s	Calm	Calm	Inap.	Inap	Fair	
Florence, Arizona	28.65	727.7	30.25	768.3	40	4.4	48	E	4	1.8		8cs	0	W		0	0	Fair	
Fort Apache, New Mexico	25.10	637.8	30.55	776.0	16	— 8.9	49	E	2	0.9		0	0			0	0	Clear	
Fort Assinniboine, Montana	27.74	704.6			— 4	—20.0	65	NW	5	2.2		0	0			0	0	Clear	
Fort Bennett, Dakota	28.95	735.3			3	—16.1	73	NW	18	8.0		10cs	0	Calm		0	0	Cloudy	
Fort Buford, Dakota	28.60	726.4	30.80	782.3	—14	—25.6	75	Calm	0	0		0	0			0.11	2.8	Clear	
Fort Custer, Montana	27.40	669.0			—23	—30.6		SE	6	2.7		0	0			0.02	0.5	Clear	
Fort Davis, Texas	25.36	644.1	30.32	770.1	26	— 3.3	88	Calm	0	0		0	0			0	0	Clear	
Fort Elliott, Texas	27.65	702.3	30.20	767.1	11	—11.7	20	N	16	7.2		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.95	760.7	30.54	775.7	26	— 3.3	75	N	12	5.4			10s		Calm	0	0	Cloudy	
Fort Grant, Arizona	25.28	642.1	30.08	764.0	36	2.2	53	N	2	0.9		0	0			0	0	Clear	
Fort Griffin, Texas	29.08	738.6	30.46	773.7	29	— 1.7	67	N	11	4.9			10s		Calm	0	0	Cloudy	
Fort Keogh, Montana	28.12	714.2			—18	—27.8		SW	10	4.5		0	0			0.06	1.5	Clear	
Fort Macon, North Carolina	30.32	770.1	30.33	770.4	31	— 0.6	71	NW	3	1.3		2c	Haze	Calm	Calm	0	0	Fair	
Fort Missoula, Montana	27.07	687.8			9	—12.8	100	W	4	1.8		0	0			0	0	Clear	
Fort McKavett, Texas	28.21	716.5	30.27	768.8	33	0.6	89	NW	5	2.2			10s		Calm	0	0	Cloudy	
Fort Shaw, Montana	26.84	681.7			— 7	—21.7	100	Calm	0	0		5cs	0	Calm		0	0	Fair	
Fort Sill, Indian Territory	29.20	741.7	30.42	772.7	21	— 6.1	86	N	32	14.3			10s		N	0	0	Cloudy	
Fort Stevenson, Dakota	28.66	728.0			— 8	—22.2	79	NW	23	10.3			10n		NW	0.08	2.0	Light snow	
Fort Verde, Arizona					25	— 3.9	50	NW			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.59	726.2	30.22	767.6	45	7.2	92	SE	5	2.2			10s		Calm	Inap.	Inap.	Cloudy	
Galveston, Texas	30.35	770.9	30.59	777.0	47	8.3	85	NE	15	6.7			10s		Calm	0	0	Cloudy	
Grand Haven, Michigan	29.35	745.5	30.04	763.0	18	— 7.8	84	W	28	12.5			10s		Calm	0.02	0.5	Cloudy	
Hatteras, North Carolina	30.29	769.4	30.31	769.9	32	0.0	79	W	3	1.3		0	0			0	0	Clear	
Helena, Montana	26.32	668.5			—18	—27.8	100	S	7	3.1		0	0			0.05	1.3	Clear	
Henrietta, Texas	29.44	747.8	30.47	773.9	27	— 2.8	64	N	16	7.2		0	2s		N	0	0	Fair	
Indianapolis, Indiana	29.43	747.5	30.26	768.6	23.5	— 4.7	80	SW	8	3.6		0	5s		SW	Inap.	Inap.	Fair	
Indianola, Texas	30.30	769.6	30.33	770.4	48	8.9	85	NE	20	8.9			10s		Calm	0	0	Cloudy	
Jacksboro, Texas	29.26	743.2	30.48	774.2	32	0.0	69	Calm	0	0		0	0			0	0	Clear	
Jacksonville, Florida	30.35	770.9	30.40	772.1	35	1.7	70	N	5	2.2		2cs	0	Calm		0	0	Clear	
Keokuk, Iowa	29.73	755.1	30.47	773.9	4	—15.6	74	W	9	4.0		0	0			0.01	0.3	Clear	
Key West, Florida	30.20	767.1	30.23	767.8	63	17.2	89	NE	18	8.0			10s		NE	0	0	Cloudy	
Kittyhawk, North Carolina	30.30	769.6	30.33	770.4	29	— 1.7	67	NW	6	2.7		0	0			0	0	Clear	
Knoxville, Tennessee	29.37	746.0	30.48	774.2	21	— 6.1	100	Calm	0	0		5cs	Fog	W	Calm	Inap	Inap.	Fair	
La Crosse, Wisconsin	29.45	748.0	30.27	768.8	6	—14.4	76	NW	9	4.0		0	0			0	0	Clear	
La Mesilla, New Mexico	26.26	667.0	30.41	772.4	20	— 6.7	56	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.72	754.9	30.08	764.0	49	9.4	100	N	6	2.7			10n		Calm	0.13	3.3	Light rain	
Leavenworth, Kansas	29.68	753.9	30.64	778.2	7	—13.9	77	NW	8	3.6		0	0			0	0	Clear	
Lewiston, Idaho	29.40	746.7	30.09	764.3	24	— 4.4	72	E	1	0.4			10s		Calm	0	0	Cloudy	
Little Rock, Arkansas	30.13	765.3	30.48	774.2	28	— 2.2	88	NW	2	0.9		0	Fog		Calm	0	0	Clear	
Los Angeles, California	29.74	755.4	30.09	764.3	45	7.2	84	E	4	1.8		0	1s		Calm	0.02	0.5	Clear	
Louisville, Kentucky	29.74	755.4	30.34	770.6	28	— 2.2	77	SW	9	4.0		5cs	2s	Calm	Calm	Inap.	Inap.	Fair	
Lynchburg, Virginia	29.58	751.3	30.32	770.1	25	— 3.9	75	Calm	0	0		0	0			0	0	Clear	
Madison, Wisconsin	29.10	739.1	30.20	767.1	1	—17.2	71	W	15	7.2		0	0			0	0	Clear	
Marquette, Michigan	29.23	742.4	30.01	762.2	4	—15.6	74	W	5	2.2			10s		W	0.03	0.8	Cloudy	
Mason, Texas	28.67	728.2	30.50	774.7	44	6.7	92	E	4	1.8			10n		Calm	0.05	1.3	Light rain	
Memphis, Tennessee	30.12	765.0	30.40	774.4	28	— 2.2	88	SW	6	2.7		5cs	Fog	Calm	Calm	0	0	Fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.36	745.7	30.17	766.3	3	—16.1	73	W	18	8.0	.....	1ck	5s	Calm	W	0	0	Fair	
Mobile, Alabama	30.40	772.1	30.48	774.2	30	— 1.1	78	N	3	1.3	.....	0	2ks	.....	N	0	0	Clear	
Montgomery, Alabama	30.24	768.1	30.49	774.4	30	— 1.1	78	NW	1	0.4	.....	2c	0	.....	Calm	0	0	Clear	
Morgantown, W. Virginia	29.22	742.2	30.28	769.1	27	— 2.8	64	SW	9	4.0	.....	.....	1os	.....	SW	0.02	0.5	Cloudy	
Moorhead, Minnesota	29.37	746.0	30.44	773.2	5	—15.0	87	NW	18	8.0	.....	.....	1os	.....	NW	0	0	Cloudy	
Mt. Washington, N. H.	23.21	589.5	29.57	751.1	— 6	—21.1	100	NW	57	25.5	.....	.....	Fog	.....	NW	0	0	Dense fog	
Nashville, Tennessee	29.88	758.9	30.46	773.7	29	— 1.7	78	Calm	0	0	.....	10ck	Fog	SW	Calm	Inap.	Inap.	Cloudy	
New Haven, Connecticut	30.03	762.7	30.16	766.1	15	— 9.4	65	W	6	2.7	.....	.....	1os	.....	W	0	0	Cloudy	
New London, Connecticut	30.09	764.3	30.14	765.5	17	— 8.3	67	NW	5	2.2	.....	.....	8s	.....	NW	0	0	Clearing	
New Orleans, Louisiana	30.38	771.6	30.45	773.4	40	4.4	56	N	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Newport, Rhode Island	30.06	763.5	30.11	764.8	19	— 7.2	70	W	19	8.5	.....	0	1s	.....	W	0	0	Clear	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	30.10	764.5	30.13	765.3	23	— 5.0	72	NW	16	7.2	.....	10k	0	NW	.....	0	0	Cloudy	
New York, New York	30.01	762.2	30.20	767.1	19	— 7.2	85	W	8	3.6	.....	2cs	5s	W	Calm	.....	.....	Fair	
Norfolk, Virginia	30.26	768.6	30.32	770.1	29	— 1.7	67	W	3	1.3	.....	0	Fog	.....	Calm	0	0	Clear	
North Platte, Nebraska	27.55	699.8	30.53	775.4	— 3	—19.4	83	NW	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Olympia, Washington T'y	29.91	759.7	29.95	760.7	36.0	2.2	39	NE	11	4.9	.....	.....	1os	.....	Calm	0.01	0.3	Cloudy	
Omaha, Nebraska	29.37	746.0	30.63	778.0	1	—17.2	100	NW	10	4.5	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Oswego, New York	29.71	754.6	30.05	763.3	23	— 5.0	81	SW	9	4.0	.....	.....	1on	.....	Calm	0.11	2.8	Light snow	
Pensacola, Florida	30.45	773.4	30.48	774.2	32	0.0	79	N	5	2.2	.....	2cs	Haze	Calm	Calm	0	0	Fair	
Philadelphia, Pa	30.19	766.8	30.25	768.3	21	— 6.1	86	W	7	3.1	.....	10k	0	W	.....	0	0	Cloudy	
Phœnix, Arizona	29.01	736.8	29.94	760.5	32	0.0	69	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.49	444.2	29.70	754.4	— 5	—20.6	63	SW	36	16.1	.....	0	0	.....	.....	0	0	Clear	
Pilot Point, Texas	29.65	753.1	30.56	776.2	30	— 1.1	68	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Pioche, Nevada	24.02	610.1	29.79	756.7	28	— 2.2	57	S	7	3.1	.....	.....	10ks	.....	Calm	0.01	0.3	Cloudy	
Pittsburg, Pennsylvania	29.36	745.7	30.22	767.6	23	— 5.0	86	SW	7	3.1	.....	.....	1on	.....	SW	0.01	0.3	Light snow	
Port Huron, Michigan	29.29	744.0	30.00	762.0	15	— 9.4	82	S	14	6.3	.....	.....	1os	.....	Calm	Inap.	In p.	Cloudy	
Portland, Maine	29.92	760.0	29.97	761.2	16	— 8.9	49	NW	7	3.1	.....	0	2s	.....	Calm	0	0	Clear	
Portland, Oregon	29.85	758.2	29.92	760.0	31	— 0.6	63	E	18	8.0	.....	1cs	2s	SE	SE	0.02	0.5	Fair	
Portsmouth, N. Carolina	.....	.....	.....	.....	32	0.0	69	NW	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Prescott, Arizona	24.82	630.2	30.18	766.6	21	— 6.1	57	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	30.24	768.1	30.26	768.6	48	8.9	85	NE	16	7.2	.....	2c	5ks	SW	SE	0	0	Fair	
Red Bluff, California	29.43	747 5	29.78	756.4	48.0	8.9	78	SE	25	11.1	.....	.....	1on	.....	Calm	0.03	0.8	Light rain	
Rio Grande City, Texas	30.05	763.3	30.27	768.8	53	11.7	93	NW	6	2.7	.....	.....	1on	.....	Calm	0.18	4.6	Light rain	
Rochester, New York	29.41	747.0	30.07	763.8	17	— 8.3	67	W	13	5.8	.....	1cs	4s	W	W	Inap	Inap.	Fair	
Roseburg, Oregon	29.20	741.7	29.78	756.4	29.5	— 1.4	100	Calm	0	0	.....	.....	Fog	.....	Calm	0.31	7.9	Dense fog	
Sacramento, California	29.90	759.4	29.98	761.5	47	8.3	85	S	10	4.5	.....	.....	1os	.....	Calm	0.03	0.8	Cloudy	
St. Louis, Missouri	29.80	756.9	30 43	772.9	22	— 5.6	86	NW	18	8.0	.....	5cs	5s	Calm	W	Inap.	Inap.	Cloudy	
St. Paul, Minnesota	29.35	745.5	30.20	768.6	8	—13.3	78	W	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Salt Lake City, Utah	25.69	652.5	30.02	762.5	33	0.6	51	E	3	1.3	.....	.....	1os	.....	Calm	0	0	Cloudy	
San Antonio, Texas	29.65	753.1	30.38	771.6	44	6.7	100	NE	7	3.1	.....	.....	1on	.....	Calm	0.07	1.8	Light rain	
San Diego, California	30.06	763.5	30.14	765.5	45	7.2	92	E	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Sandusky, Ohio	29.40	746.7	30.12	765.0	23	— 5.0	86	SW	17	7.6	.....	.....	1os	.....	Calm	0.03	0.8	Cloudy	
Sandy Hook, New Jersey	30.16	766.1	30.20	767.1	20	— 6.7	70	W	12	5.4	.....	0	0	.....	.....	0	0	Clear	
San Francisco, California	29.89	759.2	29.95	760.7	54	12.2	70	S	12	5.4	.....	.....	1on	.....	SW	Inap.	Inap.	Light rain	
Santa Fé, New Mexico	23.34	592.8	29.88	758.9	14	—10.0	64	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	30.30	769.6	30.40	772.1	33	0.6	89	NE	1	0.4	.....	.....	Fog	.....	Calm	0	0	Dense fog	
Shreveport, Louisiana	30.24	768.1	30.50	774.7	33	0.6	79	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Silver City, New Mexico	24.35	618.5	29.97	761.2	18	— 7.8	53	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Smithville, North Carolina	30.34	770.6	30.38	771.6	28	— 2.2	88	NW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Socorro, New Mexico	29.53	750 0	29.58	751.3	20	— 6.7	56	SE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.68	753.9	30.43	772.9	14	—10.0	73	W	10	4.5	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Springfield, Massachusetts	29.97	761.2	30.11	764.8	10	—12.2	79	S	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Stockton, Texas	27.24	691.9	30.24	768.1	29	— 1.7	78	W	16	7.2	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.51	749.5	30.41	772.4	1	—17.2	100	NW	24	10.7	.....	.....	1os	.....	Calm	0.07	1.8	Cloudy	
Thatcher's Island, Mass	29.97	761.2	30.02	762 5	16	— 8.9	49	W	35	15.8	.....	.....	1os	.....	W	0	0	Cloudy	
Toledo, Ohio	29.38	746.2	30.11	764.8	24	— 4.4	75	W	14	6.3	.....	8k	0	W	.....	Inap.	Inap.	Clearing	
Tucson, Arizona	27.64	702.0	30.19	766.8	33	0.6	51	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.74	755.4	30.27	768.8	19	— 7.2	85	NE	52	23.2	.....	.....	1on	.....	Calm	0.02	0.5	Light snow	
Uvalde, Texas	29.41	747.0	30.10	766.1	49	9.4	.....	E	5	2.2	.....	10ck	0	NW	.....	0.08	2.0	Cloudy	
Vicksburg, Mississippi	30.20	767.1	30.48	774.2	36	2'2	61	E	6	2.7	.....	5c	Fog	Calm	Calm	0	0	Fair	
Visalia, California	29.68	753 9	30.05	763 3	46	7.8	77	E	4	1.8	.....	0	5s	.....	Calm	0	0	Fair	
Washington, D. C.	30.17	766.3	30.30	769.0	21	— 6.1	86	W	3	1.3	.....	2cs	0	.....	W	Inap.	Inap.	Clear	
Wickenburg, Arizona	.....	.....	.....	.....	27	— 2.8	76	W	.....	.....	1	1c	5s	Calm	Calm	0	0	Fair	
Wilmington, N. Carolina	30.30	769.6	30.30	771.1	31	— 0.6	79	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Winnemucca, Nevada	25.47	646.9	29.83	757.7	24	— 4.4	74	NE	8	3.6	.....	0	0	.....	.....	0.12	3.0	Clear	
Wood's Holl, Mass	30.02	762.5	30.07	763.8	21	— 6.1	71	NW	20	8.9	.....	2k	0	NW	.....	0	0	Fair	
Yankton, Dakota	29.20	741.7	30.70	779.8	— 4	—20.0	65	NW	14	6.3	.....	0	0	.....	.....	0	0	Clear	
Yuma, Arizona	29.95	760.7	30.11	764.8	42	5.6	83	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.06	561.1	.....	.....	48.0	8.9	69	Calm	0	0	.....	5k	0	.....	.....	0	0	Fair	Thomas Herran.
Buff Bay Town, Jamaica‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	30.14	765.5	30.19	766.8	73	22.8	90	Calm	0	0	.....	.....	10n	.....	E	0.93	23.6	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	29.93	760.3	29.99	761.7	0.8	—14.	.....	S	.....	.....	2	.....	3	.....	.....	0	0	.....	
Kingston, Jamaica, W. I.	30.05	763.3	30.00	763.5	68.5	20.3	94	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	Maxwell Hall.
Navassa, W. I.	29.96	761.0	30.04	763.0	73.5	24.7	65	NE	13	5.8	.....	5k	2s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	77	25.0	91	E	.....	.....	2	5ck	5k	E	.....	0.170	4.32	½ Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.93	760.2	81	27.2	85	Calm	.....	.....	0	0	2k	.....	Calm	0	0	Fair	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	73	23	.....	SE	.....	.....	6	0	0	.....	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.08	764.0	30.11	764.8	74	23.3	85	N	3.6	1.6	.....	4c	1s	.....	NE	0	0	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	29.94	760.4	30.00	762.0	— 3.1	—19.5	.....	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	
York Factory, B. A.	29.39	746.5	29.44	747.8	—27.0	—32.8	.....	SW	16	7.2	.....	.....	10s	.....	S	0.01	0.3	Snowing	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.02	762.5	66	18.9	81	SW			1		7	SW						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 21° 04′, E. 68° 10′	30.03	762.7	77	25.0	69	N			2		2	N				1	N	D. clouds	Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. S. Hope.
H. M. S Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. J. F. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.02	762.5	61	16.1		WNW			5		2	NW						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 32′, E. 81° 22′	29.92	760.0	79	26.1		N			2		2	N				2	NNE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.95	760.7	81	27.2	62	W			4		0							Squally	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Chimbote, Peru	29.87	758.7	67	19.4	92	Calm			0		9							Misty	Comm. E. E. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 14′, E. 122° 18′	30.22	767.6	47.0	8.3	76	SE			3		10							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 12° 24′, E. 44° 28′	30.05	763.3	78	25.6	82	ESE			2		3	ESE				2	ESE	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 42° 18′, W. 9° 30′	29.36	745.7	61	16.1	88	SW			6		9	W				5	SW	Squally	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 13° 57′, W. 60° 10′	30.06	763.5	78	25.6	82	E			3		2	E				2	E	D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis, N. 38° 42′, W. 9° 06′	29.62	752.3	59	15.0	94	SW			5.6		6					2		D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 56′	29.70	754.4	76	24.4	68	ESE			1		0					1	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis, N. 17° 08′, E. 65° 43′	30.15	765.8	76.5	24.7	75	ENE			3		0					1	E	Blue sky	Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos, N. 13° 05′, W. 59° 36′	30.10	764.5	77	25.0	82	ENE			1		2							D. clouds	Capt. C. G. Fane,
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	30.10	764.5	65.5	18.6	59	S			1		3	N						D. clouds	Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, C. Verd Id's.	30.10	764.6	77.0	25.0	84	NE			4		2			0	0	2		D. clouds	S. C. da Silva Costa, Comd't.
Sado, N. 0° 27′, E. 6° 45′	29.95	760.9	83.5	28.6	75	ESE			3		9			0	0	2	SE	Gloomy	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	o—10	o—10	o—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.53	775.4	34	1.1	79	N	2	0.9			2		N	o	o			Fair	
N. Yard, Portsmouth, N. H	30.00	762.0	15	— 9.4	49	W	10	4.5		5c		W		o	o			Fair	
Naval Hospital, Yokohama, Japan	29.75	755.6	33.5	0.8	46	NNW			1		o			o	o			Clear	
Adams, Callao, Peru	29.88	758.9	68	20.0	95	Calm			o		10					Long		Cloudy	
Alaska, N. Yard, Mare I'd, Cal	29.87	758.7	51	10.6	72	ESE			4		10		ESE	o	o			Cloudy	
Alert, Hong-Kong, China *	30.07	763.8	63	17.2	78	ENE			1		o			o	o	Sm'h		Hazy	
Alliance, Matanzas, Cuba, W.I	30.16	766.1	73	22.8	90	E			1		5			Mod	erate	Sm'h		Fair	
Ashuelot, Tientsin, China	30.03	762.7	24	— 4.4	100	E			1		o							Clear	
Colorado, New York, N. Y	30.19	766.8	21	— 6.1		WNW	4	1.8			8		NW	o	o			Cloudy	
Constitution, N. Yard, League I'd., Pa			23	— 5.0		W	10	4.5			10		W					Cloudy	
Franklin, Off N. Yard, Norfolk, Va	30.27	768.8	26	— 3.3		SW	6	2.7			2			o	o			Fair	
Galena, Villafranca, France	29.92	760.0	46	7.8	84	NW			1		10					Sm'h		Cloudy	
Independence, N. Yard, Mare I'd, Cal	29.94	760.5	51	10.6	72	S	8.4	3.8			8		S	o	o			Cloudy	
Jamestown, Sitka, Alaska *	30.42	772.7	27	— 2.8		Calm			o		o			o	o	Sm'h		Clear	
Kearsarge, Kingston, Jamaica, W.I.	30.06	763.5	74	23.3	81	Calm			o		o					Sm'h		Clear	
Lackawanna, Callao, Peru †	30.03	762.7	67	19.4	95	NNE			o-1		10		NE	o	o			Cloudy	
Marion, Straits of Magellan	29.56	750.8	53	11.7	86	Calm			o		10			Lig	ht	Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	30.07	763.8	21	— 6.1		W			5		10		W					Cloudy	
Minnesota, New York, N. Y	30.22	767.6	23	— 5.0		W			3		8							Hazy	
Monocacy, Shanghai, China	30.28	769.1	41	5.0	82	SE			2		10		Calm					Cloudy	
New Hampshire, Port Royal, S. C	30.36	771.1	40	4.4	82	Calm	o	o			o			o	o			Clear	
Nipsic, Hyeres Roadstead, France	29.93	760.2	52	11.1	41	SE			2		8					Sm'h		D. clouds	
Onward, Chimbote Bay, Peru †	29.87	758.7	70	21.1	85	S			4		2		N			Long	N;W	Clear	
Palos, Shanghai, China	30.26	768.6	43	6.1	83	ESE			1		8							Fair	
Passaic, Washington, D. C.	30.33	770.4	19	— 7.2	?	SW			1		8		Calm					Cloudy	
Pensacola, N. 21° 56" W. 105° 47'	29.98	761.5	72	22.2	76	ESE			2-3		10							Cloudy	
Portsmouth, Washington, D. C	30.21	767.3	23	— 5.0	100	NE			1		2							Clear	
Powhatan, New York, N. Y	30.21	767.3	19	— 7.2	54	WSW			2		5		SE					Fair	
Quinnebaug, Naples, Italy	29.88	758.9	59	15.0	88	WNW			4		10		NW			Long			
Richmond, Hong-Kong, China	30.19	766.8	63	17.2	72	ENE			2		o			o	o			Clear	
Saratoga, Baltimore, Md	30.26	768.6	25	— 3.9	100	WSW			1		o			o	o			Clear	
Shenandoah, Montevideo, Urugnay *	29.79	756.7	70	21.1	76	W			2		2					Sm'h		Fair	
St. Louis, League Island, Pa	30.27	768.8	22	— 5.6	100	SW	10	4.5			8		NW	o	o			Cloudy	
Swatara, Takamatsa, Japan †	30.08	764.0	36	2.2	71	NW			4		o					Mod.	NW	Blue sky	
Tennessee, Port Royal, Jamaica, W.I.	30.06	763.5	75	23.9	100	NNW	1	0.4			2		Calm	o	o	Sm'h		Clear	
Trenton, Villafranca, France *	29.90	759.4	47	8.3	77	NW			1-2		10			17 h	ours	Sm'h		Cloudy	
Vandalia, Bridgetown, Barbadoes, W.I	30.14	765.5	80	26.7	74	ENE			2		2		ENE					Fair	
Wabash, Boston, Massachusetts	30.10	764.5	14	—10.0	82	WSW	10	4.5			10			o	o			Cloudy	
Wachusetts, Panama, Panama *	29.50	749.3	77	25.0	91	NNW			3		2		N	o	o	Sm'h		Clear	
Wyoming, Villafranca, France	30.13	765 3	45	7.2	76	NNW			1		5		N			Sm'h		Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	* Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic																			Capt. H. Parsell.
Ship Baroda, ‡ S. 22° 28′, E. 3° 32′	30.05	763.3	77.5	25.3	64	SE			3		10							Overcast	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 33° 10′, W. 20° 30′	29.74	755.4	66	18.9	84	SW			6		6							D. clouds	Capt. A. J. Brown.
Ship Blychswood																			Capt. E. J. Moleny.
British Merchant ‡																			Capt. E. Heggum.
Chin Yang, ‡ N. 24° 27′, W. 22° 56′	30.09	764.3	69.8	21.0	71	WSW			2		2							Blue sky	Capt. H. Youlden.
S. S. Clpero, N. 12° 10′, W. 59° 10′	30.11	764.8	79	26.1		ESE			2		2					2	ESE	Blue sky	W. N. Lafley.
City of Agra ‡ S. 40° 32′, W. 32° 45′	30.24	768.1	53.5	11.9	66	SSW			2		3							D. clouds	Capt. T. Young.
Barque Commewyne, ‡ N. 19° 38′, W. 60° 38′	39.20	767.1	79.0	26.1	73	NE			2		3							D. clouds	Capt. W. Scott.
Barque Coppename; N. 16° 08′, W. 36° 05′	30.13	765.3	79.8	26.6	61	ENE			4		7							D. clouds	Capt. A. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra ‡																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡ N. 48° 21′, W. 45° 40′	28.91	734.3	42	5.6	91	NE			5		9					6	ENE	Gloomy	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, N. 23° 33′, W. 21° 38′	30.17	766.3	71.3	21.8	75	Calm			0		1					2	N	Blue sky	Capt. H. W. Dyke.
Barque Mertoln, N. 47° 27′, W. 11° 03′	28.85	733.0	52.5	11.4	93	SSW			8		4							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 49° 03′, W. 7° 10′	29.07	738.4	43.5	6.4	92	ESE			7		10							Raining	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, N. 37° 10′, W. 73° 43′	30.13	765.3	34	1.1		W			3		8		W			Sl't	NW	Fair	Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Iemay. Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Britanic, N. 47° 48′, W. 44° 58′ †	28.90	734.0	44	6.7		NNW			6		10		NW			H'vy	WNW	Raining	Capt. H. Perry.
S. S. Celtic, N. 48° 12′, W. 32° 00′ †	28.37	720.6	50	10.0		N			5		10		ENE	10h'rs	light	H'vy	E	Cloudy	Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	29.70	754.4	25	— 3.9		ESE			4		10		E	0	0			Foggy	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. R. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, N. 47° 51′, W. 29° 43′	28.52	724.4	52.7	11.5		SW			6		5		SW	0	0	Cross	SW	Clearing	Capt. H. Baur.
S. S. Köln, N. 53° 47′, E. 7° 45′	29.88	758.9	23.0	— 5.0		SE			3-4		0			0	0	Sm'h	SE	Clear	Capt. F. Pfeiffer.
S. S. Leipzig																			Capt. G. Meyer.
S. S. Ohio																			
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolh Fredholm. †																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Philadelphia, Pa.	30.03	762.7	18	— 7.8	84	SSW			4		2		W					Clear	Capt. J. W. Shackford.
S. S. Indiana, ‡ Liverpool, England †	29.52	749.8	20	— 6.7	70	ESE			3		2		E	0	0			Clear	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 45° 35′, W. 51° 18′ *†	29.28	743.7	28	— 2.2	88	WNW			6		10		WNW	Continuous snow		H'vy	WNW	Snowing	Wm. Shakford, 1st Off'r.
S. S. Pennsylvania, Liverpool, England †	29.66	753.4	23	— 5.0		S			2		10		S	0	0			Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 35° 34′, W. 121° 19′ †	30.08	764.0	57	13.9	69	S			3		8		SE	0	0	G'tl	WNW	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 22° 40′, E. 115° 36′ †	30.21	767.3	67	19.4	69	ENE			4		0			0	0	Mod.	NE		Capt. H. Davison.
S. S. Gaelic, N. 38° 12′, W. 142° 09′ *†	30.04	763.0	61	16.1	82	E			5		10		E			Sl't	NE	Cloudy	Capt. W. H. Kidley.
S. S. Oceanic, San Francisco, Cal. †	30.26	768.6	56	13.3	69	S			3		5		S					Cloudy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal. †	29.89	759.2	53	11.7	93	SE			6		10		SE					Cloudy	Capt. J. N. Ingalls.
S. S. Idaho, Seattle, Wash. Ter. †	29.92	760.0	30	— 1.1	100	W			2		10							Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, San Diego, Cal. †	30.18	766.6	55	12.8	87	E			1		2		ESE			Sm'h		Fair	Thos. Wallace.
S. S. State of California, Portland, Oregon †	29.94	760.5	32	0.0	100	NE			3		0							Clear	Capt. G. Debney.
S. S. Victoria, Nanaimo, Vancouver I'd. †	30.04	763.0	28	— 2.2	66	Var.					0					Light	W	Clear	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W. †	29.99	761.7	73	22.8	85	Calm			0		0							Clear.	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, San Blas, Mexico †	30.05	763.3	75	23.9	72	SE			4		10?		W			Sm'h	NE	Clear?	Capt. D. S. Austin.
S. S. City of Peking, N. 30° 18′, E. 154° 37′ †	29.47	748.5	55	12.8	80	W			8		5		W	0	0	R'gh	WNW	Fair	Capt. G. G. Berry.
S. S. City of Sidney N. 32° 29′, W. 136° 40′	29.82	757.4	61	16.1	77	SE			3		10		SE	0	0	H'vy	NNW	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 35° 56′, E. 158° 45′	29.26	743.2	54	12.2	61	SW			6		10		SW	0	0	R'gh	SW	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima ‡																			Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, Panama, Panama †	29.88	758.9	80	26.7	78	NNW			4		2		NNW	0	0			Hazy	
S. S. Zealandia, N. 21° 39′, W. 157° 12′	29.66	753.4	70	21.1	75	WNW			7		5		W			Mod.	W	Squally	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland, ‡ Flushing †	29.66	753.4	24	— 4.4		SSE			2		10		S			Sm'h		Hazy	Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland, ‡ N. 48° 57′, W. 27° 07′	28.43	722.1	54	12.2	87	W			5		8		W	0.1	3.	Very h'vy	E	Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 43° 31′, W. 55° 45′	29.73	755.1				NW			7		10			Light		Cross	NW	Sleeting	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby Bentley, Morehead City, N. C. †	30.24	768.1	30	— 1.1		Calm			0		0			0	0			Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 34° 53′, W. 75° 51′	30.30	769.6	41	5.0	74	NW	6	2.7			0			0	0	Sm'h		Clear	Capt J. Jorgensen.
Sch'r Annie R. Lewis, N. 33° 08′, W. 76° 38′ †	30.19	766.8	53	11.7		N			2		5		NE			Mod.	NE	Fair	Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, ‡ Ponce, Porto Rico †	30.33	770.4	78	25.6		NE			2		2			0	0	Sm'h		Fair	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va. †	30.24	768.1	25	— 3.9		W	1	0.4		0	28			0	0			Clear	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Spain †	29.57	751.1	60	15.6	100	SSW			7		10		W	Heavy				Rainy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.

CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 27, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.09	764.2	84.9	29.4	85	SW			4		4			0	0	Cloudy	Dr. Ollive.
Nemours			29.92	759.9	70.5	21.4	74	E			0		1			0	0	Very fair	Raynard.
Algie s			29.96	760.9	68.7	20.4	53	SSW			4		10			0	0	Covered	Nicolas.
La Calle			29.99	761.7	68.0	20.0	81	W			0		4			0	0	Cloudy	Fonfrède.
Tunis			29.99	761.7															Jacques.
Sfax			30.09	764.2															Gau.
Saida			30.01	762.3	63.7	17.6	41	S			2		4			0	0	Cloudy	Dumas.
Tebessa			30.08	763.9	67.6	19.8	26	NNW			3		9			0	0	Covered	Watrin.
Gerville																			Lonchamp.
Laghouat			30.15	765.9	69.1	20.6	45	W			1		4			0	0	Cloudy	Herbin.
Biskra			30.11	764.9	66.2	19.0	75	E			1		10			0	0	Covered	Baudassé.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.72	754.9	29.81	757.2	64.1	17.8	72	W	18	8.0			10			0.23	5.8	Dull	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.50	749.3	75	23.9		NW			1		10kn			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.35	745.4	29.93	760.3	23.4	— 4.8	79	Calm			0		10			0.055	1.4	Snowing	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.15	740 5	29.98	761.6	13.6	—10.2	100	W	3.1	1.4			0			0	0		Dr. Wiersbicki.
Eperies	29.05	738.1	30.00	762.0	21.7	— 5.7	85	Calm			0		9s			0	0		Julius Mikolik.
Gratz‡	28.60	726.3	29.93	760.3	18.7	— 7.4	72	S			2		10			0	0		Andreas Rospini.
Hermannstadt	28.54	724.8	30.07	763.8	20.1	— 6.6	89	NW			2		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.37	720.7	29.81	757.1	18.7	— 7.4	95	Calm			0		10			0	0		The Staff.
Lemberg	28.96	735.6	30.01	762.3	25.5	— 3.6	71	S			1		9			0	0		Dr. T. Stanecki.
Pola	29.74	755.5	29.86	758.5	36.9	2.7	91	E			1		10			0.240	6.1		I. R. HydrographicOffice
Szathmar	29.56	750.8	30.01	762.3	25.5	— 3.6	91	E			2		6			0	0		Beicht Peter, S. J.
Szegedin																			Karl Stancel.
Trieste	29.79	756.7	29.89	759.3	35.1	1.7	88	Calm			0		10			0.043	1.1	Rain & fog	P. Busin.
Vienna	29.13	739.8	29.89	759.2	21.2	— 6.0	95	SE			4		10			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.20	741 6	29.40	746.7	38.5	3.6	92	S			2		10		SSW	0.177	4.6	Light rain	Royal Observatory
Furnes																			M. E. de Cae.
Maeseyck	29.36	745.7	29.48	748.9	37.9	3.3	95	E			1		10			0.091	2.3		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 1, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.12	739.6	29.22	742.2	34.7	1.5	74	SSW	5	2.2			10			0	0	Misty	W. Boswell.
Armagh, Observatory	28.84	732.5	29.09	738.9	40.5	4.7	96	S	19	8.5			8					Overcast	S. Call.
Bidston, Liverpool Obs'y			29.20	741.7	35.8	2.1	98	SE	21	9.4			9					Overcast	John Hartnup.
Bolton, Sharples	29.69	754.1	29.24	742.7	37.8	3.2	100	SE	4	1.8			10					Overcast	Thomas Mackereth.
Bradford, Yorkshire	28.81	731.8	29.21	741.9	33.5	0.8	94	SE			1		10			0.03	0.8	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.02	762.5	30.05	763.3	80	26.7	74	NE			2		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			29.24	742.7	39.0	3.9	82	S			0.2		10					Foggy	John McLaren.
Chatham, School M. E.	29.23	742.4	29.36	745.7	41.1	5.1	92	S			2		10			Blank		Misty	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	28.96	735.6	29.18	741.2	47.7	8.7	94	S			2		8					Foggy	The Staff.
Fort Napier, Natal	27.76	705.1	29.98	761.5	74.2	23.4	87	NE			1		6?					Overcast?	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.89	759,2	85	29.4	83	NE			1		3					D. clouds	C. E. Keane.
Galway, Queen's College			28.94	735.1	47	8.3	92	S			2		2					Blue sky	J. O'Donaghadue.
Gibraltar, Mediterranean	29.91	759.7	29.96	761.0	62.4	16.9	95	SW			6		9					Gloomy	2nd Cpl. C. Baldwin.
Glasgow, Observatory	28.98	736.1	29.18	741.2	29.4	— 1.4	95	NE			5		10					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.14	740.1	29.32	744.7	42.1	5.6	99	SSW			1		10					Foggy	The Staff.
Guernsey	29.08	738.6	29.30	744.2	46	7.8	92	SSW			5		5					Showery	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.28	743.7	29.32	744.7	40.5	4.7	97	SE	5	2.2			10					Foggy	The Met'g'l Office.
Leicester, Museum	29.02	737.1	29.28	743.7	37.0	2.8	66	S			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.81	757.2	29.89	759.2	66.8	19.3	80	SW			2		6					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.24	768.1	69.0	20.6	70	N			4		7					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.75	730.2	29.28	743.7	36.9	2.7	100	SSE			2		10					Dense fog	Robert Pate.
Oxford, Radcliffe Obs'y	29.07	738.4	29.33	745.0	38.8	3.8	98	ESE			2		10					Overcast	The Staff.
Plymouth	29.13	739.9	29.21	741.9	47.6	8.7	99	S			2		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.20	741.7	34.5	1.4	100	SSE	14	6.3			10					Raining	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.88	758.9	29.94	760.5	39.4	4.1	80	NNW			2		7			Blank		D. clouds	Serg't W. H. Lyne.
Sheffield	29.01	736.8	29.30	744.2	39.1	3.9	91	SSW			1	4c		S		0.09	2.3	D. clouds	W. F. Cooper.
Silloth Rectory	29.18	741.2	29.21	741.9	34.0	1.1	92	SE			2		10			0.146	3.71	Overcast	Rev. F. Redford, A. M.
Stonyhurst, Observatory			29.25	742.9	33.5	0.8	89	NE	4	1.8			10					Overcast	Rev. S. J. Perry.
Strathfield Turgiss	29.10	739.1	29.32	744.7	40.7	4.8	99	SE			2		10					Foggy	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution			29.17	740.9	51	10.6	86	SW			4		6					D. clouds	W. Newcombe.
Valencia, Observatory	28.95	735.3	28.98	736.1	47.7	8.7	87	SSE	24	10.7			10					Showery	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	29.72	754.9	29.77	756.1	8.6	—13.0		NW	4	1.8		0	8s			0	0	Cloudy	Hon. J. Ferguson.
Chatham, N. B.*	29.68	753.9	29.75	755.6	—11	—23.9	91	NW	L	0.4		0	0			0.01	0.3	Clear	G. A. Blair.
Charlottetown, P. E. Island	29.66	753 4	29.70	754.4	7	—13.9	98	W	5	2.2		2cs	2s			0	0	Fair	H. J. Cundall, C. E.
Chicontime, Quebec					—20.7	—29.3		Calm			0	7cs	0			0	0	Fair	Rev. V. A. Huart.
Cornwall, Ontario	29.74	755.4	29.96	761.0	7.0	—13.9	100	NW			3	0	7s			0.04	1.0	Cloudy	James Smith, M. A.
Dalhousie, N. B	29.70	754.4	29.74	755.4	6.0	—14.4		W			2		10s			0.30	7.6	Cloudy	H. A. Johnson.
Father Point, Quebec*	29.86	758.4	29.88	758.9	3	—16.1	59	NW	2	0.9		2k	5n			0	0	Fair	J. McWilliams.
Fredericton, N. B	29.75	755.6	29.82	757.4	—10.9	—23.8	100	Calm	0	0		9cs	0			0	0	Cloudy	Prof. Harrison
Fort Garry, Manitoba*	29.55	750.6	30.52	775.2	—16	—26.7	100	W	4	1.8		0	0			0	0	Clear	James Stewart.
Granton, Ontario	29.08	738.6	30.34	770.6	— 5.8	—21.0	68	W			1	0	0			0.30	7.6	Clear	James Grant.
Halifax, N. S.*	29.62	752.3	29.76	755.9	10	—12.2	94	W	3	1.3		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario	29.82	757.4	30.26	768.6	4.1	—15.5	82	SW			2	8c	0	SW		0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.72	754.9	30.10	764.5	1	—17.2	88	W	5	2.2		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S	29.52	749.8	29.56	750.8	17.6	— 8.0	92	W	2	0.9			10n			0.10	2.5	Snowing	C. H. Rigby.
Montreal, Quebec*	29.67	753.6	29.89	759.2	9	—12.8	83	SW	24	10.7			10s		N	0.08	2.0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.41	747.0	30.21	767.3	—14	—25.6	67	N	1	0.4		2k	2ks	NW	NW	0.30	7.6	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.34	745.2	30.17	766.3	7.7	—13.5	64	NW			1	0	0			0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.52	749.8	30.29	769.4	2	—16.7	100	SW	13	5.8		0	0			Inap.	Inap.	Clear	H. Morgan.
Port Stanley, Ontario	29.59	751.6	30.31	769.9	2	—16.7	94	W	12	5.4			10n		W	0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.48	748.8	29.83	757.7	9	—12.8	100	Calm	0	0			10n			0.06	1.5	Light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.59	751.6	30.11	764.8	— 4	—20.0	83	W	6	2.7		0	5s		NW	Inap.	Inap.	Fair	W. H. McIntyre.
St. Andrews	29.73	755.1	29.78	756.4	13	—10.6	85	N	1	0.4			10n			0	0	Cloudy	
St. John's, N. B	29.62	752.3	29.80	756.9	10.0	—12.2	100	NW	3	1.3			10ks			0	0	Cloudy	G. Murdock, C. E.
Saugeen, Ontario*	29.41	747.0	30.21	767.3	3	—16.1	92	E	10	4.5			10s			0.65	16.5	Light snow	K. Stewart.
Stratford, Ontario	28.84	732.5	30.30	769.6	— 4.8	—20.4	89	W	3	1.3		10s	3s	W		0.20	5.1	Fair	C. J. Macgregor, M. A.
Sydney, C. B*	29.56	750.8	29.60	751.8	16	— 8.9	92	SW	6	2.7		5cs	5n			0.04	1.0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.81	757.2	30.24	768.1	2	—16.7	81	W	10	4.5		2ck	2s	W	W	Inap.	Inap	Fair	Magnetic Observatory.
Windsor, N. S	29.63	752.6	29.73	755.1	4.5	—15.3	100	NW	5	2.2		0	0			0	0	Clear	
Woodstock, Ontario	29.05	737.9	30.26	768.6	— 4.2	—20.1	93	SW	16	7.2		0	1s			0.30	7.6	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*	29.71	754.6	29.78	756.4	22	— 5.6	72	NE	1	0.4			10s		W	0.01	0.3	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.44	747.8	29.61	752.1	30	— 1.1	100	SE	1	0.4		2k	2s			0.30	7.6	Cloudy	John Delany.
St. Pierre, N. F			29.45	748.0	28.8	— 1.8		NE			2					0	0		N. F. Land, Comd't.

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

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

Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.83	757.7	29.87	758.7	92.5	33.6	41	NW	4.8	2.1		0	1			0	0	Vapory	The Staff, for D. Gill.
*Cape St. Francis Lt. House	29.85	758.2			71.3	21.8	85	E	25.6	11.4			1s			0	0	Light haze	John Duthie.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.03	762.8	30.06	763.4	45.1	7.3	64	SW	2.5	1.1			0			0	0	Clear	M. Marc Dechevrens, S J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.22	666.0	29.94	760.5	64.0	17.8	87	NE			2		6d		NE	0	0	Fair	Federico Maison.

DANISH SERIES.

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

Copenhagen	29.67	753.7	29.72	754.9	22.8	— 5.1	78	S	25	11			2						
Fanöe	29.50	749.2	29.52	749.7	21.0	— 6.1	79	SSE			6		2						
Godthaab, Greenland	29.95	760.6	29.99	761.7	23.2	— 4.9	93	NNE			4		9						
Stykkisholm, Iceland	29.84	757.9	29.88	759.0	— 2.2	—19.0	28	E			2		0						
Thorshavn	29.37	746.0	29.41	746.9	29.5	— 1.4	74	NE	40	18			10					Snowing	
Vestervig	29.42	747.2	29.51	749.6	21.9	— 5.6	90	SE			4		2						

FRENCH SERIES.

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

Agen, Normal School	28.95	736.3	29.58	751.4	54.7	12.6	79	SSE			1	0			E	0.039	1.0		M. Labroue, Director.
Alençon	28.93	734.8	29.48	748.8	37.8	3.2	93	S			1		10			0.55	14.	Foggy	M. Nicot, Director.
Arras, Engineer School	29.17	741.0	29.43	747.6	36.5	2.5	100	SE											M. Klein, Commandant.
Avignon, Normal School	29.67	753.7	29.75	755.7	49.6	9.8	84	N			1		5		S	0.181	4.6	Cloudy	M. Giraud, Director.
Bar-sur-Seine	29.01	736.8	29.57	751.0	45.1	7.3	80	S			1		5n		WSW	0.169	4.3	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.20	741.7	29.47	748.6	41.4	5.2	92	SW			1		10			0.148	3.75	Covered	M. Frère Eugene Marie.
Besançon, Normal School	28.76	730.6	29.67	753.6	44.8	7.1	86	SSW			1		5cn		WSW	0.87	22.	Cloudy	M. Gobin, Director.
Bordeaux, Observatory	29.26	743.1	29.51	749.6	56.1	13.4	53	SSE			1		8		W	0.260	6.6	Very cloudy	M. Rayet, Director.
Bourges, Normal School	28.97	735.7	29.52	749.7	49.3	9.6	63	S			1		5kn		S	0	0	Cloudy	M. Postel, Director.
Brest, Naval Observatory	29.01	736.8	29.25	743.0	50.4	10.2	89	SW			1		3		SW	0.364	9.25	Misty	M. de Rermaree, Dir.
Caen, Normal School	29.23	742.5	29.33	744.9	42.1	5.6	100	S			1		5		S	0.807	20.5	Cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.21	741.8	29.53	750.0	39.2	4.0	87	Calm			0		10			0.047	1.2	Covered	M. Jadot, Director.
Charleville, Normal School	28.97	735.9	29.49	749.0	36.7	2.6	86	S			1		Fog			0.08	2.	Foggy	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.24	717.3	29.58	751.4	52.0	11.1	53	SSW			1		8			0.059	1.5		M. Alluard, Director.
Cluny, Normal School	28.84	732.4	29.67	753.6	47.7	8.7	78	S			1		1	S	W	0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	28.70	728.9	29.58	751.3	38.5	3.6	98	SW			4		10n		SW	0.390	9.9	Raining	Dr. Coulet, Director.
Gap, Normal School	27.23	691.6	29.75	755.7	40.1	4.5	93	N			1		s		NE	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.65	727.8	29.80	756.8	45.9	7.7	58	NE			3		8		NE	0.134	3.4		M. Kina, Director.
Grenoble, Normal School	28.73	729.8	29.50	749.4	43.9	6.6	85	E			1	c			S	0	0		M. Ablard, Director.
Guéret, Normal School	27.95	711.0	29.59	751.5	47.8	8.8	84	SW			1		5		NE	0	0	Cloudy	M. Rivoir, Director.
Lamballe, Normal School	29.02	737.2	29.31	744.4	46.4	8	94	SSW			1		5		SSW	0.12	3.	Misty	M. Olliffrault, Director.
Lescar, Normal School	28.99	736.4	29.65	753.0	60.8	16	69	W					1		NE	0.04	1.	Clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.25	742.9	29.35	745.5	51.4	10.8	86	S			2		8	S	W	0.866	22.0	¾ covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.61	726.8	29.64	752.9	44.6	7.0	76	S			1		8n		SW	0.169	4.3		M. André, Director.
Mans, Normal School	29.14	740.2	29.46	748.3	42.6	5.9	98	S			3		10			0.75	19.	Raining	M. Piboen, Director.
Marseille, Observatory	29.47	748.6	29.74	755.4	52.5	11.4	80	ESE			1-2		7		WNW	0.039	1.00		M. Stephan, Director.
Montlouis l'Instituteur	24.50	622.2	29.73	755.2	37.8	3.2	84	SW	18.6	8.3			7	SW		0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.63	752.5	29.74	755.4	47.1	8.4	72	N			2		10			0.94	24.	Covered	M. Galzin, Director.
Nancy, Normal School	28.80	731.5	29.58	751.2	39.2	4.0	93	SW			1		10n			0	0	Foggy	M. Hasse.
Nantes, Observatory	29.32	744.8	29.49	749.0	51.8	11	90	SE			1		8		W	0.717	18.2	Misty	M. Larocque, Dir.
Nice	29.73	755.2	29.77	756.1	49.3	9.6	86	W			2		10	W	W	0.563	14.3	Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.61	752.0	29.71	754.7	47.3	8.5	83	NE	1.8	0.8			10			0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.13	562.0			31.6	—0.2							5		SW	0.105	2.7	Cloudy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.67	728.1	29.74	755.3	48.2	9.0	86	Calm			0		10			0	0	Covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.71	627.7			32.7	0.4	98	SW			8		10			0.122	3.1	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.48	748.9	29.52	749.7	51.3	10.7	90	S			1		0			0.39	10.	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.23	742.4	29.45	747.9	45.7	7.6	100	SW			1		10			0.480	12.2	Covered	M. Mouillot, Director.
Rodez, Normal School	27.54	699.6	29.69	754.1	47.8	8.8	71	Calm			0		10		SE	0.098	2.5	Raining	M. Richard, Director.
Rouen, Normal School	29.31	744.5	29.40	746.7	41.7	5.4	84	SSE			1		10		S	0.087	2.2	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.21	742.0	29.37	746.0	43.2	6.2	94	WSW			1		10		W	0.335	8.5	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.32	744.8	29.49	749.0	39.2	4.0	99	SSW			2		10						M. Renou, Director.
Toulouse, Observatory	28.95	735.4	29.67	753.5	50.4	10.2	81	SSE			2		2			0	0	Slightly cl'dy	M. Bailland, Director.
Tours	29.30	744.1	29.49	749.1	46.8	8.2	86	SSE			1		8		SW	0.622	15.8	¾ covered	M. de Tastes.
Versailles, Observatory	28.98	736.1	29.47	748.6	38.8	3.8	100	W			1		10			0.346	8.80	Covered	Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	28.82	731.9	29.67	753.5	27.0	— 2.8	88	E			6		6ks	E		0.012	0.3	Snowing	Prof. Dr. Hoh.
Berlin	29.54	750.3	29.72	755.0	18.7	— 7.4	63	SE			1		0			0	0		Prof. Dr. Arndt.
Breslau	29.31	744.4	29.84	757.8	24.6	— 4.1	70	SSE			2		0			0	0		Royal University Obs'y.
Carlsruhe	29.22	742.1	29.65	753.2	30.6	— 0.8	88	SSW			0		10			1.063	27.0	Rain & fog	Albert Senz.
Cassel	28.96	735.6	29.56	750.8	28.0	— 2.2	85	S			0		8	S		0.013	0.32	Snowing	Dr. H. Möhl.
Frankfort on the Main	29.32	744.7	29.70	754.4	28.6	— 1.9	84	SE			1		10			0.031	0.8	Graupelnd.	Physical Society.
Friedrichshafen	28.24	717 3	29.72	754.8	34.9	1.6	67	NE			1		10	SW		0	0		Chief Telegrapher Wilhelm.
Hamburg	29.53	750.0	29.60	751.8	14.9	— 9.5	65	SE			4		3			0	0		Dr. R. Kleeman.
Kiel	29.54	750.4	29.56	750.8	16.9	— 8.4	68	ESE			2		1			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.27	743.5	29.72	754.8	18.0	— 7.8	60	SE			2		0			0	0		Prof. Dr. Bruhns.
Magdeburg	29.43	747.4	29.67	753.5	14.5	— 9.7	81	ESE			2		0			0	0	Foggy	Dr. Assmans.
Memel	30.01	762.2	30.06	763.4	8.6	—13.0	96	SE			2	4c							Reinbrecht & Issermann.
Munich	27.84	707.1	29.68	753.8	25.7	— 3.5	85	E			1		10			0	0	Light fog	Central Station.
Neufahrwasser	29.93	760.3	29.95	760.7	5.7	—14.6	74	SSE			1		0			0	0		A Lothes.
Neustadt, Palatinate	28.99	736.3	29.50	749.4	30.9	— 0.6		SSE			1		10			0	0		Dicknether.
Stuttgart	28.66	727.9	29.57	751.1	38.3	3.5	67	SW			1		10			0.142	3.6	Light rain	Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.15	714.9	29.66	753.4	26.8	— 2.9	94	SE			2		10			0.043	1.1		Prof. Kemlein.
Wustrow	29.68	753.8	29.70	754.4	14.0	—10.0	100	ESE			2		3s			0	0		Profs. Brandes & Reimer.

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

GREEK SERIES.

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

Athens	29.54	750.3	29.93	760.2	62.8	17.1	.....	SW	.....	.....	1.0	.....	5	.....	.....	.....	.....	½ Clear.....	Alexander Wourlisch
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	30.02	762.6	30.08	763.9	76.7	24.8	53	S	7.0	3.1	.....	.....	0	.....	.....	0	0	Blue sky.....	
Deesa	29.54	750.2	30.02	762.4	78.1	25.6	26	NW	8.0	3.6	.....	.....	0	.....	.....	0	0	Misty.....	
Bombay	29.96	761.0	30.00	761.9	81.4	27.4	48	NW	17.0	7.6	.....	.....	0	.....	.....	0	0	Blue sky.....	
Poona, Yarrowda	28.12	714.3	29.97	761.3	82.0	27.8	13	NNE	6.0	2.7	.....	.....	0	.....	.....	0	0	Blue sky.....	
Belgaum	27.43	696.7	29.97	761.2	77.6	25.3	18	NE	7.0	3.1	.....	.....	0	.....	.....	0	0	Blue sky.....	
Lahore	29.26	743.2	30.03	762.8	69.7	20.9	36	Calm	1.1	0.5	.....	.....	0	.....	.....	0	0	Blue sky.....	
Roorkee	29.09	738.8	30.01	762.3	68.8	20.4	31	NW	2.9	1.3	.....	.....	0	.....	.....	0	0	.....	
Agra	29.49	749.0	30.07	763.7	74.3	23.5	30	NW	3.2	1.4	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28.96	735.6	30.02	762.4	78.5	25.8	18	E	3.0	1.3	.....	.....	0	.....	.....	0	0	Blue sky.....	
Jubbulpore	28.67	728.2	30.07	763.8	78.8	21.6	29	Calm	1.6	0.7	.....	.....	0	.....	.....	0	0	Blue sky.....	
Lucknow	29.66	753.2	30.04	763.1	70.2	21.2	27	Calm	1.0	0.4	.....	.....	0	.....	.....	0	0	Blue sky.....	
Allahabad	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	6	.....	
Patna	29.85	758.2	30.04	763.1	70.2	21.2	50	W	0.8	0.4	.....	.....	0	.....	.....	.....	.....	Blue sky.....	
Hazaribagh	27.97	710.5	30.05	763.2	64.2	18.2	28	NNW	4.2	1.9	.....	.....	0	.....	.....	0	0	Blue sky.....	
Cuttack	29.94	760.4	30.02	762.5	72.9	22.7	47	Calm	0.9	0.4	.....	.....	0	.....	.....	0	0	Blue sky.....	
Calcutta, Alipore	29.98	761.5	30.00	762.0	70.0	21.1	52	NNE	0.5	0.2	.....	.....	0	.....	.....	0	0	Blue sky.....	
Goalpara	29.59	751.5	30.00	762.0	70.9	21.6	54	Calm	1.2	0.5	.....	.....	0	.....	.....	0	0	Blue sky.....	
Chittagong	29.91	759.7	30.00	762.0	72.8	22.7	48	NNW	3.3	1.5	.....	.....	0	.....	.....	0	0	Misty.....	
Sibsagar	29.70	754.5	30.06	763.4	63.3	17.4	80	NE	1.1	0.5	.....	.....	0	.....	.....	0	0	Blue sky.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.48	748.7	29.91	759.6	32.4	0.2	98	Calm	0	0	.....	.....	10	.....	.....	0	0	....	Prof. Giovanni Clodig.
Milan	29.34	745.3	29.89	759.2	32.0	0.0	78	WSW	1.3	0.6	.....	.....	5	.....	.....	0.087	2.2	....	Prof. Schiaparelli.
Padua	29.79	756 7	29.91	759.6	31.8	— 0.1	93	N	1.3	0.6	.....	.....	10	.....	.....	0	0	....	Prof. Dott. Lorenzoni.
Moncalieri	28.95	735.2	29.89	759.3	32.4	0.2	79	N	1.3	0.6	.....	.....	6	NW	.....	0	0	....	Prof. P. F. Denza.
Genoa	29.60	751.9	29.80	756.9	37.8	3.2	60	N	11.9	5.3	.....	.....	6	NW	.....	0.240	6.1	....	Prof. G. M. Garibaldi.
Mondovi	27.91	709.0	29.93	760.1	34.3	1.3	74	W	.....	.....	2	.....	7	.....	.....	0	0	....	Prof. D. C. Bruno.
Pesaro	29.83	757.7	29.88	759.0	32.9	0.5	92	W	2.5	1.1	.....	.....	10	.....	.....	0	0	....	Prof. Luigi Guidi.
Florence	29.52	749 8	29.78	756.5	37.8	3.2	89	E	.....	.....	2	.....	10	.....	.....	0.193	4.9	....	Cav. F. Meucci.
Leghorn	29.71	754.5	29.79	756.7	37.6	3.1	91	NE	9.8	4.4	.....	.....	10	.....	.....	0.252	6.4	....	Prof. P. Monte.
Rome	29.58	751.3	29.76	755.8	47.3	8.5	92	W	10.5	4.7	.....	.....	10	.....	.....	0.110	2.8	....	Prof. P. S. Ferrari.
Lecce	29.64	752.8	29.89	759.3	54.7	12.6	78	SSW	6.3	2.8	.....	.....	9	.....	.....	0.059	1.5	....	Prof. C. de Giorgi.
Cosenza	28.97	735.9	29.88	758.9	57.2	14.0	76	SE	0.7	0.3	.....	.....	10	ESE	.....	0.118	3.0	....	Prof. D. Conti.
Cagliari	29.59	751.5	29.78	756.4	63.7	17.6	65	NW	.....	.....	4	.....	7	W	.....	0	0	....	Prof. A. Pacinotti.
Palermo	29.58	751.3	29.83	757.6	65.8	18.8	53	SW	22.4	10.0	.....	.....	10	W	.....	0	0	....	Prof. G. Cincciatore.
Syracuse	29.89	759.2	29.93	760.3	61.0	16.1	87	S	6.3	2.8	.....	.....	9	S	.....	0	0	....	Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R	29.30	744.3	29.57	751.0	55.4	13.0	94	WSW	2.5	1.1	.....	.....	10k	W	.....	0.008	0.2	.....	Prof. F. Brioschi.
Stelvio	21.93	558.1	.....	.....	21.2	— 6.0	84	SW	.....	.....	.....	.....	10	.....	.....	0	0	.....	P. F. Denza.
Valdobbia	21.80	553.8	.....	.....	16.7	— 8.5	85	E	.....	.....	.....	.....	2	.....	.....	0	0	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	30.10	764.5	30.12	765.0	34.7	1.5	74	Calm	0	0	.....	.....	0	.....	.....	0	0	Clear.....	K. Sasaki.
Kioto	29.91	759.7	30.10	764.5	29.1	— 1.6	88	.....	.....	.....	.....	.....	0	.....	.....	0	0	Clear	....
Nagasaki, I. M. Obs'y	29.89	759.2	30.10	764.5	44.8	7.1	80	SE	1.3	0.6	.....	.....	18	.....	.....	0.090	2.29	Clear.....	S. Takehayashi.
Tokei Obs'y, Yeddo	29.96	761.0	30.03	762.7	35.1	1.7	69	ENE	4.0	1.8	.....	3ck;cs	0	.....	.....	0	0	Fair.....	The Staff.
Wakayama	30.06	763.5	30.11	764.8	33.0	0.6	88	ENE	6.9	3.1	.....	.....	0	.....	.....	0	0	Clear.....	S. Iwahashi.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.77	756.1	29.95	760.8	81.7	27.6	71	NNW	9.0	4.0	.....	1	6	WSW	NNW	0	0	Cloudy.....	A. N. Figon.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Colima	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. Banda, C. E.
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanaxuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Leal.
Mazatlan	29.75	755.7	30.01	762.3	71.0	21.7	69	NNE	.....	.....	2	10cs	0	.....	.....	Inap.	Inap.	Covered.....	F. Quijano, C. E.
Mexico, Central Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff.
Morelia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Fena, M. D.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barreeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Castrillon.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	29.39	746.4	29.39	746.4	35.2	1.8	.....	S	.....	.....	2	.....	.....	.....	.....	0.039	1.0	.....	
Groningen	29.40	746.8	29.46	748.2	24.1	— 4.4	.....	S	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Helder	29.39	746.4	29.39	746.4	31.3	— 0.4	.....	ESE	.....	.....	3	.....	.....	.....	.....	0.075	1.9	.....	
Hellevoetsluis	29.38	746.3	29.38	746.3	34.2	1.2	96	SE	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Utrecht	29.38	746.3	29.43	747.5	33.3	0.7	83	SSE	.....	.....	2	.....	10	.....	.....	0.035	0.9	Dull.....	H. van der Brink
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.35	745.6	29.42	747.2	32.4	0.2	81	SE	5-8	2.6	.....	.....	10	.....	.....	0.020	0.5	Light snow.	
Christiania	29.43	747.6	29.59	751.5	23.2	— 4.9	90	SSE	7	3	.....	.....	10	.....	.....	.....	.....	Light snow.	
Gjæsvær	29.39	746.4	29.41	747.0	13.3	—10.4	.....	WNW	.....	.....	6	.....	10	.....	.....	.....	.....	.....	
Lodingen	29 47	748.6	29.52	749.8	19.8	— 6.8	86	SW	.....	.....	4	.....	7	.....	.....	0.016	0.4	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.22	742.2	29.38	746.3	53.6	12.0	81	W	20.6	9.2	.....	.....	5	.....	.....	c.827	21.0	.....	Dr. J. A. Sampaio.
Campo Major	28.63	727.3	29.62	752.4	57.9	14.4	98	SSW	16.1	7.2	.....	.....	10	.....	.....	0.343	8.7	Raining	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.81	757.2	29.90	759.4	67.5	19.7	86	W	15.4	6.9	.....	.....	10	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.25	742.9	29.60	751 9	60.8	16.0	94	SW	37.4	16.7	.....	.....	10	.....	.....	0.504	12.8	Raining	The Staff.
Ponta Delgada, Azores	29.37	745.9	29.44	747.7	60.4	15.8	59	W	24.8	11.1	.....	.....	4	.....	SE	0.720	18.3	.....	.....
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.71	729.1	29.82	757.5	30.6	— 0.8	100	SSW	13	6	.....	.....	0	.....	.....	Blank		.....	Capt. Lasarew.
Archangel	29.77	756.1	29.79	756.6	— 4.4	—20.2	80	S	9	4	.....	.....	0	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	30.62	777.8	30.54	775.7	10.9	—11.7	75	W	4	2	.....	.....	0	.....	.....	.....	.....	.....	Capt. Wisganow.
Barnaul	29.62	752.4	30.15	765.9	24 4	— 4.2	59	Calm	0	0	.....	.....	5	.....	.....	.....	.....	Light clouds	Meteorological Obs'y.
Dorpat	29.78	756.5	30.05	763.3	11.1	—11.6	68	SW	9	4	.....	.....	10kn	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	29.02	737.0	30.08	764.0	2.7	—16.3	78	W	13	6	.....	.....	90s;n	.....	.....	.....	.....	Light snow.	Meteorological Obs'y.
Kasan	29.91	759.6	30.20	767.1	17.1	— 8.3	81	WSW	4	2	.....	.....	10	.....	.....	.....	.....	Light snow.	Observatory.
Kertch	30.35	771.0	30.37	771.5	15.3	— 9.3	84	E	7	3	.....	.....	10	.....	.....	.....	.....	.....	Lagorio.
Kieff	29.63	752.6	30.34	770.6	3.9	—15.6	86	SSW	11	5	.....	.....	0	.....	.....	.....	.....	.....	Observatory.
Krotkowo, N. 68°47', E. 48°34'	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	30.24	768.1	30.47	773.9	7.2	—13.8	71	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	29.66	753.3	30.26	768.6	11.1	—11.6	68	S	7.8	3.5	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.98	710.8	30.66	778.8	—17.9	—27.7	79	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	30.22	767.7	30.30	769.5	15.8	— 9.0	88	ENE	9	4	.....	.....	10n	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaievsk, on the Amoor	29.92	759.9	30.00	762.1	—18.0	—27.8	73	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	1st. Lieut. Kurdakov.
Nukuss	30.21	767.3	30.46	773.7	24.8	— 4.0	82	WNW	13	6	.....	.....	6k	.....	.....	.....	.....	.....	Lieut. Iwanow.
Pekin, China	30.17	766.4	30.32	770.0	31.6	— 0.2	31	NW	27	12	.....	.....	5ks	.....	.....	.....	.....	.....	Dr. Dobrochotow.
St. Petersburg	29.92	760.0	29.94	760.4	19.0	— 7.2	90	SSW	18	8	.....	.....	10n	.....	.....	.....	.....	.....	Physical Observatory.
Tashkend, Laboratory	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tiflis	29.04	737.7	30.54	775.8	35.4	1.9	40	SSE	4	2	.....	.....	2k	.....	.....	.....	.....	.....	Teich, A. M.
Warsaw	29.56	750.8	30.02	762.6	8.4	—13.1	80	SE	7	3	.....	.....	0	.....	.....	.....	.....	.....	Physical Observatory.
Wilna	29.70	754.4	30.16	766.0	16.9	— 8.4	85	SE	2	1	.....	.....	10	.....	.....	.....	.....	.....	Astronomical Obs'y.
Yeniseisk	30.39	772.0	30.73	780.5	—15.2	—26.2	81	Calm	0	0	.....	.....	0	.....	.....	.....	.....	Heavy cld's	Berg, Assistant.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. O. Marks.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.24	742.7	30.0	— 1.1	89	E	.....	.....	1	.....	10s	.....	.....	0.02	0.5	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.04	737.6	34	1.1	90	SE	.....	.....	4	.....	10	.....	.....	0.1	3.	.....	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.30	744.2	.....	.....	.....	NE	.....	.....	4	.....	10	.....	.....	Blank		.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.60	751.8	29.71	754 5	60.1	15.6	65	SW	4.0	1.8	.....	.....	0	.....	.....	0	0	.....	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.39	746.4	29.44	747.8	61.9	16.6	47	S	7.7	3.45	.....	2	7	NW	.....	0.012	0.3	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.54	674.0	.....	.....	49.5	9.7	69	S	10.8	4.85	.....	.....	10	.....	.....	0.453	11.5	Covered	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.49	698.3	29.73	755.1	49.8	9.9	95	S	29.8	13.3	.....	.....	10	.....	.....	0.433	11.0	Raining	The Staff.
Murcia, Met. Obs'y. ‡	29.67	753.6	29.82	757.4	68.0	20.0	66	SE	1.6	0.7	.....	1	4	E	.....	0.016	0.4	Misty	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.22	716.9	29.10	739.1	52.9	11.6	88	SW	36.0	16.1	.....	.....	10	.....	.....	1.508	38.3	Raining	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.12	764.9	30.18	766.6	70.8	21.6	92	Calm	0	0	.....	.....	10s;k	.....	NE	1.201	30.5	Cloudy	Benito Vines, S. J.
Manilla, Phillippine Islands	29.96	761.0	30.01	762.3	75.2	24.0	66	ENE	0.7	0.3	.....	.....	.....	.....	.....	0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.85	758.2	29.95	760.7	62.4	16.9	91	SSW	20.4	9.1	.....	.....	10	.....	S	0.243	6.2	Raining	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.04	762.9	30.13	765.2	69.8	21.0	91	S	0	0	.....	2cs	3k	SE	SE	0	0	D. clouds	Enrique Gadea, Chief Engineer.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.68	753.8	29.72	754.8	— 0.8	—18.2	100	SE	.....	.....	2	.....	10	.....	.....	0	0	.....	.....
Umea	29.54	750.4	29.60	751.7	14.0	—10.0	100	N	.....	.....	4	.....	10	.....	.....	0.087	2.2	.....	.....
Hernosand	29.51	749.6	29.56	750.9	25.3	— 3.7	89	SW	.....	.....	2	.....	10	.....	.....	0.028	0.7	.....	.....
Stockholm	29.58	751.4	29.76	755.9	23.7	— 4.6	81	WSW	.....	.....	6	.....	10	.....	.....	0	0	.....	.....
Wisby	29.78	756.3	29.84	757.8	27.0	— 2.8	83	SW	.....	.....	2	.....	3	.....	.....	0	0	.....	.....
Sub-Series.																			
Upsala	29.62	752.4	29.71	754.6	20.1	— 6.6	77	SSW	17.4	7.8	.....	.....	10	.....	W	0	0	.....	Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.29	718.5	29.76	755.8	40.3	4.6	85	SE	.....	.....	1	.....	10	.....	.....	0.469	11.9	Covered	The Observatory.
Zurich	28.66	712.6	29.75	755.7	36.3	2.4	83	SE	.....	.....	1	.....	8	.....	.....	0.197	5.0	Rainy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —8.8 mm.; Ther. +2°.6 cent.; Hum. +8 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.96	760.9	38.8	3.8	80	NW	7	3.0	.....	.....	10	.....	WSW	0.709	18.0	.....	The Observatory.
Valona	.....	.....	29.90	759.4	58.6	14.8	.....	NE	.....	.....	2	.....	5	.....	.....	0.91	23.	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.17	766.3	60.6	15.9	57	NE	.....	.....	1	70	.....	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	BAROMETER. Corrected for instrum'tal error and temperature. Mill.	BAROMETER. Reduced to sea-level. Inch.	BAROMETER. Reduced to sea-level. Mill.	TEMPERATURE OF THE AIR. Fah.	TEMPERATURE OF THE AIR. Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	WIND. Velocity. Miles p. h'r	WIND. Velocity. Mtrs p. sec	WIND. Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	CLOUDS. Amount and kind. Lo'er 0—10	CLOUDS. Direction. Upper. From.	CLOUDS. Direction. Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.01	762.2	30.10	764.5	18	— 7.8	100	W	4	1.8			10n		Calm	0.02	0.5	Light snow.	
Alpena, Michigan	29.55	750.6	30.29	769.4	— 5	—20.6	63	W	4	1.8		0	5s		W	0	0	Fair	
Atton Id., Alaska‡																			
Atlanta, Georgia	29.25	742.9	30.49	774.4	28	— 2.2	57	NW	15	6.7		2k	2s	W	Calm	0	0	Fair	
Atlantic City, New Jersey	30.23	767.8	30.25	768.3	16	— 8.9	65	NW	20	8.9		0	0			0	0	Clear	
Augusta, Georgia	30.25	768.6	30.48	774.2	35	— 1.7	70	NW	6	2.7		5cs	0	W		0	0	Fair	
Baltimore, Maryland	30.27	768.8	30.33	770.4	19	— 7.2	54	W	11	4.9		0	Fog		Calm	0	0	Clear	
Barnegat, New Jersey	30.18	766.6	30.20	767.1	15	— 9.4	65	NW	26	11.6		Haze	0	Calm		0	0	Clear	
Benton, Montana	27.54	699.5			—22	—30.0	60	Calm	0	0		0	0			0	0	Clear	
Bismarck, Dakota	28.64	727.4	30.50	774.7	— 8	—22.2		Calm	0	0		0	0			0	0	Clear	
Boise City, Idaho	27.32	693.9	30.28	769.1	31	— 0.6	79	N	4	1.8			10s		Calm	Inap.	Inap.	Cloudy	
Boston, Massachusetts	29.78	756.4	29.95	760.7	17	— 8.3	67	W	12	5.4		0	0			0	0	Clear	
Brackettville, Texas	29.29	744.0	30.41	772.4	40	4.4	91	Calm	0	0			10s		Calm	0.18	4.6	Cloudy	
Brownsville, Texas	30.37	771.4	30.42	772.7	55	12.8	100	NE	4	1.8			10n		Calm	1.20	30.5	Light rain	
Buffalo, New York	29.47	748.5	30.25	768.3	5	—15.0	75	W	20	8.9		0	2s		W	0.10	2.5	Clear	
Burlington, Vermont	29.72	754.9	30.04	763.0	12	—11.1	61	W	13	5.8			10s		W	Inap.	Inap.	Cloudy	
Cairo, Illinois	30.23	767.8	30.67	779.0	21	— 6.1	71	W	1	0.4		0	0	W		0	0	Clear	
Campo, California	27.54	700.3	30.11	764.8	30	— 1.1	78	E	3	1.3		2c	0	W		0	0	Fair	
Camp Thomas, Arizona	27.48	698.0			25	— 3.9	62	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.26	768.6	30.28	769.1	28	— 2.2	66	N	18	8.0		0	0			0	0	Clear	
Cape May, New Jersey	30.22	767.6	30.25	768.3	18	— 7.8	68	NW	40	17.9		2k	0	NW		0	0	Clear	
Castroville, Texas	29.69	754.1	30.44	773.2	40	4.4	91	E	6	2.7			10s		Calm	0.16	4.1	Cloudy	
Cedar Keys, Florida	30.40	772.1	30.42	772.7	43	6.1	59	N	6	2.7		5cs	0	Calm		0	0	Fair	
Champaign, Illinois	29.65	753.1	30.55	776.0	6	—14.4	52	W	5	2.2		0	0			0	0	Clear	
Charleston, S. Carolina	30.33	770.4	30.39	771.9	41	5.0	57	NW	8	3.6		0	0			0	0	Clear	
Charlotte, N. Carolina	29.45	748.0	30.32	770.1	30	— 1.1	68	SW	4	1.8		5cs	Sm'e	Calm	Calm	0	0	Fair	
Chattanooga, Tennessee	29.71	754.6	30.59	777.0	24	— 4.4	74	NW	5	2.2		2cs	0	SW		0	0	Fair	
Cheyenne, Wyoming	24.11	612.4	30.05	763.3	23	— 5.0	60	SE	4	1.8		0	0			0	0	Clear	
Chicago, Illinois	29.64	752.8	30.43	772.9	4	—15.6	74	NW	8	3.6		0	0			0	0	Clear	
Chincoteague, Virginia	30.26	768.6	30.28	769.1	20	— 6.7	70	NW	20	8.9		1k	0	NW		0	0	Clear	
Cincinnati, Ohio	29.81	757.2	30.54	775.7	18	— 7.8	68	SW	5	2.2		0	2s		W	0	0	Clear	
Cleveland, Ohio	29.56	750.8	30.36	771.1	10	—12.2	79	SW	8	3.6			10s		Calm	0.05	1.3	Cloudy	
Coleman City, Texas	28.68	728.5	30.50	774.7	28	— 2.2	100	NE	4	1.8			10n		Calm	0.02	0.5	Light rain	
Columbus, Ohio	29.52	749.8	30.46	773.7	8	—13.3	78	W	7	3.1		0	0			Inap.	Inap.	Clear	
Concho, Texas	28.54	724.9	30.36	771.1	30	— 1.1	89	NE	3	1.3			10s		Calm	0	0	Cloudy	
Corsicana, Texas	30.15	765.8	30.66	778.7	28	— 2.2	66	N	4	1.8		0	8ks		Calm	0	0	Cloudy	
Davenport, Iowa	29.83	757.7	30.58	776.7	— 4	—20.0	65	W	6	2.7		0	0			0	0	Clear	
Dayton, Washington T'y	28.51	724.1	30.30	769.6	21	— 6.1	85	S	4	1.8			10s		Calm	0	0	Cloudy	
Deadwood, Dakota	25.56	649.2			— 4	—20.0	28	SW	1	0.4		0	0			0	0	Clear	
Decatur, Texas	29.38	746.2	30.67	779.0	26	— 3.3	75	N	6	2.7		Haze	0	Calm		0	0	Dense haze	
Delaware Breakwater, Del.	30.26	768.6	30.28	769.1	20	— 6.7	70	NW	39	17.4		1k	0	NW		0	0	Clear	
Denison, Texas	29.78	756.4	30.66	778.7	24	— 4.4	87	N	4	1.8			10s		Calm	Inap.	Inap.	Cloudy	
Denver, Colorado	24.91	632.7	30.13	765.3	12	—11.1	70	SW	2	0.9		0	0			0	0	Clear	
Des Moines, Iowa	29.67	753.6	30.70	779.8	— 2	—18.9	67	N	3	1.3		0	0			0	0	Clear	
Detroit, Michigan	29.58	751.3	30.32	770.1	9	—12.8	100	SW	4	1.8			10n		Calm	0.06	1.5	Light snow	
Dodge City, Kansas	27.78	705.6	30.37	771.4	6	—14.4	52	N	1	0.4		0	0			0	0	Clear	
Dubuque, Iowa	29.74	755.4	30.54	775.7	2	—16.7	72	W	4	1.8		0	5s;fg			0	0	Fair	
Duluth, Minnesota	29.70	754.4	30.48	774.2	— 2	—18.9	84	SW	2	0.9		0	0		Calm	0.01	0.3	Clear	
Eagle Pass, Texas	29.73	755.1	30.51	774.9	41	5.0	91	NW	3	1.3			10s		Calm	0.45	11.4	Cloudy	
Eagle Rock, Texas	25.40	645.2	30.05	763.3	12	—11.1	80	N	3	1.3			10s		Calm	0	0	Cloudy	
Eastport, Maine	29.72	759.4	29.79	756.7	17	— 8.3	67	NW	7	3.1			10s		Calm	0	0	Cloudy	
Edinburg, Texas					46	7.8	100	N			4		10n		Calm	1.10	27.9	Heavy rain	
El Paso, Texas	25.50	673.1			24	— 4.4	61	NE	2	0.9		0	0			0	0	Clear	
Erie, Pennsylvania	29.50	749.3	30.29	769.4	10	—12.2	79	W	12	5.4		0	1s		Calm	0.08	2.0	Clear	
Escanaba, Michigan	29.61	752.1	30.35	770.9	1	—17.2	71	SW	5	2.2			10s		Calm	0	0	Cloudy	
Florence, Arizona	28.67	728.2	30.27	768.8	35	1.7	80	Calm	0	0		0	0			0	0	Clear	
Fort Apache, New Mexico	25.20	640.1	30.64	778.2	18	— 7.8	53	NE	3	1.3		0	0			0	0	Clear	
Fort Assinniboine, Montana	27.47	697.7			—15	—26.1	42	SW	14	6.3		0	0			0	0	Clear	
Fort Bennett, Dakota	28.92	734.6			— 1	—18.3	68	Calm	0	0		0	0			0	0	Clear	
Fort Buford, Dakota	28.51	724.1	30.71	775.7	—18	—27.8	67	SW	4	1.8		0	0			0	0	Clear	
Fort Custer, Montana	27.16	689.8			— 2	—18.9	67	Calm	0	0			10s		Calm	0	0	Cloudy	
Fort Davis, Texas	25.45	646.4	30.41	772.4	28	— 2.2	88	NE	10	4.5			10s		Calm	0	0	Cloudy	
Fort Elliott, Texas	27.60	701.0	30.17	766.3	8	—13.3	11	SW	2	0.9		0	0			0	0	Clear	
Fort Gibson, Indian T'y	30.05	763.3	30.65	778.5	17	— 8.3	67	Calm	0	0		0	0			0	0	Clear	
Fort Grant, Arizona	25.35	643.9	30.15	765.8	39	3.9	31	NE	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas	29.18	741.1	30.57	776.5	29	— 1.7	67	N	3	1.3			10s		Calm	0	0	Cloudy	
Fort Keogh, Montana	27.91	708.9			—23	—30.6		Calm	0	0		0	0			0	0	Clear	
Fort Macon, North Carolina	30.28	769.1	30.29	769.4	36	2.2	61	NW	17	7.6		2c	2s	W	Calm	0	0	Fair	
Fort Missoula, Montana	27.00	685.8			5	—15.0	100	Calm	0	0			10n		Calm	0.39	9.9	Light snow	
Fort McKavett, Texas	28.14	714.7	30.26	768.6	30	— 1.1	89	NE	5	2.2			10s		Calm	0.01	0.3	Cloudy	
Fort Shaw, Montana	26.57	674.9			— 6	—21.1	100	Calm	0	0		10cs	0	Calm		0	0	Cloudy	
Fort Sill, Indian Territory	29.28	743.7	30.50	774.7	23	— 5.0	73	Calm	0	0		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.58	725.9			—13	—25.0	74	W	14	6.3			10ks		W	0.03	0.8	Cloudy	
Fort Verde, Arizona					19	— 7.2	69	N			1	5cs	0	W		0	0	Fair	
Fredericksburg, Texas	28.74	730.0	30.43	772.9	36	2.2	80	N	3	1.3			10s		Calm	0.03	0.8	Cloudy	
Galveston, Texas	30.45	773.4	30.50	774.7	47	8.3	70	NE	7	3.1			10s		Calm	0	0	Cloudy	
Grand Haven, Michigan	29.60	751.8	30.30	769.6	18	— 7.8	68	W	16	7.2			10s		Calm	0.05	1.3	Cloudy	
Hatteras, North Carolina	30.24	768.1	30.26	768.6	36	2.2	71	NW	16	7.2		0	0			0	0	Clear	
Helena, Montana	26.14	663.9			—12	—24.4	100	Calm	0	0		0	0			0.02	0.5	Clear	
Henrietta, Texas	29.57	751.1	30.60	777.2	26	— 3.3	75	NE	2	0.9			10s		Calm	0	0	Cloudy	
Indianapolis, Indiana	29.64	752.8	30.52	775.2	10	—12.2	68	W	5	2.2		0	0			Inap.	Inap.	Clear	
Indianola, Texas	30.48	774.2	30.51	774.9	45	7.2	84	N	20	8.9			10s		Calm	0.13	3.3	Cloudy	
Jacksboro, Texas	29.39	746.5	30.64	778.5	28	— 2.2	76	Calm	0	0			10s		Calm	0	0	Cloudy	
Jacksonville, Florida	30.40	772.1	30.45	773.4	43	6.1	51	NW	8	3.6		5cs	0	W		0	0	Fair	
Keokuk, Iowa	29.89	759.2	30.63	778.0	4	—15.6	74	W	6	2.7		0	0			0	0	Clear	
Key West, Florida	30.22	767.6	30.26	768.6	65	18.3	89	NE	22	9.8			10n		NE	0.01	0.3	Light rain	
Kittyhawk, North Carolina	30.24	768.1	30.25	768.6	33	0.6	61	NW	18	8.0		0	0			0	0	Clear	
Knoxville, Tennessee	29.47	748.5	30.58	776.7	22	— 5.6	72	N	3	1.3		0	1s;sm'e		Calm	0	0	Clear	
La Crosse, Wisconsin	29.65	753.1	30.49	774.4	5	—15.0	75	W	4	1.8			10s		W	0	0	Cloudy	
La Mesilla, New Mexico	26.35	669.3	30.50	774.7	22	— 5.6	72	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	30.03	762.7	30.39	771.9	45	7.2	100	N	8	3.6			10n		Calm	1.53	38.9	Light rain	
Leavenworth, Kansas	29.75	755.6	30.71	780.0	10	—12.2	79	NW	2	0.9		0	0			0	0	Clear	
Lewiston, Idaho	29.45	748.0	30.14	765.5	25	— 3.9	100	W	4	1.8			10n		Calm	0.01	0.3	Light snow	
Little Rock, Arkansas	30.31	769.9	30.66	778.7	27	— 2.8	88	NE	4	1.8		0	0			0	0	Clear	
Los Angeles, California	29.78	756.4	30.13	765.3	46	7.8	77	NE	3	1.3		0	0			0	0	Clear	
Louisville, Kentucky	29.92	760.0	30.54	775.7	20	— 6.7	85	W	10	4.5		0	Sm'e		Calm	0	0	Clear	
Lynchburg, Virginia	29.56	750.8	30.29	769.4	27	— 2.8	64	W	7	3.1		0	0			0	0	Clear	
Madison, Wisconsin	29.32	744.7	30.44	773.2	0	—17.8	71	W	12	5.4		5cs	0	W		0	0	Fair	
Marquette, Michigan	29.52	749.8	30.32	770.1	0	—17.8	70	W	8	3.6		0	0			0.01	0.3	Clear	
Mason, Texas	28.83	732.3	30.73	780.5	33	0.6	89	N	2	0.9			10n		N	0.01	0.3	Cloudy	
Memphis, Tennessee	30.29	769.4	30.67	779.0	26	— 3.3	63	N	6	2.7		0	0			0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.60	751.8	30.43	772.9	2	—16.7	72	W	11	4.9		1ck	5s	Calm	W	0	0	Fair	
Mobile, Alabama	30.46	773.7	30.53	775.4	39	3.9	82	NE	2	0.9		5ck	0	NW		0	0	Fair	
Montgomery, Alabama	30.30	769.6	30.56	776.2	35	1.7	70	N	5	2.2		8cs	0	W		0	0	Fair	
Morgantown, W. Virginia	29.34	745.2	30.42	772.7	19	— 7.2	69	SW	14	6.3			10s		SW	0.02	0.5	Cloudy	
Moorhead, Minnesota	29.48	748.8	30.57	776.5	0	—17.8	85	NW	7	3.1		0	0			0.02	0.5	Clear	
Mt. Washington, N. H.	23.14	587.8	29.50	749.3	— 8	—22.2	79	NW	48	21.5			Fog			0.23	5.8	Light fog	
Nashville, Tennessee	30.03	762.7	30.63	778.0	23	— 5.0	86	NW	2	0.9		1cs	Sm'o	Calm	NW	Inap.	Inap.	Dense smoke	
New Haven, Connecticut	29.94	760.5	30.06	763.5	16	— 8.9	74	NW	8	3.6		0	0			0	0	Clear	
New London, Connecticut	29.97	761.2	30.02	762.5	19	— 7.2	69	NW	12	5.4		0	1ks		Calm	0	0	Clear	
New Orleans, Louisiana	30.46	773.7	30.52	775.2	44	6.7	52	NE	5	2.2		8c	0	W		0	0	Fair	
Newport, Rhode Island	29.91	759.7	29.97	761.2	21	— 6.1	71	W	17	7.6		1c	1s	Calm	W	0	0	Fair	
New River, N. Carolina					36	2.2	71	NW			4	8cs	0	Calm				Cloudy	
New Shoreham, Rhode I'd	29.97	761.2	30.01	762.2	21	— 6.1	71	N	32	14.3		0	0			0	0	Clear	
New York, New York	29.96	761.0	30.16	766.1	15	— 9.4	82	W	14	6.3		0	0			0	0	Clear	
Norfolk, Virginia	30.24	768.1	30.30	769.6	28	— 2.2	66	N	10	4.5		0	0			0	0	Clear	
North Platte, Nebraska	27.46	697.5	30.42	772.7	— 3	—19.4	83	NE	10	4.5		0	0			0	0	Clear	
Olympia, Washington T'y	30.13	765.3	30.18	766.6	27.0	— 2.8	94	N	1	0.4		0	1s		Calm	0	0	Clear	
Omaha, Nebraska	29.46	748.3	30.74	780.8	— 1	—18.3	85	W	8	3.6		0	5s		Calm	0	0	Fair	
Oswego, New York	29.75	755.6	30.10	764.5	15	— 9.4	74	NW	24	10.7			10ks		NW	0.42	10.7	Cloudy	
Pensacola, Florida	30.50	774.7	30.54	775.7	39	3.9	73	N	1	0.4		4k	4s;fg	W	W;C	0	0	Cloudy	
Philadelphia, Pa	30.19	766.8	30.25	768.3	14	—10.0	64	NW	22	9.8		0	0			Inap.	Inap.	Clear	
Phœnix, Arizona	29.06	738.1	30.99	787.1	34	1.1	70	E	2	0.9		0	0			0	0	Clear	
Pike's Peak, Colorado	17.69	449.3	29.90	759.4	2	—16.7	44	W	38	17.0		1cs	0	Calm		0	0	Clear	
Pilot Point, Texas	29.80	756.9	30.72	780.3	26	— 3.3	40	NE	8	3.6			10s		Calm	0	0	Cloudy	
Pioche, Nevada	24.17	613.9	29.94	760.5	26	— 3.3	63	S	2	0.9		5cs	0	Calm		0.03	0.8	Fair	
Pittsburg, Pennsylvania	29.49	749.0	30.38	771.6	12	—11.1	80	W	14	6.3			10s		W	0.06	1.5	Cloudy	
Port Huron, Michigan	29.56	750.8	30.31	769.9	1	—17.2	71	W	8	3.6			10s		Calm	0.05	1.3	Cloudy	
Portland, Maine	29.80	756.9	29.86	758.4	23	— 5.0	86	NW	3	1.3			10s		Calm	0	0	Cloudy	
Portland, Oregon	30.14	765.5	30.21	767.3	30	— 1.1	89	E	2	0.9		0	1s		Calm	0	0	Clear	
Portsmouth, N. Carolina					32	0.0	69	NW	24	10.7		0	0			0	0	Clear	
Prescott, Arizona	24.91	632.7	30.27	768.8	21	— 6.1	57	SE	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	30.32	770.1	30.34	770.6	51	10.6	53	N	19	8.5		2c	5ks	SW	N	0	0	Fair	
Red Bluff, California	29.78	756.4	30.13	765.3	48.0	8.9	85	S	6	2.7			10s		Calm	0.31	7.9	Cloudy	
Rio Grande City, Texas	30.31	769.9	30.54	775.7	47	8.3	92	N	6	2.7			10n		Calm	2.15	54.6	Light rain	
Rochester, New York	29.49	749.0	30.17	766.3	6	—14.4	76	W	15	6.7			10s		Calm	0.12	3.0	Cloudy	
Roseburg, Oregon	29.55	750.6	30.14	765.5	35	1.7	90	N	4	1.8			10n		Calm	0.04	1.0	Light rain	
Sacramento, California	30.08	764.0	30.16	766.1	47	8.3	85	SE	3	1.3			10s		Calm	0.03	0.8	Cloudy	
St. Louis, Missouri	30.01	762.2	30.66	778.7	11	—11.7	80	W	12	5.4		0	0			0	0	Clear	
St. Paul, Minnesota	29.55	750.6	30.48	774.2	7	—13.9	77	NW	4	1.8		0	5s		NW	0	0	Fair	
Salt Lake City, Utah	25.80	655.3	30.13	765.3	31	— 0.6	48	Calm	0	0		0	0			0	0	Clear	
San Antonio, Texas	29.82	757.4	30.57	776.5	37	2.8	100	N	7	3.1			10n		Calm	0.11	2.8	Light rain	
San Diego, California	30.10	764.5	30.18	766.6	45	7.2	84	NW	4	1.8		0	2s		Calm	0	0	Clear	
Sandusky, Ohio	29.61	752.1	30.35	770.9	13	—10.6	81	SW	12	5.4			10s		Calm	0.06	1.5	Cloudy	
Sandy Hook, New Jersey	30.13	765.3	30.17	766.3	11	—11.7	60	W	39	17.4		0	0			0	0	Clear	
San Francisco, California	30.07	763.8	30.14	765.5	53	11.7	80	SE	31	13.9			9s		SW	0.01	0.3	Cloudy	
Santa Fé, New Mexico	23.43	595.1	29.97	761.2	22	— 5.6	72	N	3	1.3		0	0			0	0	Clear	
Savannah, Georgia	30.32	770.1	30.42	772.7	38	3.3	63	W	6	2.7		0	1ks		Calm	0	0	Clear	
Shreveport, Louisiana	30.34	770.6	30.60	777.2	37	2.8	71	NE	4	1.8		0	8s		Calm	0	0	Fair	
Silver City, New Mexico	24.46	621.3	31.06	788.9	21	— 6.1	57	S	2	0.9		0	0			0	0	Clear	
Smithville, North Carolina	30.32	770.1	30.36	771.1	34	1.1	79	NW	7	3.1		2c	1ks	Calm	Calm	0	0	Fair	
Socorro, New Mexico	25.33	643.4	29.40	746.7	20	— 6.7	53	E	3	1.3		0	0			0	0	Clear	
Springfield, Illinois	29.85	758.2	30.02	777.7	7	—13.9	68	W	6	2.7		0	0			0	0	Clear	
Springfield, Massachusetts	29.90	759.4	30.04	763.0	17	— 8.3	67	W	14	6.3		0	0			0	0	Clear	
Stockton, Texas	27.31	693.7	30.31	769.9	31	— 0.6	100	E	8	3.6			10s		Calm	0.05	1.3	Cloudy	
St. Vincent, Minnesota	29.53	750.0	30.46	773.7	—11	—23.9	100	SW	3	1.3		2cs	0	Calm		0	0	Clear	
Thatcher's Island, Mass	29.85	758.2	29.91	759.7	18	— 7.8	68	W	19	8.5		5k	0	W		0	0	Fair	
Toledo, Ohio	29.58	751.3	30.33	770.4	15	— 9.4	83	SW	12	5.4			10s		Calm	Inap.	Inap.	Cloudy	
Tucson, Arizona	27.70	703.6	30.25	768.3	37	2.8	38	S	3	1.3		0	0			0	0	Clear	
Umatilla, Oregon	30.01	762.2	30.55	776.0	23.5	— 4.7	85	W	7	3.1			10s		Calm	0.08	2.0	Cloudy	
Uvalde, Texas	29.55	750.6	30.44	773.2	41	5.0	41	N	3	1.3		10cs	0	S		0.15	3.8	Cloudy	
Vicksburg, Mississippi	30.33	770.4	30.61	777.5	37	2.8	71	NE	2	0.9		5cs	Sm'e	Calm	Calm	0	0	Fair	
Visalia, California	29.75	755.6	30.13	765.3	49	4.4	82	E	1	0.4			10s		Calm	0	0	Cloudy	
Washington, D. C.	30.19	766.8	30.32	770.1	18	— 7.8	53	NW	12	5.4		1k	0	NW		0	0	Clear	
Wickenburg, Arizona					27	— 2.8	64	NW			1	5c	2s	Calm	Calm	0	0	Cloudy	
Wilmington, N. Carolina	30.30	769.6	30.36	771.1	35	1.7	70	NW	4	1.8		8ck	0	Calm		0	0	Fair	
Winnemucca, Nevada	25.68	652.3	30.04	763.0	34	1.1	70	Calm	0	0		0	Haze			0	0	Clear	
Wood's Holl, Mass	29.89	759.2	29.93	760.2	22	— 5.6	72	NW	24	10.7			10s		NW	0	0	Cloudy	
Yankton, Dakota	29.26	743.2	30.77	781.5	— 2	—18.9	67	W	4	1.8		0	0			0	0	Clear	
Yuma, Arizona	30.03	762.7	30.18	766.6	40	4.4	82	SE	1	0.4		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8			47.5	8.6	74	Calm	0	0		2k	0			0	0	Fair	Thomas Herran.
Buff Bay Town, Jamaica ‡																			
Havana, Cuba, W. I.	30.14	765.5	30.19	766.8	73	22.8	85	Calm	0	0			10n		NE	1.11	28.2	Light rain	Charles Hasselbrink.
Jakobshavn, Greenland	30.02	762.4	30.08	764.0	18.0	— 7.8		Calm			0	6				0	0		
Kingston, Jamaica, W. I.	30.08	764.0	30.09	764.3	67.2	19.6	92	Calm	0	0		1c	0			0	0		Maxwell Hall.
Navassa, W. I.	30.00	762.0	30.08	764.0	77.5	25.3	65	NE	11	4.9		2k	0	E		0	0	Clear	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	77	25.0	91	SE			2	5k	6ks	E		0.230	5.8	½ cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Colʼmbia	29.38	746.2	29.93	760.2	80	20.7	85	Calm			0	0	2s		Calm	0	0	Fair	Francesco J. Cisneros.
Rivas, Nicaragua					73	23		NE			7	0	3c		SE	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.10	764.5	30.13	765.3	73	22.8	71	N	7.2	3.2		0	0			0	0		Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	30.07	763.7	30.13	765.3	8.5	—22.5		Calm			0	0				0	0		
York Factory, B. A.	29.22	742.2	29.28	743.7	—2.0	—33.9		S	12	5.4		9s			S	0.05	1.5	Threatening	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
M.H. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, N. 35° 53′, E. 14° 31′	29.95	760.7	64	17.8	82	SW			1–2		10	WSW						Overcast	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 22° 06′, E 65° 58′	30.12	765.0	75	23.9	64	N			1		0					1	N	Blue sky	Comm. G. W. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.99	761.7	59	15.0	73	WNW			5		7	NW						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 32′, E. 81° 22′	29.91	759.7	78	25.6		N			2		1	NE				1	NNE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J.Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.92	760.0	81	27.2	62	WNW			4		0							Squally	Capt. R. D. King.
H. M. S. Falcon,																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Chimbote, Peru	29.89	759.2	67	19.4	97	Calm			0		10							Misty	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 37′, E. 122° 23′	30.07	763.8	46.9	8.3	81	SSW			1		0							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 15° 43′ E. 41° 30′	30.00	762.0	79	26.1	86	S			4–5		4	SSE				5	S	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 42° 14′, W. 8° 40′	29.27	743.4	58.5	14.7	82	WSW			8		7	SW						Squally	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Barbadoes, W. I.	30.05	763.3	79	26.1	78	ENE			2		3	ENE						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis, N. 38° 42′, W. 9° 06′	29.60	751.8	61	16.1	94	SW			5-7		10					2		Overcast	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 45° 56′	29.72	754.9	75	23.9	68	ESE			1		0					1	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis, N. 18° 12′, E. 70° 26′	30.16	766.1	80.5	26.9	68	ENE			2		0							Blue sky	Capt. G. P. Lewis.
H. M. S. Shannon, S. 11° 11′ W. 78° 03′	29.91	759.7	67.5	19.7	92	Calm			0		3					2	S		Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	30.30	769.6	52.5	11.4	48	NNW			3-4		3	W						D. clouds	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, N. 14° 15′, W. 21° 50′	30.05	763.2	75.1	24.5	88	ENE			3		5			0	0	3		D. clouds	S. C. da Silva Costa, Comd't.
Sado, N. 0° 27′, E. 6° 45′	29.98	761.4	83.8	28.8	68	S			5		6		S	0	0	3	S	D. clouds	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

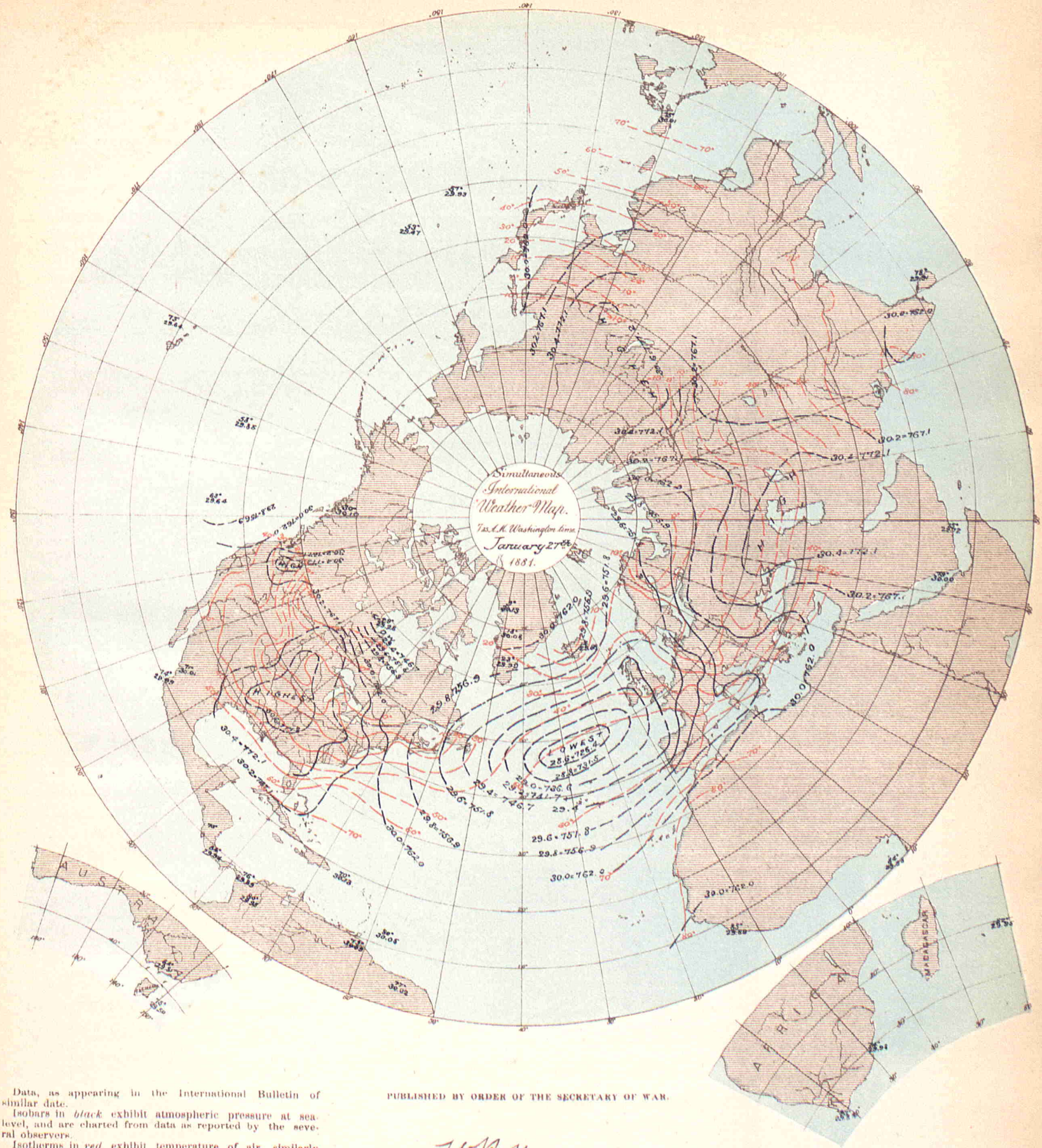
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.		Force	Amount and kind.		Direction							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.62	777.7	42	5.6	83	NE	5	2.2		10				0	0			Cloudy	
N. Yard, Portsmouth, N. H.	29.90	759.4	20	— 6.7	85	NW	17	7.6		0				0	0			Clear	
Naval Hospital, Yokohama, Japan	29.88	758.9	38	3.3	72	NNW			1		5		W	0	0			Hazy	
Adams, Callao, Peru	29.90	759.4	69	20.6	90	Calm			0		5					Long	SE	Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.10	764.5	51	10.6	79	E			1		10		E	0.03	0.8			Cloudy.	
Alert, Hong-Kong, China	30.01	762.2	63	17.2	83	Calm			0		0			0	0	Sm'h		Hazy	
Alliance, Matanzas, Cuba, W.I.	30.15	765.8	75	23.9	95	E			1		8			0	0	Sm'h		Cloudy	
Ashuelot, Tientsin, China	30.23	767.8	31	— 0.6	79	SSW			1		10		Calm					Overcast	
Colorado, New York, N. Y.	30.11	764.8	16	— 8.9	100	NW	22	9.8			0			0	0			Clear.	
Constitution, N. Yard, League I'd., Pa			14	—10.0		NW	10	4.5			0							Squally	
Franklin, Off N. Yard, Norfolk, Va	30.23	767.8	32	0.0		N	10.8	4.8			0			0	0			Clear	
Galena, Villafranca, France	29.74	755.4	51	10.6	85				2		5					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal.	30.11	764.8	50	10.0	79	SE	6.0	2.7			5		SE	0	0			Fair.	
Jamestown, Sitka, Alaska	30.10	764.5	30	— 1.1		Calm			0		0			0	0	Sm'h		Clear	
Kearsarge, Kingston, Jamaica, W.I.	30.05	763.3	75	23.9	77	Calm			0		2					Sm'h		Hazy	
Lackawanna, S. 10° 09′, W. 78° 21′	30.02	762.5	70	21.1	90	S			1		10		SE	0	0	Sm'h	NW	Cloudy	
Marion, Straits of Magellan	29.70	754.4	52	11.1	73	WNW			1-2		10		WNW	Light		Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	30.24	768.1	9	—12.8		NW			3		8		NW	0	0			Cloudy	
Minnesota, New York, N. Y.	30.14	765.5	19	— 7.2		WNW			3-5		0							Misty	
Monocacy, Shanghai, China	30.06	763.5	52	11.1	47	SSE			1		0							Clear.	
New Hampshire, Port Royal, S. C.	30.34	770.6	42	5.6	58	NW	11	4.9			2		Calm	0	0			Fair	
Nipsic, Hyeres Roadstead, France	29.76	755.9	57	13.9	58	E			2		8					Sm'h		D. clouds	
Onward, Chimbote Bay, Peru	29.87	758.7	71	21.7	85	SSW			4		5		NNE			Long	N;W	Fair	
Palos, Shanghai, China	30.09	764.3	50	10.0	52	SW			1		0							Clear.	
Passaic, Washington, D. C.	30.34	770.6	19	— 7.2	85	NW			1		2		NW					Fair	
Pensacola, N. 20° 05′ W. 105° 49′	29.99	761.7	74	23 3	75	ESE			4-5		10							Cloudy	
Portsmouth, Washington, D. C.	30.30	769 6	18	— 7.8	100	NE			1		2		NE					Cloudy?	
Powhatan, New York, N. Y.	30.12	765.0	16	— 8.9	100	NNW			4		0							Clear.	
Quinnebaug, Naples, Italy	29.79	756.7	59	15.0	82	SSW			2		10		SW			Sm'h			
Richmond, Hong-Kong, China	30.16	766.1	62	16.7	83	Calm			0		0			0	0			Clear	
Saratoga, Baltimore, Md.	30.27	768.8	18	— 7.8	100	WNW			3		8		Calm	0	0			Cloudy.	
Shenandoah, Montevideo, Uruguay	29.88	758.9	73	22.8	85	SW			2		2					Sm'h		Fair	
St. Louis, League Island, Pa.	30.24	768.1	14	—10.0	82	NW	24	10.7			0			0	0			Clear	
Swatara, N. 34° 20′, E. 133° 13′	30.00	762.0	44	6.7	76	WNW			1		0					Sm'h		Blue sky	
Tennessee, Kingston, Jamaica, W.I.	30.10	764.5	75	23.9	90	Calm	0	0			2		Calm	0	0	Sm'h		Hazy	
Trenton, Villafranca, France	29.73	755.1	51	10.6	79	Var.			0-1		10			15 h'r	s mod	Sm'h		Cloudy	
Vandalia, Bridgetown, Barbadoes, W.I.			77	25.0	77	ENE			1		5		E					Fair	
Wabash, Boston, Massachusetts	29.97	761.2	18	— 7.8	68	WNW	9	4.0			2		NW	0	0			Hazy	
Wachusetts, Panama, Panama	29.54	750.3	76	24.4	91	NW			3		5		N	0	0	Sm'h		Fair	
Wyoming, Villafranca, France	29.75	755.6	51	10.6	79	SSW			1		10		WSW			Sm'h		Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mil.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mil.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic, N. 51° 25′, W. 11° 40′	28.93	734.8	51	10.6	93	S			4		8					4	SSE; SSW	D. clouds	Capt. H. Parsell.
Ship Baroda, ‡ S. 22° 25′, E. 2° 06′	30.01	762.2	76	24.4	73	SE			3		6							D. clouds	Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle
Barque Belleisle, N. 32° 05′, W. 19° 38′	29.81	757.2	67	19.4	89	SW			6		5							D. clouds	Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
British Merchant ‡																			Capt. E. J. Molony.
Barque Chin Yang, ‡ N. 23° 58′, W. 22° 47′	30.12	765.0	72.6	22.6	63	WSW			1		2							Blue sky	Capt. H. Youlden.
S. S. Cipero,																			
Port of Spain, Trinidad, W.I.	30.09	764.3	79	26.1		SE			1		2					0		Blue sky	Capt. W. N. Lailey.
City of Agra, ‡ S. 40° 10′, W. 32° 10′	30.23	767.8	59.5	15.3	83	NE			3		6							D. clouds	Capt. T. Young.
Barque Commewyne, ‡ N. 20° 30′, W. 61° 23′	30.29	769.4	81.2	27.3	71	NNE			2		2							Blue sky	Capt. W. Scott.
Barque Coppename, N. 15° 23′, W. 38° 00′	30.14	765.5	77.6	25.3	64	ENE			4		8							D. clouds	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra ‡																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡ N. 45° 38′, W. 50° 13′	29.32	744.7	35	1.7	100	NW			4		7					5	ENE; SSW	Misty	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 23° 01′, W. 21° 44′	30.18	766.6	69.8	21.0	78	NW			2		8					4	NNW	D. clouds	Capt. H. W. Dyke.
Barque Mertola, N. 47° 52′, W. 11° 37′	28.95	735.3	52.2	11.2	100	SSE			4		10							Overcast	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathloven, ‡ N. 52° 30′, W. 5° 20′	30.12	765.0	47.5	8.6	89	SE			4		10							Misty	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, N. 38° 21′, W. 67° 33′	29.70	754.4	47	8.3		WNW			5		10		WNW			Mod.	WNW	Threatening	Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Britanic, N. 45° 16′, W. 51° 58′ †	29.34	745.2	38	3.3		N			3		10		NW			H'vy	WNW	Snowing	Capt. H. Perry.
S. S. Celtic, N. 49° 42′, W 24° 23′ †	28.55	725.2	52	11.1		SSW			5		8		SW	24h'rs	light	Cross	ENE; SW	Fair	Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	29.43	747.5	39	3.9		SSE			3		10		E	0	0			Foggy	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann. N. 47° 07′, W 35° 00′	28.45	722.6	51.8	11.0		NE			6		8		NE	0	0	H'vy	SSW	Clearing	Capt. H. Baur.
S. S. Köln																			
S. S. Leipzig ‡																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm ‡																			Capt. Albert Fredholm.
Ship Pera ‡																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Philadelphia, Pa	30.04	763.0	14	—10.0	82	W			3		2		W					Clear.	Capt. J. W. Shackford.
S. S. Indiana, ‡ Liverpool, England †	29.10	739.1	34	1.1	79	S			3		8		S			Light			Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 44° 21′, W. 55° 07′ *†	29.49	749.0	28	— 2.2	100	NW			6		10		WNW			Snow	H'vy	WNW	Snowing	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, Hollyhead, England †	29.11	739.4	45	7.2		SW			3		10		S	0	0	Sm'h		Overcast	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ Hong Kong, China †	30.15	765.8	70	21.1	57	Calm			0		0			0	0	Sm'h			Capt. H. Davison.
S. S. Gaelic, N. 38° 12′, W. 148° 20′ *†	29.85	758.2	58	14.4	75	ENE			6		8		ENE			R'gh	ENE	Cloudy	Capt. W. H. Kidley.
S. S. Oceanic, San Francisco, Cal	30.15	765.8	57	13.9	63	SSE			4		8		SE					Cloudy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia																			Capt. Fred. Bolles
S. S. Oregon, N. 40° 41′, W. 124° 35′ †	29.96	761.0	53.0	11.7	96	SSE			4		10		SE			R'gh	SSE	Rainy	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal †	30.08	764.0	61	10.6	86	SE			2		10		SE					Cloudy	Capt. J. N. Ingalls.
S. S. Idaho, Tacoma, Wash. Ter †	29.62	752.3	40	4.4	100	ESE			1		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, San Pedro, Cal †	30.20	767.1	51	10.6	93	NE			1		0					Sm'h		Clear	Thos. Wallace.
S. S. State of California, Portland, Oregon †	30.21	767.3	32	0.0	69	Calm			0		5							Fair	Capt. G. Debney.
S. S. Victoria, Nanaimo, Vancouver Id †*	30.20	767.0	22	— 5.6	86	S			1		0					Light	W	Clear	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 33° 51′, E. 152° 35′	29.50	749.3	72	22.2	100	NNE			5		8		NNE			R'gh	NE	Hazy	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W †	29.81	757.2	76	24.4	91	Calm			0		0			0	0			Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 19° 44′, W. 105° 23′ †	30.08	764.0	72	22.2	85	ENE			4		10		SW			Sm'h	SE	Hazy	Capt. D. S. Austin.
S. S. City of Peking, N. 30° 21′, E. 151° 56′ †	29.93	760.2	57	13.9	58	NW			6		5		NW	0	0	R'gh	WNW	Fair	Capt. G. G. Berry.
S. S. City of Sidney, N. 34° 16, W. 132° 48′ †	29.64	752.8	63	17.2	89	S			7		10		SE	0.25	6.3	H'vy	N	Light rain	Capt. H. C. Dearborn
S. S. City of Tokio, N. 35° 46′, E. 164° 20′ †	29.47	748.5	53	11.7	54	NW			7		5		NW	0	0	Long	NW	Fair	A. L. Ritchie, 2d Officer.
S. S. Colima ‡																			apt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, Panama, Panama †	29.89	759.2	80	26.7	78	NNW			5		2		NNW	0	0			Hazy	
S. S. Zealandia, N. 19° 42′, W. 158° 25′	29.64	752.8	73	22.8	67	WSW			7		0					High	WNW	Fine	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland, ‡ Flushing, Netherlands †	29.13	739.9	34	1.1	90	SSW			3		8		S			Sm'h		Light rain	Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland, ‡ N. 49° 12′, W. 20° 14′	28.51	724.1	54	12.2	93	SW			6		5		SW	0.1	2.	Long	SW	Fair	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 42° 43′, W. 59° 15′	29.79	756.7				WNW			6		10		NW	0	0	Short	NW	Cloudy	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Morehead City, N. C †	30.25	768.3	20	— 6.7		NW			7		0			0	0			Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 36° 00′, W. 75° 23′	30.21	767.3	38	3.3	63	NW	15	6.7			0			0	0	Mod.	NW	Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, N. 32° 38′, W. 74° 16′ †	30.07	763.8	60	15.6		NW			6		10		WNW	Sprinkles		H'vy	N; W	Threatening	Capt. S. S. Lewis.
Bark Carrie Heckle																Cross			Capt B. F. Woodbury.
Brigantine George, ‡ Ponce, Porto Rico †	30.33	770.4	79	26.1		N			2		2			0	0	Sm'h		Fair	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	30.24	768.1	33	0.6	70	N	2	0.9		28	28			0	0			Clear	
Ship Jumna																			Capt. James S. Gawin
Bark Sunbeam, ‡ Lisbon, Portugal †	29.55	750.6	63	17.2	100	SSW			7		10		W	Heavy				Rainy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 28, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.11	764.7	68.9	20.5	83	SW			3		4			0	0	Cloudy	Dr. Ollive.
Nemours			29.92	759.9	69.4	20.8	67	N			3		2			0	0	Fair	Raynard.
Algie s			29.92	759.9	70.9	21.6	56	WSW			5		9			Inap.	Inap.	Covered	Nicolas.
La Calle			29.91	759.6	72.0	22.2	63	[illegible]W			0		4			0	0	Cloudy	Fonfréde.
Tunis			29.91	759.7															Jacques.
Sfax			30.04	763.0															Gau.
Saida			30.04	763.0	74.3	23.5	30	W			2		0			0	0	Clear	Dumas.
Tebessa			30.02	762.6	75.3	24.6	12	W			5		3			0	0	Pretty fair.	Watrin.
Gerville																			Lonchamp.
Laghouat			30.14	765.5	74.1	23.4	30	E			1		0			0	0	Clear.	Herbin.
Biskra			30.07	763.8	75.2	24.0	59	NW			1		0			0	0	Clear.	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.78	756.4	29.88	758.9	60.9	16.1	67	SSE	7	3.1			2			0	0	Very fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.70	754.4	78	25.6		SW			3		4km			0.05	1.3		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.11	739.3	29.69	754.1	21.8	— 4.0	93	Ca'm			0		10			0.016	0.4	Rain & snow	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.86	733.1	29.65	753.2	31.3	— 0.4	87	ENE	4.3	1.9			10			0	0		Dr. Wiersbicki.
Eperies	28.88	733.5	29.81	757.1	25.5	— 3.6	81	Calm			0		10			0	0		Julius Mikollik.
Gratz‡	28.37	720.7	29.70	754.3	21.6	— 5.8	72	S			1		10			0	0		Andreas Rospini.
Hermannstadt	28.31	719.1	29.78	756.5	35.4	1.9	69	S			5		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.19	716.1	29.61	752.0	22.3	— 5.4	96	Calm			0		10			0	0		The Staff.
Lemberg	28.79	731.3	29.84	757.8	24.4	— 4.2	79	SE			3		0			0	0	Solar halo	Dr. T. Stanecki.
Pola	29.52	749.8	29.63	752.7	41.5	5.3	96	N			1		10			0.984	25.0		I. R. HydrographicOffice
Szathmar	29.36	745.7	29.81	757.1	34.3	1.3	94	SE			2		10			0	0		Beicht Peter, S. J.
Szegedin	29.46	748.2	29.75	755.6	31.3	— 0.4	96						10			0	0		Karl Stancel.
Trieste	29.57	751.1	29.67	753.7	38.5	3.6	95	Calm			0		10			0.598	15.2	Rain & fog	P. Busin.
Vienna	28.89	733.8	29.65	753.0	23.0	— 5.0	98	SE			2		10			0.031	0.8		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	28.79	731.3	28.99	736.4	39.6	4.2	97	SW			3		10			0.287	7.3	Light rain	Royal Observatory.
Furnes																			M. E. de Cae.
Maseyck	28.84	732.4	28.96	735.6	41.2	5.1	85	SSE			2		5			0.201	5.1	Raining	M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 2, 1882.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.

BRITISH SERIES.

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

Aberdeen	28.94	735.1	29.04	737.6	37.0	2.8	95	S	8	3.6			1			0.020	0.51	Misty	W. Boswell.
Armagh, Observatory	28.75	730.2	29.00	736.6	41.4	5 2	96	SE	13	5.8			10					Raining	S. Call.
Bidston, Liverpool Obs'y			29.08	738.6	35.5	1.9	99	SE	12	5.4			10					Foggy	John Hartnup.
Bolton, Sharples	28.56	725.4	29.10	739.1	37.0	2.8	97	S	4	1.8			10					Foggy	Thomas Mackereth.
Bradford, Yorkshire	28.64	727.4	29.04	737.6	36.1	2.3	90	S			1		10			0.04	1.0	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.04	763.0	30.08	764.0	82	27.8	67	NE			3		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			29.13	739.9	37.6	3.1	98	W			0.2		10					Foggy	John McLaren.
Chatham, School M. E.	29.04	737.6	29.17	740.9	39.1	3.9	92	Calm			0		0			Blank		Foggy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	28.89	733.8	29.12	739.6	48.0	8.9	89	SSW			3		10					Foggy	The Staff.
Fort Napier, Natal	27.66	702.6	29.87	758.7	84.3	29.1	100	NE			1		0					Blue sky	Pvt. E. K.Annis, A.H.C.
Free Town, Sierra Leone	29.66	753.4	29.90	759.4	84	28.9	83	S			1		4					Raining	C. E. Keane.
Galway, Queen's College			28.86	733.0	46	7.8	92	SW			2		2					Blue sky	J. O'Donaghadue.
Gibraltar, Mediterranean	29.80	756.9	29.85	758.2	61.4	16.3	93	SW			6		10					Raining	2nd Cpl. O. Baldwin.
Glasgow, Observatory	28.83	732.3	29.03	737.3	37.3	2.9	91	NE			2		10					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.00	736.6	29.17	740.9	37.4	3.0	99	WSW			1		10					Foggy	The Staff.
Guernsey	28.98	736.1	29.20	741.7	48.5	9.2	92	SSE			2		5					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.14	740.1	29.18	741.2	39.0	3.9	92	WNW	6	2.7			10					Foggy	The Met'g'l Office.
Leicester, Museum	29.87	758.7	30.13	765.3	37.2	2.9	89	SW			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.78	756.4	29.85	758.2	69.2	20.7	70	SW			2		3					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			30.26	768.6	69.5	20.8	63	NE			5		5					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.62	726.9	29.14	740.1	36.3	2.4	100	SSW			1		9					Light fog	Robert Pate.
Oxford, Radcliffe Obs'y	28.94	735.1	29.19	741.4	37.8	3.2	98	Calm			0		10					Misty	The Staff.
Plymouth	29.05	737.9	29.13	739.9	46.2	7.9	99	SE			2		10					Raining	John Merrifield.
Sandwick Manse, Orkneys			28.96	735.6	38.2	3.4	99	S	18	8.0			0					Blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.84	757.9	29.90	759.4	43.6	6.4	78	NE			2		8			Blank		D. clouds	Serg't W. H. Lyne.
Sheffield	28.87	733.3	29.15	740.4	40.6	4.8	92	SSW			1		5			0	0	D. clouds	W. F. Cooper.
Silloth Rectory	29.03	737.3	29.06	738.1	34.5	1.4	89	NE			2		10			0.034	0.86	Overcast	Rev. F. Redford, A. M.
Stonyhurst, Observatory			29.11	739.4	37.8	3.2	99	NNE	2	0.9			10					Raining	Rev. S. J. Perry.
Strathfield Turgiss	28.96	735.6	29.18	741.2	38.0	3.3	100	W			0-1		10					Foggy	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution			29.10	739.1	51	10.6	86	SW			6		10					Raining	W. Newcombe.
Valencia, Observatory	28.85	732.8	28.88	733.5	47.6	8.7	85	SE	19	8.5			8					D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B	29.60	751.8	29.64	752.8	10.6	—11.9		NW	7	3.1			Ion			Inap.	Inap	Snowing	Hon. J. Ferguson.
Chatham, N. B.*	29.51	749.5	29.57	751.1	10	—12.2	89	W	6	2.7			Ion		W	0.10	2.5	Light snow	G. A. Blair.
Charlottetown, P. E. Island	29.40	746.7	29.45	748.0	9	—12.8	100	W	16	7.2			Ion			0.125	3.18	Light snow	H. J. Cundall, C. E.
Chicontime, Quebec					— 5.7	—20.9		NW			4		10s			0.03	0.8	Light snow	Rev. V. A. Huart.
Cornwall, Ontario	30.08	764.0	30.31	769.9	— 9.3	—22.9	100	W			1	0	0			0	0	Clear	James Smith, M. A.
Dalhousie, N. B	29.62	752.3	29.66	753.4	7.0	—13.9		W			1		Ion			Inap.	Inap.	Snowing	H. A. Johnson.
Father Point, Quebec*	29.82	757.4	29.84	757.9	3	—16.1	62	NW	4	1.8			Ion			0.10	2.5	Threatening	J. McWilliams.
Fredericton, N. B	29.63	752.6	29.70	754.4	5.7	—14.6	83	NW	18	8.0			10s			0	0	Threatening	Prof. Harrison
Fort Garry, Manitoba*	29.67	753.6	30.64	778.2	—14	—25.6	100	N	10	4.5		Haze	Haze			0	0	Hazy	James Stewart.
Grantcn, Ontario	29.28	743.7	30.54	775.7	— 5.8	—21.0	68	W			1	0	0			0	0	Clear	James Grant.
Halifax, N. S.*	29.44	747.8	29.58	751.3	12	—11.1	82	W	10	4.5		2c	0			0	0	Fair	A. Allison.
Hamilton, Ontario	30.03	762.7	30.47	773.9	6.9	—13.9	79	SW			2	4cs	0			0	0	Fair	Geo. Dickson, B. A.
Kingston, Ontario*	30.00	762.0	30.39	771.9	— 8	—22.2	83	W	2	0.9		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S	29.19	741.4	29.23	742.4	13.2	—10.4	89	N	4	1.8			Ion			0.50	12.7	Snowing	C. H Rigby.
Montreal, Quebec*	30.02	762.5	30.25	768.3	— 5	—20.6	86	W	20	8.9		0	0			Inap.	Inap.	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.61	752.1	30.42	772.7	—12	—24.4	70	E	1	0.4			Ion		NW	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.58	751.3	30.43	772.9	1.5	—16.9	56	W			1		Ion			0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.73	755.1	30.51	774.9	2	—16.7	100	SW	7	3.1		0	0			Inap.	Inap.	Clear	H. Morgan.
Port Stanley, Ontario	29.80	756.9	30.53	775.4	3	—16.1	92	W	12	5.4		0	0			0	0	Clear	M. Payne.
Quebec, Quebec*	29.68	753.9	30.04	763.0	— 3	—19.4	66	W			3		10s		W	0	0	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.86	758.4	30.40	772.1	—21	—29.4	85	NW	2	0.9		0	0			0	0	Clear	W. H. McIntyre.
St. Andrews	29.61	752.1	29.67	753.6	7	—13.9	79	NW	22	9.8			Ion			0	0	Cloudy	
St. John's, N. B	29.49	749.0	29.66	753.4	7.0	—13.9	100	NW	23	10.3			Ion			0	0	Cloudy	G. Murdock, C. E.
Saugeen, Ontario*	29.62	752.3	30.40	772.1	14	—10.0	96	W	26	11.6			10s			0.25	6.3	Cloudy	K. Stewart.
Stratford, Ontario	29.05	737.9	30.49	774.4	3.2	—16.0	95	SW	15	6.7			10s			0	0	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.29	744.0	29.33	745.0	16	— 8.9	95	SW	10	4.5			Ion			0.53	13.5	Light snow	T. C. Hill, C. E.
Toronto, Ontario*	30.02	762.5	30.44	773.2	11	—11.7	94	W	9	4.0			Ion			0.03	0.8	Cloudy	Magnetic Observatory.
Windsor, N. S.	29.45	748.0	29.55	750.6	11.0	—11.7	80	NW	12	5.4			Ion			0.03	0.8	Overcast	
Woodstock, Ontario	29.31	744.5	30.52	775.2	— 0.1	—17.8	97	SW	10	4.5		10cs	0	W		0	0	Cloudy	Prof. Wolverton.
Yarmouth, N.S.*	29.65	753.1	29.72	754.9	15	— 9.4	65	NW	25	11.2			10s		NW	0.09	2.3	Cloudy	Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. John's, Newfoundland	29.27	743.4	29.44	747.8	31	— 0.6	100	NE	1	0.4		10k	10s			0.75	19.0	Cloudy	John Delany.
St. Pierre, N. F			29.16	740.7	30.2	— 1.0		SW			2					0	0		N. F. Land, Comd't.

Stations marked with a * are telegraph d daily to the office of the Chief Signal Officer of the Army,

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.93	760.2	29.97	761.2	90.4	32.4	37	SSE	4.3	1.9		0	2			0	0	Vapory	The Staff, for D. Gill.
Cape St. Francis Lt. House	29.85	758.2			71.6	22.0	82	W	19.5	8.7			5cs			0	0	Light haze	John Duthie.

CHINESE SERIES.

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

SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	30.23	767.9	30.26	768.5	32.9	0.5	77	W	2.5	1.1			0			0	0	Clear	M. Marc Dechevrens, S. J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.21	665.7	29.93	760.2	61.7	16.5	82	NE			2		2d			0	0	Clear	Federico Maison.

DANISH SERIES.

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

Copenhagen	29.31	744.5	29.36	745.7	28.0	— 2.2	92	SSE	18	8			10						
Fanöe	29.19	741.4	29.21	741.9	31.3	— 0.4	96	SE			4		10						
Godthaab, Greenland	29.94	760.4	29.98	761.5	23.7	— 4.6	85	NNE			4		0						
Stykkisholm, Iceland	29.87	758.6	29.91	759.7	—8.3	—22.4	84	NE			8		2						
Thorshavn	28.70	728.9	28.73	729.8	36.7	2.6	77	ENE	9	4			10						
Vestervig	29.15	740.4	29.24	742.8	27.1	— 2.7	100	E			2		10					Foggy	

FRENCH SERIES.

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

Agen, Normal School	28.98	736.0	29.63	752.5	48.7	9.3	79	SSE			1		n	NE	NE	0.024	0.6		M. Labroue, Director.
Alençon	28.84	732.5	29.39	746.5	43.5	6.4	94	SW			2		10n		NE	0.79	20.	Covered	M. Nicot, Director.
Arras, Engineer School	28.89	733.7	29.14	740.2	37.4	3.0	100	N											M. Klein, Commandant.
Avignon, Normal School	29.58	751.4	29.66	753.4	56.5	13.6	71	NNE			1		2n		SSW	0.185	4.7	Partly cl'dy	M. Giraud, Director.
Bar-sur-Seine	28.81	731.7	29.36	745.7	46.8	8.2	76	W			4		10		W	0.157	4.0	Covered	M. Saillard, Director.
Beauvais, Normal School	28.98	736.0	29.24	742.8	41.9	5.5	92	W			2		10			0.463	11.75	Covered	M. Frère Eugene Marie.
Besançon, Normal School	28.43	722.2	29.32	744.7	50.2	10.1	66	SSW			4		8n		SW			Rainy	M. Gobin, Director.
Bordeaux, Observatory	29.28	743.6	29.54	750.2	57.9	14.4	51	SW			2		2		W	0.043	1.1	Slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	28.87	733.3	29.42	747.3	51.8	11	46	S			4		5kn		SE	0.24	6.	Raining	M. Postel, Director.
Brest, Naval Observatory	29.01	736.9	29.26	743.1	51.4	10.8	86	SW			2		5		SW	0.413	10.50		M. de Rermaree, Dir.
Caen, Normal School	29.14	740.2	29.24	742.8	46.0	7.8	100	SW			1		5		WSW	0.287	7.3	Cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	28.92	734.6	29.24	742.8	42.8	6.0	94	Calm			0		10			0.079	2.0	Covered	M. Jadot, Director.
Charleville, Normal School	28.56	725.5	29.07	738.4	39.6	4.2	83	SSW			4		10		SW	0.24	6.	Raining	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.11	714.0	29.45	748.1	52.0	11.1	53	WSW			5		5			0.094	2.4		M. Alluard, Director.
Cluny, Normal School	28.67	728.3	29.51	749.6	55.4	13	57	S			3		1		SW	0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	28.40	721.4	29.27	743.4	40.6	4.8	100	W			8		10n		W	0.413	10.5	Raining	Dr. Coulet, Director.
Gap, Normal School	27.19	690.5	29.71	754.6	46.8	8.2	70	N			0		n		S	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.54	724.8	29.68	753.8	56.5	13.6	62	W			2		8		W	0.12	3.		M. Kina, Director.
Grenoble, Normal School	28.82	732.0	29.67	753.7	46.4	8	82	ESE			1		ck		SE	0	0		M. Ablard, Director.
Guéret, Normal School	27.95	710.0	29.52	749.8	46.8	8.2	92	SW			3		5		NE	0	0	Cloudy	M. Rivoir, Director.
Lamballe, Normal School	28.99	736.4	29.28	743.6	44.8	7.1	91	S			1		10		S	0.299	7.6	Raining	M. Ollitrault, Director.
Lescar, Normal School	29.03	737.4	29.70	754.3	57.2	14	67	W					10		N	0	0	Covered	M. Chauvin, Director.
Lorient, Naval Observatory	29.20	741.7	29.30	744.3	51.4	10.8	86	SSW			3		8		SW	0.472	12.0	¾ covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.40	721.4	29.40	746.8	54.1	12.3	56	S			3		ks		SW	0	0		M. André, Director.
Mans, Normal School	29.08	738.5	29.38	746.3	46.2	7.9	98	SW			3		8		WSW	0.67	17.	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.38	746.3	29.65	753.1	54.5	12.5	85	W			0-1		4		SW	0.063	1.60		M. Stephan, Director.
Montlouis l'instituteur	24.49	622.1	29.73	755.1	39.2	4.0	59	S	13.0	5.8			10	E		0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.55	750.6	29.66	753.4	53.2	11.8	86	W			2		0			0	0	Clear	M. Galzin, Director.
Nancy, Normal School	28.51	724.1	29.28	743.6	42.8	6.0	85	S			3		10			0.079	2.0	Raining	M. Hasse.
Nantes, Observatory	28.51	743.7	29.44	747.8	51.8	11	90	S			1		10		SW	0.535	13.6	Covered	M. Larocque, Dir.
Nice	29.60	751.8	29.63	752.6	51.8	11.0	93	SE			3		5	W	SE	0.799	20.3	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.55	750.5	29.65	753.2	52.7	11.5	80	W	3.8	1.7			0			0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.19	563.5			29.7	—1.3							5		W	0	0	Cloudy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.62	727.0	29.69	754.1	50.0	10.0	86	W			1		1	W	W	0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.62	625.4			32.9	0.5	98	WSW			8		10			0.091	2.3	Stormy, fog'y	M. Alluard, Director.
Rochefort, Naval Obs'y	29.46	748.3	29.49	749.1	55.4	13.0	77	SW			2		0			0.020	0.5	Clear	Lt. E. Decaute, Director.
Roche-sur-Yon, N. School	29.22	742.2	29.43	747.6	52.5	11.4	85	SSW			3		5		SSW	0.386	9.8	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.52	699.0	29.68	753.8	49.3	9.6	66	Calm			0		10		SW			Raining	M. Richard, Director.
Rouen, Normal School	29.26	743.1	29.34	745.3	45.0	7.2	95	SE			1		8		SE	0.189	4.8	Very cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.11	739.5	29.27	743.5	47.8	8.8	89	W			1		10	W	S	0.228	5.8	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.15	740.3	29.31	744.5	45.0	7.2	82	WSW			3		10		W				M. Renou, Director.
Toulouse, Observatory	28.95	735.5	29.67	753.6	56.8	13.8	98	W			1		5			0	0	Cloudy	M. Baillaud, Director.
Tours	29.22	742.3	29.42	747.3	53.2	11.8	75	WNW			2		8			0.205	5.2	¾ covered	M. de Tastes.
Versailles, Observatory	28.81	731.7	29.30	744.2	45.3	7.4	83	W			3					0.480	12.21		Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	28.47	723.0	29.31	744.4	38.1	3.4	90	WSW			3		3k	WSW		0.138	3.5	Raining	Prof. Dr. Hoh.
Berlin	29.21	742.0	29.39	746.5	31.6	—0.2	76	SE			1		10					Showery	Prof. Dr. Arndt.
Breslau	29.02	737.0	29.54	750.3	32.4	0.2	71	S			4		10					Snow-flakes	Royal University Obs'y.
Carlsruhe	28.88	733.5	29.34	745.1	45.7	7.6	73	SW			8		10	SW		0.106	2.7	Raining	Albert Senz.
Cassel	28.56	725.3	29.15	740.3	40.6	4.8	81	SE			0		10	SW		0.110	2.80	Raining	Dr. H. Möhl.
Frankfort on the Main	28.89	733.8	29.26	743.1	43.7	6.5	77	S			2		10			0.157	4.0	Raining	Physical Society.
Friedrichshafen	28.02	711.7	29.47	748.4	40.6	4.8	81	W			2		2	W		0	0		Chief Telegrapher Wilhelm.
Hamburg	29.16	740.6	29.23	742.4	32.4	0.2	85	ESE			4		10			0.004	0.1		Dr. R. Kleeman.
Kiel	29.23	742.4	29.24	742.8	32.4	0.2	91	SSE			1		9			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	28.94	735.1	29.37	746.1	32.9	0.5	85	SSE			2		10					Showery	Prof. Dr. Bruhns.
Magdeburg	29.09	738.8	29.32	744.7	32.2	0.1	92	SE			3		10ks	SE		0.035	0.9	Raining	Dr. Assmans.
Memel	29.74	755.4	29.79	756.6	18.5	—7.5	83	SSE			4-5		0						Reimbrecht & Issermann.
Munich	27.62	701.5	29.45	747.9	43.2	6.2	72	SE			1		5	SE		0.071	1.8		Central Station.
Neufahrwasser	29.64	752.8	29.65	753.2	19.8	—6.8	78	SE			3		0			0	0		A Lothes.
Neustadt, Palatinate	28.64	727.4	29.13	740.0	45.0	7.2		SSW			4		10	S		0.887	22.52		Dickuether.
Stuttgart	28.39	721.1	29.28	743.6	45.7	7.6	61	SW			1		8	W		0.075	1.9		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	27.90	708.6	29.40	746.8	34.7	1.5	83	S			6		6	W		0.051	1.3		Prof. Kemlein.
Wustrow	29.30	744.2	29.32	744.8	29.7	—1.3	100	SE			4		7s			0	0		Profs. Brandes & Reimer.

GREEK SERIES.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Athens	29.47	748.5	29.86	758.4	63.1	17.3		SW			1.0		5					½ Clear	Alexander Wourlisch

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	29.98	761.4	30.03	762.7	77.5	25.3	57	WSW	5.0	2.2			0			0	0	Blue sky	
Deesa	29.52	749.8	29.99	761.8	85.6	29.8	15	NW	7.4	3.3			0			0	0	Misty	
Bombay	29.94	760.6	30.08	764.1	80.9	27.2	51	NW	18.0	8.0			0			0	0	Blue sky	
Poona, Yarrowda	28.11	713.9	29.96	760.9	81.8	27.7	11	ENE	4.0	1.8			0			0	0	Blue sky	
Belgaum	27.42	696.5	29.95	760.7	80.1	26.7	16	NNE	5.0	2.2			0			0	0	Blue sky	
Lahore	29.22	742.5	30.00	761.9	69.7	20.9	36	Calm	0.8	0.4			0			0	0	Blue sky	
Roorkee	29.07	738.5	30.00	761.9	68.8	20.4	39	Calm	1.9	0.8			0			0	0		
Agra	29.45	748.0	30.02	762.5	77.3	25.2	23	W	3.2	1.4			0			0	0		
Nagpur	28.96	735.6	30.02	762.4	77.7	25.4	16	Calm	3.0	1.3			0			0	0	Blue sky	
Jubbulpore	28.66	727.8	30.06	763.6	68.1	20.1	38	N	1.7	0.8			0			0	0	Blue sky	
Lucknow	29.63	752.5	30.02	762.4	70.2	21.2	35	NNE	1.7	0.8			0			0	0	Blue sky	
Allahabad	29.71	754.7	30.03	762.8	67.8	19.9	48	Calm	1.8	0.8			0			0	0	Blue sky	
Patna	29.83	757.6	30.02	762.4	65.4	18.6	77	W	0.5	0.2			0			0	0	Blue sky	
Hazaribagh	27.96	710.1	30.03	762.8	64.6	18.1	29	NNW	4.2	1.9			0			0	0	Blue sky	
Cuttack	29.93	760.3	30.02	762.4	72.2	22.3	46	NNE					0			0	0	Blue sky	
Calcutta, Alipore	29.97	761.3	29.99	761.8	70.0	21.1	43	Calm	0	0			0			0	0	Blue sky	
Goalpara	29.57	751.0	29.98	761.5	70.6	21.4	55	Calm	1.4	0.6			0			0	0	Blue sky	
Chittagong	29.90	759.4	29.99	761.7	71.8	22.1	41	W	3.1	1.4			0			0	0	Misty	
Sibsagar	29.67	753.6	30.02	762.6	61.9	16.6	89	NE	1.1	0.5			0			0	0	Blue sky	

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.23	742.5	29.66	753.4	34.5	1.4	93	Calm	0	0			10			0	0		Prof. Giovanni Clodig.
Milan	29.13	739.9	29.68	753.8	31.1	— 0.5	100	SSW	1.3	0.6			5			0.295	7.5		Prof. Schiaparelli.
Padua	29.53	750.1	29.65	753.0	34.9	1.6	91	NNW	1.8	0.8			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.78	730.9	29.72	755.0	32.5	0.3	77	SE	1.3	0.6			10			0	0		Prof. P. F. Denza.
Genoa	29.41	747.1	29.61	752.1	41.4	5.2	54	N	10.5	4.7			0			0.642	16.3		Prof. G. M. Garibaldi.
Mondovi	27.73	704.4	29.74	755.5	31.6	— 0.2	81	W			2		0			0	0		Prof. D. C. Bruno.
Pesaro	29.62	752.3	29.67	753.6	33.1	0.6	88	W	9.8	4.4			10			0.098	2.5		Prof. Luigi Guidi.
Florence	29.30	744.2	29.56	750.9	43.3	6.3	91	NE			2		10			0.882	22.4		Cav. F. Meucci.
Leghorn	29.41	747.1	29.50	749.3	46.6	8.1	97	ENE	9.4	4.2			10			0.480	12.2		Prof. P. Monte.
Rome	29.42	747.2	29.60	751.7	55.4	13.0	91	SSE	16.8	7.5			10			1.138	28.9		Prof. P. S. Ferrari.
Lecce	29.52	749.7	29.77	756.2	54.9	12.7	89	SSW	9.4	4.2			10			0.047	1.2		Prof. C. de Giorgi.
Cosenza	28.91	734.3	29.82	757.3	61.2	16.2	79	SE	6.9	3.1			10	SSE		0.220	5.6		Prof. D. Conti.
Cagliari	29.52	749.7	29.71	754.6	64.9	18.3	69	NW			4		9	W		0.004	0.1		Prof. A. Pacinotti.
Palermo	29.53	750 1	29.78	756.4	69.8	21.0	45	SW	19.2	8.6			8			0	0		Prof. G. Ciacciatore.
Syracuse	29.79	756.6	29.83	757.7	64.6	18.1	55	WSW	4.9	2.2			10	WSW		0	0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R	29.17	741.0	29.70	754.3	54.1	12.3	96	SE	2.5	1.1			10k			0.177	4.5	Dense fog	Prof. F. Brioschi.
Stelvio	21.95	557.4			21.6	— 5.8	85	SW					10			0	0		P. F. Denza.
Valdobbia	21.70	551.2			21.9	— 5.6	92	E					10			0	0		

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	29.76	755.9	29.77	756.1	41.5	5.3	60	NW	12.8	5.7			0			0.007	0.18	Fair	K. Sasaki.
Kioto	29.47	748.5	29.65	753.1	39.6	4.2	94						6s;ck			0.046	1.17	Cloudy	
Nagasaki, I. M. Obs'y	29.76	755.9	29.97	761.2	40.6	4.8	58	W	16.8	7.5			6s			0.150	3.81	Cloudy	S. Takohnyashi.
Tokei Obs'y, Yeddo	29.63	752.6	29.70	754.4	36.0	2.2	82	SE	2.5	1.1			10s			0	0	Covered	The Staff.
Wakayama	29.63	752.6	29.68	753.9	43.7	6.5	86	ESE	2.4	1.1			6ck;s			0.180	4.57	Fair	S. Iwahashi.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.78	756.4	29.97	761.3	79.1	26.2	80	S	6.0	2.7		2	7		WSW	0	0	Cloudy	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.80	757.0	30.07	763.7	67.3	19.6	74	NNW			2	1cs	0			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	29.02	737.1	29.02	737.1	36.3	2.4		NNW			3					0.185	4.7		
Groningen	29.05	737.8	29.10	739.2	34.0	1.1		E			2					0.043	1.1		
Helder	29.05	737.9	29.05	737.9	34.2	1.2		ESE			2					0.010	0.4		
Hellevoetsluis	29.05	737.9	29.05	737.9	37.4	3.0	98	Calm			0					0.335	8 5		
Utrecht	28.98	736.0	29 02	737.2	38.7	3.7	95	ESE			2		10			0.177	4.5	Dull	H. van der Brink

STATIONS.	Barometer. Corrected for instrum't'al error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.14	740.2	29.21	741.8	36.0	2.2	85	Calm	0	0			9			0.028	0.7		
Christiania	29.30	744.3	29.46	748.2	21.7	— 5.7	87	ENE	7	3			10			0.063	1.6	Snowing	
Gjæsvær	29.59	751.6	29.61	752.2	13.5	—10.3		NW			2		7						
Lodingen	29.61	752.0	29.65	753.2	17.2	— 8.2	85	NE			2		3			0	0		
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.28	743.8	29.44	747.8	57.9	14.4	78	WNW	22.4	10.0			4			1.417	36.0		Dr. J. A. Sampaio.
Campo Major	28.81	731.8	29.81	757.1	57.2	14.0	76	WSW	9.4	4.2			10			0.945	24.0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.87	758.8	29.96	761.0	67.5	19.7	76	WSW	9.8	4.4			10			0.449	11.4		Capt. D. A. de Cunha.
Lisbon, Observatory	29.44	747.7	29.80	756.8	59.4	15.2	91	SSW	23.7	10.6			10			0.209	5.3		The Staff.
Ponta Delgada, Azores	29.49	749.1	29.56	750.9	58.6	14.8	70	W	17.4	7.8			10			0.240	6.1		
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.98	736.2	30.15	765.8	13.6	—10.2	100	SW	11	5			10						Capt. Lasarew.
Archangel	29.60	751.8	29.62	752.3	13.6	—10.2	90	SW	9	4			10					Snowing	Capt. Sselliwerstow.
Astrakhan	30.60	777.1	30.51	775.0	15.3	— 9.3	75	ENE	9	4			0						Capt. Wisganow.
Barnaul	29.46	748.2	29.98	761.4	31.6	— 0.2	98	SW	4	2			10						Meteorological Obs'y.
Dorpat	29.68	753.8	29.94	760.4	19.4	— 7.0	78	S	7	3		2c							Observatory.
Ekaterinburg	29.14	740.1	30.19	766.8	11.7	—11.3	75	W	4	2			10						Meteorological Obs'y.
Kasan	29.99	761.8	30.29	769.4	8.4	—13.1	80	SSW	7	3			10						Observatory.
Kertch	30.05	763.2	30.07	763.7	21.2	— 6.0	82	E	13	6			9						Lagorio.
Kieff	29.52	749.9	30.23	767.9	4.8	—15.1	73	SE	9	4			0						Observatory.
Krotkowo, N. 58°47', E. 48°34'																			Cand. Fatjanow.
Lugan	30.17	766.2	30.39	771.9	11.8	—11.2	68	ESE	9	4			0						Meteorological Obs'y.
Moscow	29.71	754.5	30.31	769.8	10.6	—11.9	63	Calm	0	0			0						Meteorological Obs'y.
Nertchinsk	27.82	706.5	30.48	774.3	—19.5	—28.6	64	NW	4	2			0						Meteorological Obs'y.
Nikolaiev	30.08	763.9	30.15	765.7	20.7	— 6.3	84	E	9	4			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.80	756.9	29.89	759.1	—14.1	—25.6	70	W	9	4			7k						Lieut. Iwanow.
Nukuss	30.34	770.5	30.59	776.9	26.2	— 3.2	87	NE	9	4			0						Dr. Dobrochotow.
Pekin, China	29.82	757.5	29.97	761.1	32.9	0.5	30	NW	16	7			1k						Physical Observatory.
St. Petersburg	29.94	760.5	29.96	760.9	21.7	— 5.7	87	W	13	6			10sn						Central Physical Obs'y.
Tashkend, Laboratory																			Teich, A. M.
Tiflis	28.83	732.2	30.32	770.0	35.8	2.1	62	S	2	1			3ks						Physical Observatory.
Warsaw	29.26	743.2	29.71	754.5	25.5	— 3.6	74	SE	18	8			0						Astronomical Obs'y.
Wilna	29.54	750.4	30.00	761.9	18.1	— 7.7	81	SE	9	4			1					Light clouds	Berg, Assistant.
Yeniseisk	29.67	753.6	29.99	761.7	— 1.5	—18.6	82	SE	7	3			10					Snowing	M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.07	738.4	35.1	1.7	99	E			1		10s			0.01	0.3	Foggy	Andrew Gibb.
Monach Lt. House, Hebrides			28.87	733.3	44	6.7	92	S			4		10			0.3	8.		J. Youngclause.
North Unst, Shetland Isl'ds			28.98	736.1				S			6		10			Blank			Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.58	751.2	29.68	753.9	62.6	17.	51	W	4.7	2.1			0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.54	750.4	29.60	751.8	63.3	17.4	47	W	7.4	3.33		1	8	SE		0	0	Almost cov'd	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.71	678.4			47.8	8.8	76	S	9.7	4.33			8			0.256	6.5	Cloudy	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.54	699.5	29.76	756.0	53.2	11.8	76	SW	21.6	11.0		0	9			0.122	3.1	Almost cov'd	The Staff.
Murcia, Met. Obs'y	29.65	753.0	29.80	756.8	69.8	21.0	59	SW	2.9	1.3		5	5	SE		0	0	Covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.51	724.1	29.39	746.6	53.0	12.0	75	SSW	23.7	10.6			10			1.366	34.7	Rainy	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.13	765.4	30.20	767.0	68.7	20.4	83	E	5.4	2.4		0	2k;s		E	0.024	0.6	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.98	760.9	30.01	762.2	75.1	23.9	76	NE	0	0			1s			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.87	758.7	29.97	761.2	62.1	16.7	94	WSW	8.2	3.7			10		SW	1.170	29.7		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.04	763.0	30.13	765.3	74.8	23.8	80	SE	6.6	2.95		2cs	3k	E	E	0	0	D. clouds	Enrique Gadea, Chief Engineer.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.71	754.5	29.74	755.5	—23.1	—30.6	100	N			2		0			0	0		
Umea	29.68	753.9	29.73	755.2	7.9	—13.4	100	NE			4		10			0.071	1.8		
Hernosand	29.67	753.6	29.72	754.9	15.3	— 9.3	91	NE			4		10			0	0		
Stockholm	29.42	747.2	29.60	751.7	29.1	— 1.6	76	S			2		10			0	0		
Wisby	29.55	750.5	29.61	752.0	29.1	— 1.6	80	S			4		7			0	0		
Sub-Series.																			
Upsala	29.47	748.4	29.55	750.6	28.0	— 2.2	80	SSE	17.4	7.8			10			0.011	0.28		Nils Ekholm.
SWISS SERIES.																			
Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.15	714.9	29.58	751.4	50.4	10.2	49	SSW			5		7			0.067	1.7	Cloudy	The Observatory.
Zurich	27.85	707.3	29.51	749.6	45.7	7.6	57	SW			4		4			0	0		The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —12.3 mm.; Ther. +8°.2 cent.; Hum. —28 per cent.																			
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.95	760.6	41.2	5.1	77	N	8	3.5			10		WSW	0.102	2.6		The Observatory.
Valona			29.83	757.6	57.7	14.3		SE			1		5			0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.06	763.4	66.0	18.9	59	NE			1	9c				0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.23	767.8	30.32	770.1	10	—12.2	79	NW	4	1.8		0	1ks		Calm	Inap.	Inap.	Clear.	
Alpena, Michigan	29.77	756.1	30.50	774.7	0	—17.8	70	W	4	1.8		0	0			0	0	Clear	
Atton Id., Alaska‡																			
Atlanta, Georgia	29.28	743.7	30.52	775.2	28	— 2.2	67	NW	12	5.4		8c	0	Calm		0	0	Fair	
Atlantic City, New Jersey	30.41	772.4	30.43	772.9	13	—10.6	71	NW	14	6.3		0	0			0	0	Clear	
Augusta, Georgia	30.37	771.4	30.59	777.0	31	— 0.6	79	NW	4	1.8		5cs	0	NW		0	0	Fair	
Baltimore, Maryland	30.47	773.9	30.52	775.2	18	— 7.8	68	W	4	1.8		0	Fog		Calm	0	0	Clear	
Barnegat, New Jersey	30.36	771.1	30.39	771.9	13	—10.6	62	NW	24	10.7		0	0			0	0	Clear	
Benton, Montana	27.38	695.4			— 5	—20.6	100	Calm	0	0			1on		Calm	0.16	4.1	Heavy snow	
Bismarck. Dakota	28.53	724.6	30.39	771.9	— 9	—22.8		NW	3	1.3			1os		Calm	0	0	Cloudy	
Boise City, Idaho	27.02	686.3	29.98	761.5	32	0.0	79	NW	4	1.8			1os		Calm	0	0	Cloudy	
Boston, Massachusetts	29.96	761.0	30.13	765.3	5	—15.0	50	W	20	8.9		0	0			0	0	Clear	
Brackettville, Texas	29.29	744.0	30.42	772.7	40	4.4	100	Calm	0	0			1on		Calm	0.11	2.8	Light rain	
Brownsville, Texas	30.35	770.9	30.40	772.1	52	11.1	100	N	5	2.2			1on		Calm	0.30	7.6	Light rain	
Buffalo, New York	29.68	753.9	30.47	773.9	5	—15.0	75	SW	14	6.3		0	2ks		SW	0	0	Fair	
Burlington, Vermont	30.01	762.2	30.33	770.4	2	—16.7	72	NW	5	2.2		2cs	2s	NW	NW	0	0	Fair	
Cairo, Illinois	30.31	769.9	30.76	781.3	17	— 8.3	67	N	2	0.9		0	0			0	0	Clear	
Campo, California	27.53	699.2	30 10	764.5	26	— 3.3	88	E	3	1.3		2c	0	W		0	0	Fair	
Camp Thomas, Arizona	27.48	698.0			25	— 3.9	75	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.50	774.7	30.51	774.9	25	— 3.9	62	NW	36	16.1		0	0			0	0	Clear	
Cape May, New Jersey	30.44	773.2	30.48	774.2	17	— 8.3	67	NW	36	16.1		0	0			0	0	Clear	
Castroville, Texas	29.68	753.9	30.43	772.9	45	7.2	61	N	2	0.9			1os		Calm	0.01	0.3	Cloudy	
Cedar Keys, Florida	30.42	772.7	30.44	773.2	42	5.6	83	N	16	7.2			1os		Calm	0	0	Cloudy	
Champaign, Illinois	29.78	756.4	30.71	780.0	0	—17.8	69	Calm	0	0		0	0			0	0	Clear	
Charleston, S. Carolina	30.42	772.7	30.48	774.2	36	2.2	61	N	11	4.9		0	0			0	0	Clear	
Charlotte, N. Carolina	29.63	752.6	30.51	774.9	28	— 2.2	66	NE	7	3.1		5cs	Sm'e	W	Calm	0	0	Fair	
Chattanooga, Tennessee	29.75	755.6	30.63	778.0	23	— 5.0	73	N	8	3.6		1cs	0	Calm		0	0	Clear	
Cheyenne, Wyoming	24.05	610.9	29.99	761.7	28	— 2.2	66	NW	12	5.4		0	0			0	0	Clear	
Chicago, Illinois	29.85	758.2	30.65	778.5	— 1	—18.3	68	NW	4	1.8		0	0			0	0	Clear	
Chincoteague, Virginia	30.50	774.7	30.52	775.2	17	— 8.3	51	NW	18	8.0		1k	0	NW		0	0	Clear	
Cincinnati, Ohio	30.00	762.0	30.73	780.5	14	—10.0	73	NE	3	1.3			10ks		Calm	Inap.	Inap.	Cloudy	
Cleveland, Ohio	29.80	756.9	30.61	777.5	12	—11.1	80	SW	7	3.1			1os		W	0.03	0.8	Cloudy	
Coleman City, Texas	28.63	727.2	30.40	772.1	39	3.9	82	S	6	2.7			1os		Calm	0.02	0.5	Cloudy	
Columbus, Ohio	29.72	754.9	30.68	779.3	6	—14.4	76	NW	2	0.9		0	0			0	0	Clear	
Concho, Texas	28.48	723.4	30.24	768.1	42	5.6	83	Calm	0	0			1os		Calm	0	0	Cloudy	
Corsicana, Texas	30.10	764.5	30.61	777.5	39	3.9	100	Calm	0	0			1on		Calm	0.02	0.5	Light rain	
Davenport, Iowa	29.96	761.0	30.72	780.3	— 9	—22.8	78	Calm	0	0			1os		Calm	0	0	Cloudy	
Dayton, Washington T'y	28.12	714.2	29.87	758.7	21	— 6.1	85	SW	4	1.8			1on		Calm	0.74	18.8	Light snow.	
Deadwood, Dakota	25.38	644.6			6	—14.4	76	E	3	1.3		0	0			0	0	Clear	
Decatur, Texas	29.31	744.5	30.55	776.0	35	1.7	80	E	4	1.8			1os		Calm	0	0	Cloudy	
Delaware Breakwater, Del.	30.47	773.9	30.50	774.7	12	—11.1	61	NW	29	13.0		0	0			0	0	Clear	
Denison, Texas	29.72	754.9	30.58	776.7	33	0.6	89	NE	2	0.9			1os		Calm	0.02	0.5	Cloudy	
Denver, Colorado	24.86	631.4	30.08	764.0	19	— 7.2	54	SE	4	1.8		0	0			0	0	Clear	
Des Moines, Iowa	29.68	753.9	30.71	780.0	— 4	—20.0	82	Calm	0	0			1os		Calm	0	0	Cloudy	
Detroit, Michigan	29.80	756.9	30.56	776.2	3	—16.1	86	SW	8	3.6		0	0			0.02	0.5	Clear	
Dodge City, Kansas	27.62	701.5	30.08	764.0	24	— 4.4	74	S	13	5.8			1os		Calm	0	0	Cloudy	
Dubuque, Iowa	29.88	758.9	30.70	779.8	— 6	—21.1	81	SW	3	1.3		0	5s;1g		Calm	0	0	Fair	
Duluth, Minnesota	29.78	756.4	30.57	776.5	— 2	—18.9	84	W	4	1.8		0	0			0	0	Clear	
Eagle Pass, Texas	29.71	754.6	30.49	774.4	42	5.6	100	SE	4	1.8			1on		Calm	0.59	15.0	Light rain	
Eagle Rock, Texas	25.28	642.1	29.93	760.2	10	—12.2	79	N	3	1.3			1os		Calm	0	0	Cloudy	
Eastport, Maine	29.66	753.4	29.74	755.4	7	—13.9	77	NW	19	8.5			1os		NW	0	0	Cloudy	
Edinburg, Texas					48	8.9	100	N			1		1on		Calm	1.00	25.4	Light rain	
El Paso, Texas	26.49	672.8			28	— 2.2	77	Calm	0	0		0	0			0	0	Clear	
Erie, Pennsylvania	29.74	755.4	30.54	775.7	8	—13.3	78	SW	9	4.0			1os		Calm	0.02	0.5	Cloudy	
Escanaba, Michigan	29.79	756.7	30.56	776.2	—12	—24.4	100	Calm	0	0		0	0			0	0	Clear	
Florence, Arizona	28.64	724.4	30.24	768.1	46	7.8	62	Calm	0	0		0	0			0	0	Clear	
Fort Apache, New Mexico	25.22	640.6	30.67	779.0	25	— 3.9	62	E	2	0.9		0	0			0	0	Clear	
Fort Assinniboine, Montana	27.38	695.4			— 4	—20.0	65	NE	7	3.1			1os		Calm	0	0	Cloudy	
Fort Bennett, Dakota	28.70	729.0			1	—17.2	71	N	6	2.7		0	0			0	0	Clear	
Fort Buford, Dakota	28.35	720.1	30.50	774.7	—13	—25.0	74	W	2	0.9		0	0			0	0	Clear	
Fort Custer, Montana	27.01	686.0			— 1	—18.3	68	N	3	1.3			1os		Calm	0	0	Cloudy	
Fort Davis, Texas	25.44	646.2	30.40	772.1	28	— 2.2	88	Calm	0	0		0	0			0	0	Clear	
Fort Elliott, Texas	27.51	698.7	29.94	760.5	28	— 2.2	77	SE	14	6.3			1os		SE	0	0	Threatening	
Fort Gibson, Indian T'y	29.98	761.5	30.56	776.2	30	— 1.1	78	Calm	0	0			1os		Calm	0	0	Cloudy	
Fort Grant, Arizona	25.35	643.9	30.15	765.8	40	4.4	49	NE	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas	29.08	738.6	30.42	772.7	40	4.4	82	SE	8	3.6			1os		Calm	0	0	Cloudy	
Fort Keogh, Montana	27.74	704.6			3	—16.1	73	Calm	0	0			1os		Calm	0.03	0.8	Cloudy	
Fort Macon, North Carolina	30.47	773.9	30.49	774.4	30	— 1.1	78	N	18	8.0		5c	0	NW		0	0	Fair	
Fort Missoula, Montana	26.65	676.9			8	—13.3	100	S	1	0.4			1on		Calm	0.28	7.1	Light snow.	
Fort McKavett, Texas	28.12	714.2	30.14	765.5	40	4.4	91	S	4	1.8			1os		Calm	0	0	Cloudy	
Fort Shaw, Montana	26.47	672.3			— 2	—18.9	100	Calm	0	0			1on		Calm	0.11	2.8	Light snow.	
Fort Sill, Indian Territory	29.20	741.7	30.39	771.9	32	0.0	89	Calm	0	0			1os		Calm	0.02	0.5	Cloudy	
Fort Stevenson, Dakota	28.50	723.9			—10	—23.3	77	SW	2	0.9		0	0			0	0	Clear	
Fort Verde, Arizona					29	— 1.7	45	W			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.70	729.0	30.35	770.9	42	5.0	74	NE	2	0 9			1os		Calm	Inap.	Inap.	Cloudy	
Galveston, Texas	30.46	773.7	30.50	774.7	49	9.4	78	E	11	4.9			1os		Calm	0	0	Cloudy	
Grand Haven, Michigan	29.84	757.9	30.55	776.0	20	— 6.7	70	W	12	5.4		5k	0	W		0.01	0.3	Fair	
Hatteras, North Carolina	30.46	773.7	30.48	774.2	30	— 1.1	68	NW	24	10.7		0	0			0	0	Clear	
Helena, Montana	25.78	654.8			5	—15.0	76	Calm	0	0			1os		Calm	0.20	5.1	Cloudy	
Henrietta, Texas	29.46	748.3	30.47	773.9	33	0.6	89	SE	6	2.7			1os		Calm	0.04	1.0	Cloudy	
Indianapolis, Indiana	29.83	757.7	30.73	780.5	5	—15.0	75	NW	3	1.3			1os		Calm	Inap.	Inap.	Cloudy	
Indianola, Texas	30.48	774.2	30.51	774.9	47	8.3	76	NE	15	6.7			1os		Calm.	0	0	Cloudy	
Jacksboro, Texas	29.30	744.2	30.50	774.7	39	3.9	64	SE	2	0.9			1os		Calm	0	0	Cloudy	
Jacksonville, Florida	30.44	773.2	30.49	774.4	38	3.3	45	N	6	2.7		5cs	0	Calm		0	0	Fair	
Keoknk, Iowa	29.95	760.7	30.70	779.8	1	—17.2	71	Calm	0	0		0	1s		Calm	0	0	Clear	
Key West, Florida	30.24	768.1	30.28	769.1	65	18.3	78	NE	16	7.2		ck	0	NE		Inap.	Inap.	Fair	
Kittyhawk, North Carolina	30.48	774.2	30.51	774.9	27	— 2.8	53	N	33	14.8		2c	0	N		0	0	Clear	
Knoxville, Tennessee	29.55	750.6	30.66	778.7	21	— 6.1	71	N	5	2.2		0	0			0	0	Clear	
La Crosse, Wisconsin	29.78	756.4	30.64	778.2	— 6	—21.1	61	S	8	3.6		0	0			0	0	Clear	
La Mesilla, New Mexico	26.34	669.0	30.49	774.4	27	— 2.8	76	N	2	0.9		0	0			0	0	Clear	
Laredo, Texas	30.03	762.7	30.40	772.1	44	6.7	100	N	3	1.3			1on		Calm	0.93	23.6	Light rain	
Leavenworth, Kansas	29.68	753.9	30.63	778.0	11	—11.7	80	N	1	0.4		0	0			0	0	Clear	
Lewiston, Idaho	28.99	736.3	29.66	753.4	25	— 3.9	100	NE	1	0.4			1on		Calm	0.60	15.2	Light snow.	
Little Rock, Arkansas	30.30	769.6	30.65	778.5	30	— 1.1	89	NE	5	2.2			10ks		NE	0	0	Cloudy	
Los Angeles, California	29.81	757.2	30.17	766.3	46	7.8	66	NW	2	0.9		0	4s		Calm	0	0	Fair	
Louisville, Kentucky	30.06	763.5	30.69	779.5	13	—10.6	62	NW	6	2.7		0	0			0	0	Clear	
Lynchburg, Virginia	29.84	757.9	30.59	777.0	24	— 4.4	74	S	3	1.3		0	0			0	0	Clear	
Madison, Wisconsin	29.48	748.8	30.62	777.7	— 1	—17.8	68	W	6	2.7		0	0			0	0	Clear	
Marquette, Michigan	29.70	754.4	30.50	774.7	3	—16.1	46	W	7	3.1		0	0			0	0	Clear	
Mason, Texas	28.79	731.3	30.64	778.2	42	5.6	91	SE	1	0.4			1os		SE	0.03	0.8	Cloudy	
Memphis, Tennessee	30.31	769.9	30.69	779.5	25	— 3.9	62	NE	6	2.7		10cs	Haze	Calm	Calm	0	0	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
United States Series—Continued.																			
Milwaukee, Wisconsin	29.78	756.4	30.62	777.7	0	—17.8	70	W	8	3.6	.....	0	1s	.....	Calm	0	0	Clear.	
Mobile, Alabama	30.46	773.7	30.54	775.7	39	3.9	64	NE	12	5.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Montgomery, Alabama	30.34	770.6	30.59	777.0	32	0.0	60	N	4	1.8	.....	8c	0	Calm	.....	0	0	Fair	
Morgantown, W. Virginia	29.53	750.0	30.63	778.0	18	— 7.8	84	W	8	3.6	.....	.....	10s	.....	W	0	0	Cloudy	
Moorhead, Minnesota	29.44	747.8	30.57	776.5	—15	—26.1	71	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Mt. Washington, N. H.	23.06	585.7	29.42	747.3	—24	—31.1	100	NW	76	34.0	.....	.....	Fog	.....	NW	0	0	Dense fog	
Nashville, Tennessee	30.11	764.8	30.71	780.0	22	— 5.6	72	N	3	1.3	.....	1cs	Sm'e	Calm	Calm	0	0	Fair	
New Haven, Connecticut	30.14	765.5	30.27	768.8	8	—13.3	66	N	3	1.3	.....	0	0	.....	.....	0	0	Clear	
New London, Connecticut	30.17	766.3	30.22	767.6	9	—12.8	57	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
New Orleans, Louisiana	30.47	773.9	30.53	775.4	43	6.1	59	NE	10	4.5	.....	3c	0	Calm	.....	0	0	Fair	
Newport, Rhode Island	30.10	764.5	30.16	766.1	10	—12.2	90	W	21	9.4	.....	0	0	.....	.....	0	0	Clear	
New River, N. Carolina	.....	.....	.....	.....	28	— 2.2	69	N	.....	.....	4	2cs	0	Calm	.....	.....	.....	Clear	
New Shoreham, Rhode I'd	30.16	766.1	30.19	766.8	11	—11.7	80	NW	31	13.0	.....	0	5s	.....	NW	0	0	Fair	
New York, New York	30.14	765.5	30.34	770.6	11	—11.7	80	W	11	4.9	.....	0	Fog	.....	Calm	0	0	Clear	
Norfolk, Virginia	30.48	774.2	30.55	776.0	21	— 6.1	57	N	15	6.7	.....	0	0	.....	.....	0	0	Clear	
North Platte, Nebraska	27.24	691.9	30.10	764.5	3	—16.1	86	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Olympia, Washington T'y	29.59	751.6	29.63	752.6	34.5	1.4	95	N	4	1.8	.....	.....	10n	.....	Calm	0.32	8.1	Light snow	
Omaha, Nebraska	29.32	744.7	30.57	776.5	5	—15.0	88	SE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Oswego, New York	30.04	763.0	30.39	771.9	10	—12.2	79	N	16	7.2	.....	.....	10s	.....	NW	0	0	Cloudy	
Pensacola, Florida	30.51	774.9	30.55	776.0	40	4.4	48	N	9	4.0	.....	4cs	Haze	SW	Calm	0	0	Fair	
Philadelphia, Pa	30.39	771.9	30.45	773.4	13	—10.6	62	W	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Phœnix, Arizona	29.04	737.6	30.94	785.9	38	3.3	81	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.71	449.8	29.92	760.0	4	—15.6	48	W	40	17.9	.....	2cs	0	Calm	.....	0	0	Clear	
Pilot Point, Texas	29.73	755.1	30.64	778.2	33	0.6	89	NE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Pioche, Nevada	24.10	612.1	29.86	758.4	33	0.6	51	S	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	29.70	754.4	30.61	777.5	15	— 9.4	82	NW	10	4.5	.....	.....	10s	.....	W	0	0	Cloudy	
Port Huron, Michigan	29.77	756.1	30.54	775.7	— 2	—18.9	67	S	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Portland, Maine	29.94	760.5	30.00	762.0	8	—13.3	55	W	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Portland, Oregon	29.59	751.6	29.66	753.4	31.5	— 0.3	84	SE	3	1.3	.....	.....	10n	.....	Calm	0.74	18.8	Sleeting	
Portsmouth, N. Carolina	.....	.....	.....	.....	29	— 1.7	45	W	26	11.6	.....	0	0	.....	.....	0	0	Clear	
Prescott, Arizona	24.90	632.4	30.26	768.6	26	— 3.3	63	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	30.34	770.6	30.36	771.1	52	11.1	47	NE	16	7.2	.....	5c	2s	SW	Calm	0	0	Fair	
Red Bluff, California	29.53	750.0	29.88	758.9	50.5	10.3	89	SE	20	8.9	.....	.....	10n	.....	Calm	0.16	4.1	Light rain	
Rio Grande City, Texas	30.20	768.6	30.49	774.4	47	8.3	92	NW	6	2.7	.....	.....	10n	.....	Calm	0.84	21.3	Light rain	
Rochester, New York	29.72	754.9	30.41	772.4	9	—12.8	89	W	8	3.6	.....	.....	10n	.....	Calm	0.10	2.5	Light snow	
Roseburg, Oregon	28.98	736.1	29.54	750.3	45	7.2	84	S	4	1.8	.....	.....	10n	.....	Calm	0.21	5.3	Light rain	
Sacramento, California	29.90	759.4	29.98	761.5	52	11.1	79	S	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
St. Louis, Missouri	30.08	764.0	30.74	780.8	6	—14.4	88	N	7	3.1	.....	0	0	.....	.....	0	0	Clear	
St. Paul, Minnesota	29.62	752.3	30.59	777.0	— 9	—22.8	78	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Salt Lake City, Utah	25.67	652.0	30.00	762.0	34	1.1	43	Calm	0	0	.....	0	7s	.....	Calm	0	0	Fair	
San Antonio, Texas	29.80	756.9	30.54	775.7	45	7.2	61	N	3	1.3	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
San Diego, California	30.09	764.3	30.17	766.3	47	8.3	85	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Sandusky, Ohio	29.86	758.4	30.62	777.7	8	—13.3	78	SW	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Sandy Hook, New Jersey	30.30	769.6	30.34	770.6	13	—10.6	62	W	36	16.1	.....	0	0	.....	.....	0	0	Clear	
San Francisco, California	29.88	758.9	29.94	760.5	55	12.8	81	SE	11	4.9	.....	.....	10n	.....	Calm	0.18	4.6	Light rain	
Santa Fé, New Mexico	23.41	594.0	29.95	760.7	23	— 5.0	60	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	30.39	771.9	30.49	774.4	35	1.7	61	NW	8	3.6	.....	5cs	0	W	.....	0	0	Fair	
Shreveport, Louisiana	30.35	770.9	30.61	777.5	41	5.0	74	Calm	0	0	.....	.....	10n	.....	Calm	0.01	0.3	Light rain	
Silver City, New Mexico	24.46	621.3	30.98	786.9	25	— 3.9	62	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Smithville, North Carolina	30.50	774.7	30.54	775.7	31	— 0.6	69	N	10	4.5	.....	1k	1ks	Calm	Calm	0	0	Fair	
Socorro, New Mexico	25.39	644.9	29.46	748.3	12	—11.1	80	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.90	761.0	30.73	780.5	6	—14.4	76	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Springfield, Massachusetts	30.07	763.8	30.22	767.6	8	—13.3	78	NW	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Stockton, Texas	27.29	693.2	30.29	769.4	33	0.6	100	S	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
St. Vincent, Minnesota	29.61	752.1	30.54	775.7	— 7	—21.7	100	NE	4	1.8	.....	5cs	0	Calm	.....	0	0	Fair	
Thatcher's Island, Mass	30.00	762.0	30.06	763.5	8	—13.3	55	W	35	15.7	.....	5k	0	W	.....	0	0	Fair	
Toledo, Ohio	29.81	757.2	30.58	779.7	10	—12.2	79	SW	6	2.7	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Tucson, Arizona	27.69	703.3	30.24	768.1	42	5.6	42	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.64	752.8	30.16	766.1	23.5	— 4.7	93	N	8	3.6	.....	.....	10n	.....	Calm	0.16	4.1	Light snow	
Uvalde, Texas	29.50	749.3	30.37	771.4	45	7.2	84	N	1	0.4	.....	.....	10n	.....	Calm	0.09	2.3	Cloudy	
Vicksburg, Mississippi	30.33	770.4	30.61	777.5	39	3.9	46	NE	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Visalia, California	29.66	753.4	30.04	763.0	50	10.0	82	S	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Washington, D. C.	30.41	772.4	30.54	775.7	16	— 8.9	66	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Wickenburg, Arizona	.....	.....	.....	.....	30	— 1.1	68	NW	.....	.....	1	1c	0	Calm	.....	0	0	Clear	
Wilmington, N. Carolina	30.46	773.7	30.52	775.2	32	0.0	50	NE	5	2.2	.....	1c	0	Calm	.....	0	0	Clear	
Winnemucca, Nevada	25.49	647.4	29.85	758.2	34	1.1	70	NE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Wood's Holl, Mass	30.08	764.0	30.13	765.3	9	—12.8	57	NW	32	14.3	.....	1k	0	NW	.....	0	0	Clear	
Yankton, Dakota	29.09	738.9	30.56	776.2	4	—15.6	74	SE	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Yuma, Arizona	30.00	762.0	30.16	766.1	40	4.4	65	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.07	560.6	.....	.....	54.0	12.2	66	S	2	0.9	.....	2k	0	.....	.....	0	0	Fair	Thomas Herran.
Buff Bay Town, Jam ica.†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	30.17	766.3	30.22	767.6	70	21.1	75	SE	2.4	1.1	.....	0	4ks	.....	SE	0.04	1.0	Clearing	Charles Hasselbrink.
Jakobshavn, Greenland	30.10	764.4	30.16	766.1	5.0	—15	.....	Calm	.....	.....	0	.....	.....	.....	.....	0	0	.....	
Kingston, Jamaica, W. I.	30.07	763.8	30.08	764.0	64.8	18.2	82	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	Maxwell Hall.
Navassa, W. I.	29.99	761.7	30.07	763.8	76.5	24.7	73	NE	10.2	4.6	.....	2k	5s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	78	25.6	86	E	.....	.....	3	5k	7ks	E	.....	0.070	1.78	⅜ cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.92	760.0	81	27.2	76	Calm	.....	.....	0	.....	0	.....	.....	0	0	Fair	Francesco J. Cisneros
Rivas, Nicaragua	.....	.....	.....	.....	73	23	.....	ESE	.....	.....	6	0	3ks	.....	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.11	764.8	30.14	765.5	74	23.3	81	NNE	6	2.7	.....	0	1s	.....	NE	0	0	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	30.19	766.9	30.25	768.3	—10.1	—23.4	.....	Calm	.....	.....	0	.....	4	.....	.....	0.047	1.2	.....	
York Factory, B. A.	29.61	752.1	29.67	753.6	—27.0	—32.8	.....	SW	8	3.6	.....	4k	4s	W	W	0.05	1.3	Cloudy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0— 10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, N. 35° 53′, E. 14° 31′	29.89	759.2	67	19.4	69	WSW			2		3							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon N. 23° 00′, E. 64° 06′	30.09	764.3	75	23.9	64	N			1		1	NW				1	NW	D. clouds	Comm. G. Haud.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. S. Hope.
H. M. S Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. J. F. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.03	762.7	56	13.3	75	WNW			5-6		3	NW						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 32′, E. 81° 22′	29.91	759.7	78	25.6		N			1		1	NE				1	NE	Blue sky	Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.92	760.0	81	27.2	62	NW			4		0							Squally	Capt. R. D. King.
H. M. S. Falcon, N. 36° 50′, E. 16° 05′	29.83	757.7	70	21.1		SW			1-2		5					1	SW	Misty	Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Chimbote, Peru	29.88	758.9	67	19.4	92	Calm			0		10							Misty	Comm. E. E. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris, N. 36° 21′, E. 14° 58′	29.86	758.4	65	18.3	100	W			3		5					2	S	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 40′, E. 122° 30′	30.25	768.3	39.5	4.2	54	NNW			3		0							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 19° 31′, E. 39° 00′	30.04	763.0	79	26.1	91	NNE			2		4	NE				2	N	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 42° 14′, W. 8° 40′	29.47	748.5	57.5	14.2	78	SW			8		10	SW						Squally	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Barbadoes, W. I.	30.08	764.0	78.5	25.8	86	NE			3		3	E						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis, N. 38° 42′, W. 9° 06′	29.78	756.4	61	16.1	88	SW			4.5		10					1		Overcast	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 56′	29.69	754.1	78	25.6	57	ESE			1		1					1	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 9° 10′, W. 78° 39′	29.99	761.7	66	18.9	94	E			2		10					2	SSE		Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos																			
H. M. S. Thetis																			Capt. C. G. Fane,
H. M. S. Thunderer																			Capt. P. W. Stephens.
H. M. S. Triumph																			Capt. P. H. Colomb.
H. M. S. Turquoise																			Capt. A. H. Markham.
H. M. S. Tweed																			Capt. M. B. Medlycott.
H. M. S. Tyne																			
H. M. S. Urgent																			Capt. J. E. Stokes.
H. M. S. Wild Swan																			Comm. W. S. Brown.
H. M. S. Wolverine																			Capt. S. H. P. Dacres.
H. M. S. Woodlark, Busrah, India																			Comm. J. C. Wilson, A. D. C.
H. M. S. Zephyr	30.23	767.8	58.5	14.7	48	NNW			3		0							Blue sky	Capt. R. D. Cumming. Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, N. 13° 19′, W. 19° 29′	30.04	763 1	77.0	25.0	78	ENE			3		3			0	0	2		D. clouds	S. C. da Silva Costa, Comd't.
Sado, S. 1° 40′, E. 8° 20′	29.97	761.1	83.3	28.5	74	S			4		4		S	0	0	3	SSW	D. clouds	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			

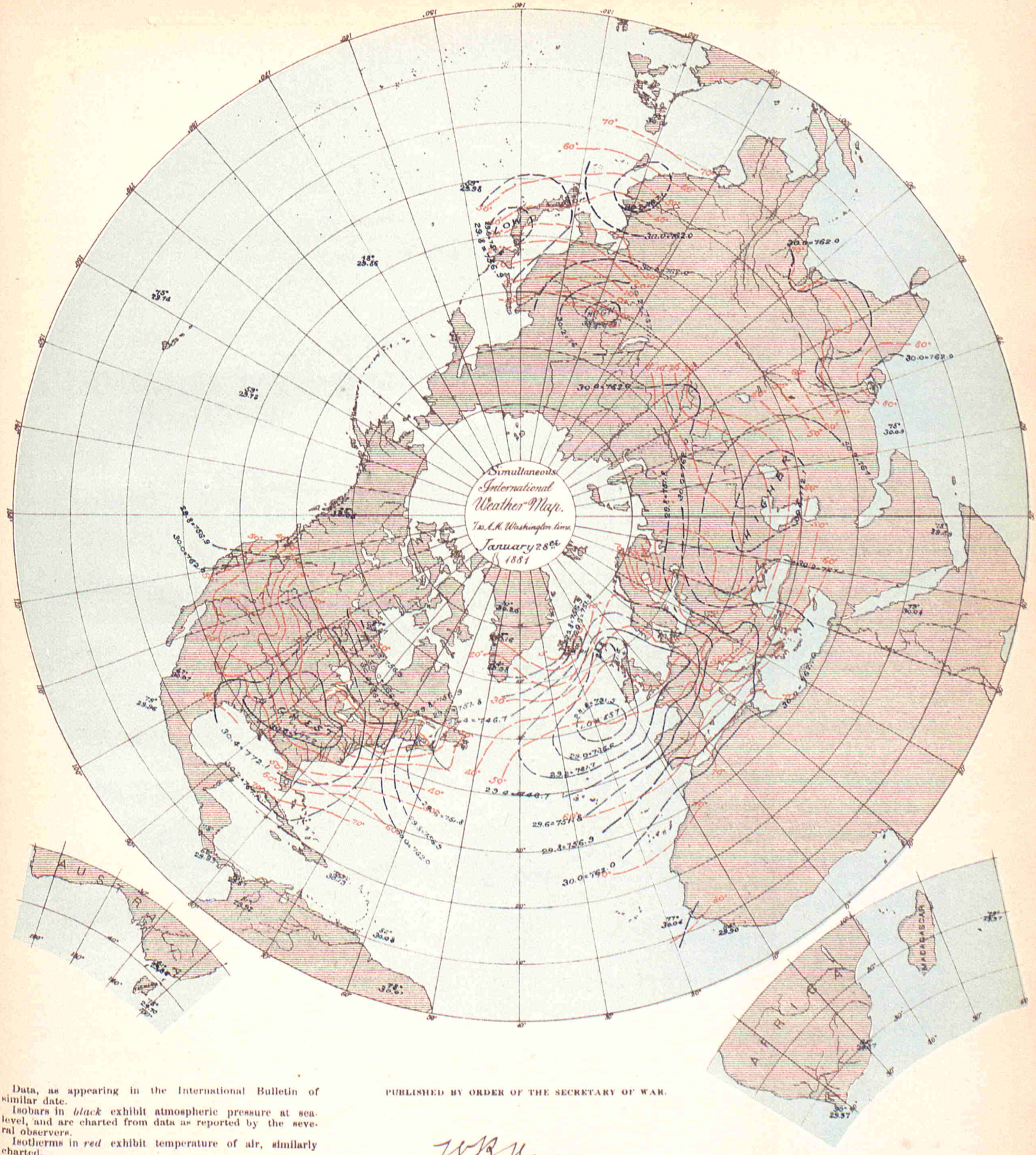
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.66	778.7	41	5.0	65	NW	7	3.1			8		NW	0	0			Fair	
N. Yard, Portsmouth, N. H.	29.98	761.5	15	— 9.4	48	NW	24	10.7		2C			NW	0	0			Clear	
Naval Hospital, Yokohama, Japan	29.57	751.1	47.5	8.6	62	SW			4		8		W	0	0			Threatening	
Adams, Callao, Peru	29.91	759.7	68	20.0	95	Calm			0		0					Sm'h		Clear	
Alaska, N. Yard, Mare I'd, Cal.	29.93	760.2	53	11.7	80	SE			2		10			0.55	14.0			Rainy	
Alert, Hong-Kong, China *	30.00	762.0	69	20.6	52	Calm			0		0			0	0	Sm'h		Hazy	
Alliance, Matanzas, Cuba, W.I.	30.22	767.6	73	22.8	76	ENE			3		2			0	0	Sm'h		Clear	
Ashuelot, Tientsin, China	29.93	760.2	25	— 3.9	100	SSW			2		0							Clear	
Colorado, New York, N. Y.	30.29	769.4	12	—11.1	80	NW	12	5.4			0			0	0			Clear	
Constitution, N. Yard, League I'd., Pa			12	—11.1		W	3	1.3			0							Clear	
Franklin, Off N. Yard, Norfolk, Va	30.44	773.2	24	— 4.4		NNW	8.4	3.8			0			0	0			Clear	
Galena, Villafranca, France	29.57	751.1	53	11.7	86	SSW			1		8					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal.	29.96	761.0	53	11.7	80	SE	7.2	3.2			5		SE	0.09	2.3			Fair	
Jamestown, Sitka, Alaska *	30.05	763.3	28	— 2.2		Calm			0		0			0	0	Sm'h		Clear	
Kearsarge, Kingston, Jamaica, W.I.	30.06	763.5	73	22.8	76	Calm			0		0					Sm'h		Clear	
Lackawanna, Chimbote, Peru †	30.01	762.2	70	21.1	90	SE			1		8		S			Sm'h	NW	Fair	
Marion, Straits of Magellan	29.73	755.1	52	11.1	79	N			2		8		Calm			Sm'h		Fair	
Michigan, Erie, Pennsylvania	30.52	775.2	10	—12.2		W			3		5		NW					Fair	
Minnesota, New York, N. Y.	30.33	770.4	14	—10.0		WNW			4		0							Clear	
Monocacy, Shanghai, China	30.31	769.9	36	2.2	55	NW			2		0							Clear	
New Hampshire, Port Royal, S. C.	30.44	773.2	40	4.4	73	NNW	14	6.3			2		NNW	0	0			Fair	
Nipsic, Hyeres Roadstead, France	29.65	753.1	57	13.9	75	SW			3		2					Sm'h		D. clouds	
Onward, Chimbote Bay, Peru †	29.89	759.2	72	22.2	85	S			3		8		NNE			Long	N;W	Cloudy	
Palos, Shanghai, China	30.32	770.1	34	1.1	62	WSW			1		0							Clear	
Passaic, Washington, D. C.	30.57	776.5	17	— 8.3	67	W			3		0							Clear	
Pensacola, N. 18° 12" W. 103° 36'	29.96	761.0	79	26.1	70	NW			1		10					Sm'h		Cloudy	
Portsmouth, Washington, D. C.	30.52	775.2	16	— 8.9	100	W			2		0							Clear	
Powhatan, New York, N. Y.	30.33	770.4	12	—11.1	80	NNW			4									Hazy	
Quinnebaug, Naples, Italy	29.69	754.1	58	14.4	88	S			2		10		E			Sm'h			
Richmond, Hong-Kong, China	30.16	766.1	65	18.3	94	W			1		0			0	0			Clear	
Saratoga, Baltimore, Md	30.49	774.4	16	— 8.9	100	NW			2		0			0	0			Clear	
Shenandoah, Montevideo, Uruguay *	29.95	760.7	75	23.9	86	SSW			3		8					Sm'h		Fair	
St. Louis, League Island, Pa	30.43	772.9	11	—11.7	80	WNW	10	4.5			0			0	0			Clear	
Swatara, Simonoshi, Japan †	29.76	755.9	43	6.1	59	W			8-9		8		WSW			Mod.	W	Squally	
Tennessee, Kingston, Jamaica, W.I.	30.08	764.0	73	22.8	81	Calm	0	0			2		Calm	0	0	Sm'h		Hazy	
Trenton, Villafranca, France *	29.56	750.8	58	14.4	64	SW			2		10			5 hours		Sm'h		Cloudy	
Vandalia, Bridgetown, Barbadoes, W.I			82	27.8	83	NE			2		2		E					Fair	
Wabash, Boston, Massachusetts	30.13	765.3	5	—15.0	75	NW	14	6.3			2		Calm	0	0			Hazy	
Wachusetts, Panama, Panama *	29.51	749.5	76	24.4	91	NW			2		8		N	0	0	Sm'h		Fair	
Wyoming, Villafranca, France	29.62	752.3	53	11.7	73	WSW			2		2		NW			Sm'h		Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic,																	SSE.		
N. 51° 25', W. 20° 15'	28.69	728.7	50	10.0	93	Var.			2		3					4	SSW	D. clouds	Capt. H. Parsell.
Ship Baroda, ‡																			
S. 21° 10', E. 0° 40'	30.08	764.0	76	24.4	73	ESE			3		9							Showery	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 31° 21', W. 19° 24'	29.96	761.0	66	18.9	97	WSW			4		10							Drizzling	Capt. A. J. Brown.
Ship Blychswood																			Capt. E. J. Molony.
British Merchant, ‡																			Capt. E. Heggum.
Chin Yang, ‡																			
N. 23° 30', W. 22° 59'	30.15	765.8	72	22.2	58	Calm			0		0							Blue sky	Capt. H. Youlden.
S. S. Cipero.																			W. N. Lailey.
City of Agra, ‡																			
S. 39° 45', W. 31° 04'	29.99	761.7	61.5	16.4	?	NNE			4		10							Foggy	Capt. T. Young.
Barque Commewyne, ‡																			
N. 21° 03', W. 61° 47'	30.22	767.6	74.0	23.3	92	N			2		9							Showery	Capt. W. Scott.
Barque Coppename,																			
N. 14° 26', W. 40° 08'	30.16	766.1	77.8	25.4	65	ENE			5		9							Overcast	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡																			
N. 43° 54', W. 56° 15'	29.43	747.5	29	— 1.7	89	SW			6		8					5	WSW	Snowing	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamports																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee ‡																			Capt J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland,																			
N. 21° 54', W. 22° 23'	30.19	766.8	70.3	21.3	81	N			4		5					4	NNW	D. clouds	Capt. H. W. Dyke.
Barque Mertola,																			
N. 48° 25', W. 12° 22'	28.84	732.5	50.7	10.4	98	SSW			6		7							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven ‡																			Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian,																			
N. 39° 39', W. 61° 15'	29.56	750.8	35	1.7		WNW			5		10		WNW			Mod.	WNW	Threatening	Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic,																			
N. 51° 25', W. 20° 29'	28.88	733.5	50	10.0	79	Var.			1–2		4		Calm			Con.	Var.	D. clouds	
S. S. Britanic,																			
N. 43° 05', W. 59° 07'	29.58	751.3	30	— 1.1		WNW			5		10		NW			H'vy	WNW	Snowing	Capt. H. Perry.
S. S. Celtic,																			
N. 50° 36', W. 16° 28'	28.71	729.2	48	8.9		ESE			4		8		SW	24h'rs	light	Mod.	SW	Fair	Capt. Benj. Gleadell.
S. S. Germanic,																			
Liverpool, England	29.13	739.9	42	5.6		SSE			3		10		E	Sho	wers			Foggy	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann,																			
N. 45° 51', W. 41° 40'	29.24	742.7	51.8	11.0		NNE			4		10		NNE			Mod.	NE	Fair	Capt. H. Baur.
S. S. Köln																			Capt. F. Pfeiffer.
S. S. Leipzig																			Capt. G. Meyer.
S. S. Ohio																			
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolh Fredholm ‡																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. Philadelphia, Pa.	30.21	767.3	12	—11.1	80	SW			2		2		SW					Clear	Capt. J. W. Shackford.
S. S. Indiana, ‡ Liverpool, England †	29.04	737.6	42	5.6	83	SE			4		8		SE	Light					Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 42° 51′, W. 60° 34′ *†	29.51	749.5	27	— 2.8	88	WNW			7		10		WNW	Snow		H'vy	WNW	Cloudy	Wm. Shakford, 1st Off'r
S. S. Pennsylvania, N. 51° 52′, W. 9° 55′ †	28.87	733.3	49	9.4		SW			4		8		W	o	o	Mod.	W	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ Hong Kong, China †	30.15	765.8	64	17.8	58	Var.			1		0			o	o	Sm'h			Capt. H. Davison.
S. S. Gaelic, N. 38° 10′, W. 154° 18′ †*	29.78	756.4	59	15.0	70	ENE			4		2		E			High	NE	Clear	Capt. W. H. Kidley.
S. S. Oceanic, San Francisco, Cal.	29.99	761.7	58	14.4	58	SE			6		10		SE					Cloudy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, N. 45° 55′, W. 124° 07′ †	29.88	758.9	48.5	9.2	74	SSW			6		10		SW			Very r'gh	SW	Rainy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal. †	29.90	759.4	54	12.2	87	SE			4		10		SE					Rainy	Capt. J. N. Ingalls.
S. S. Idaho, Seattle, Wash. Ter. †	29.62	752.3	48	8.9	78	ESE			1		10		Calm					Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, Santa Barbara, Cal. †	30.12	765.0	50	10.0	86	NE			1		0					Sm'h		Clear	Thos. Wallace.
S. S. State of California, Portland, Oregon †	29.64	752.8	30	— 1.1	89	ESE			3		10		E					Sleeting	Capt. G. Debney.
S. S. Victoria, Nanaimo, Vancouver I'd. *†	29.49	749.0	32	0.0	94	Var.					10					Light	W	Snowing	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 34° 02′, E. 157° 21′	29.60	751.8	73	22.8	85	NNE			6		8		NNE			R'gh	NE	Cloudy	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W. †	29.85	758.2	73	22.8	100	S			5		0			o	o			Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 17° 34′, W. 103° 16′ †	30.05	763.3	79	26.1	74	ESE			1		10		E			Sm'h	E	Cloudy	Capt. D. S. Austin.
S. S. City of Peking, N. 31° 07′, E. 148° 04′ †	29.98	761.5	59	15.0	59	WSW			5		5		W	o	o	Light	W	Fair	Capt. G. G. Berry.
S. S. City of Sidney, N. 35° 54′, W. 128° 03′ *†	29.74	755.4	60	15.6	82	SSW			6		10		SW	0.125	3.18	H'vy	SW	Light rain	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 36° 07′, E. 170° 05′ †	29.86	758.4	48	8.9	78	NNW			6		8		N	o	o	Long	NW	Fair	A. L. Ritchie, 2d Officer.
S. S. Colima ‡																			Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, Panama, Panama †	29.87	758.7	82	27.8	75	NW			3		2		NW	o	o			Hazy	
S. S. Zealandia, N. 14° 50′, W. 160° 07′	29.74	755 4	75	23.9	64	WNW			5		o					Sm'h	WNW	Clear	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland, ‡ Flushing †.	29.03	737.3	40	4.4	100	SW			4		8		SSW			Sm'h		Drizzling	Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhyniand, ‡ N. 49° 32′, W. 12° 50′	28.64	727.4	52	11.1	100	SW			6		5		SW	0.1	2.	Long	SW	Fair	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 41° 41′, W. 62° 38′	29.80	756.9				WNW			7		5		NW	Light		Cross	NW	Sleeting	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Morehead City, N. C. †	30.44	773.2	31	— 0.6		N			5		o			o	o			Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 36° 00′, W. 75° 23′	30.44	773.2	32	0.0	79	N	14	6.3			2k		N	o	o	Mod.	N	Clear	Capt J. Jorgensen.
Sch'r Annie R. Lewis, N. 32° 00′, W. 71° 13′ †	30.17	766.3	60	15.6		WNW			5		8		NW	o	o	H'vy Cross	N;W	Fair	Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, ‡ Ponce, Porto Rico †	30.33	770.4	79	26.1		N			2		2			o	o			Fair	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va. †	30.44	773.2	28	— 2.2	66	NNW	2	0.9.		28	28			o	o			Clear	
Ship Jamna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Spain †	29.72	754.9	62	16.7	100	SSW			7		10		W	Heavy				Rainy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.

CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 29, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instru'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.12	765.1	67.3	19.6	78	SW.			4		7			0	0	Very cloudy	Dr. Ollive.
Nemours			29.84	757.8	72.1	22.3	63	S			7		1			0	0	Very fair....	Raynard.
Algie s			29.90	759.4	69.1	20.6	68	SSE			1		9			0.087	2.2	Covered.....	Nicolas.
La Calle			29.89	759.2	69.4	20.8	75	NW			1		5			0	0	Cloudy.....	Fonfréde.
Tunis			29.89	759.2															Jacques.
Sfax			30.06	763.4															Gau.
Saida			30.02	762.6	68.4	20.2	25	S			7		3			0	0	Pretty fair.	Dumas.
Tebessa			30.02	762.6	72.0	22.2	28	W			2		8			0	0	Very cloudy	Watrin.
Gerville																			Lonchamp.
Laghouat			30.11	764.8	68.4	20.2	54	SE			1		1			0	0	Very fair....	Herbin.
Biskra			30.05	763.2	74.5	23.6	61	NW			1		3			0	0	Pretty fair..	Baudass6.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.56	750.8	29.65	753.1	68.3	20.2	52	NNW	4	1.8			5			0	0	Fine....	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.40	746.7	74	23.3		SE			3		10ku			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.15	740.5	29.73	755.2	27.0	— 2.8	96	Calm			0		10			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.77	730.7	29.54	750.4	41.0	5.0	75	SW	0.7	0.3			S			0	0		Dr. Wiersbicki.
Eperies	28.76	730.5	29.67	753.7	32.2	0.1	100	S			3		10			0.079	2.00		Julius Mikolik.
Gratz‡	28.36	720.3	29.65	753.1	32.4	0.2	73	S.			1		3			0	0		Andreas Rospini.
Hermannstadt	28.28	718.4	29.75	755.6	37.6	3.1	79	W			1		10			0.085	2.15		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.19	715.9	29.56	750.8	34.5	1.4	76	Calm			0		2			0.008	0.2		The Staff.
Lemberg	28.66	728.0	29.70	754.4	24.4	— 4.2	75	SE			1		10			0	0		Dr. T. Stanecki.
Pola	29.64	752.9	29.76	755.8	43.0	6.1	93	E			2		10			0.181	4.6		I. R. Hydrographic Office
Szathmar	29.30	744.3	29.87	758.8	34.7	1.5	96	E			2		10			0.020	0.5		Beicht Peter, S. J.
Szegedin	29.47	748.4	29.76	755.8	32.7	0.4	100						10			0	0		Karl Stancel.
Trieste	29.69	754.0	29.79	756.6	40.1	4.5	84	Calm			0		10			0.205	5.2	Rain & fog..	P. Busin.
Vienna	28.90	734.0	29.65	753.0	29.1	— 1.6	92	SE			1		5			0.016	0.4		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	28.95	735.4	29.15	740.4	48.4	9.1	81	SSW			4		7			0	0		Royal Observatory
Furnes																			M. E. de Cae.
Maeseyck	29.07	738.3	29.19	741.5	46.4	8.0	93	WSW			2		10			0.091	2.3		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 2, 1882.

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

BRITISH SERIES.

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

Aberdeen	28.83	732.3	28.93	734.8	39.0	3.9	99	SSE	13	5.8	.....	.....	10	.....	.....	0.145	3.69	Rain & fog..	W. Boswell.
Armagh, Observatory	28.51	724.1	28.76	730.5	43.7	6.5	90	SSE	17	7.6	.....	.....	6	.....	.....	.....	.....	D. clouds....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	28.81	731.8	40.9	4.9	97	SE	17	7.6	.....	.....	10	.....	.....	.....	.....	Misty	John Hartnup.
Bolton, Sharples	28.31	719.1	28.83	732.3	41.3	5.2	97	SE	4	1.8	.....	.....	10	.....	.....	.....	.....	Gloomy.....	Thomas Mackereth.
Bradford, Yorkshire	28.64	727.4	29.04	737.6	37.1	2.8	89	SE	.....	.....	1	.....	10	.....	.....	0.04	1.0	Overcast....	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.07	763.8	30.10	764.5	81.5	27.5	67	NE	.....	.....	3	.....	3	.....	.....	.....	.....	D. clouds....	Pvt. J. Surgenor, A. H. C.
Cardington	.....	.....	28.87	733.3	44.6	7.0	99	S	.....	.....	0.2	.....	10	.....	.....	.....	.....	Overcast....	John McLaren.
Chatham, School M. E.	28.87	733.3	29.00	736.6	47.1	8.4	93	SW	.....	.....	4	.....	8	.....	.....	Blank		Gloomy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	28.60	726.4	28.82	732.0	49.6	9.8	90	WSW	.....	.....	5	.....	10	.....	.....	.....	.....	Overcast....	The Staff.
Fort Napier, Natal	27.58	700.5	29.79	756.7	73.2	22.9	85	NE	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky.....	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.67	753.6	29.90	759.4	85	29.4	83	S	.....	.....	1	.....	5	.....	.....	.....	.....	D. clouds....	C. E. Keane.
Galway, Queen's College	.....	.....	28.66	728.0	46	7.8	92	SE	.....	.....	2	.....	2	.....	.....	.....	.....	Blue sky.....	J. O'Donaghadue.
Gibraltar, Mediterranean	29.90	759.4	29.96	761.0	62.2	16.8	94	WSW	.....	.....	7	.....	8	.....	.....	.....	.....	Gloomy.....	2nd Cpl. O. Baldwin.
Glasgow, Observatory	28.62	726.9	28.82	732.0	37.8	3.2	86	NE	.....	.....	2	.....	10k	.....	.....	.....	.....	Gloomy	D. G. MacLean.
Greenwich, Royal Obs'y	28.76	730.5	28.93	734.8	47.5	8.6	85	SSW	.....	.....	4	.....	10	.....	.....	.....	.....	Raining.....	The Staff.
Guernsey	28.74	730.0	28.96	735.6	50.5	10.3	86	SSE	.....	.....	6	.....	7	.....	.....	.....	.....	Squally	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	28.88	733.5	28.92	734.6	46.5	8.1	92	S	24	10.7	.....	.....	10	.....	.....	.....	.....	Raining.....	The Met'g'l Office.
Leicester, Museum	28.65	727.7	28.91	734.3	42.3	5.7	85	SW	.....	.....	1	.....	10	.....	.....	.....	.....	Drizzling....	J. E. Carryer.
Malta, Mediterranean	29.79	756.7	29.96	758.4	72.0	22.2	58	SW	.....	.....	2	.....	1	.....	.....	.....	.....	Blue sky.....	F. S. Vine, A. H. C.
Nassau, Bahamas	.....	.....	30.32	770.1	69.5	20.8	77	NE	.....	.....	4	.....	7	.....	.....	.....	.....	D. clouds....	C. S. Duncombe.
Oscott, St. Mary's College	28.34	719.8	28.85	732.8	41.4	5.2	100	SE	.....	.....	2	.....	10	.....	.....	.....	.....	Rain & fog...	Robert Pate.
Oxford, Radcliffe Obs'y	28.64	727.4	28.89	733.8	45.1	7.3	99	SE	.....	.....	3	.....	10	.....	.....	.....	.....	Raining	The Staff.
Plymouth	28.73	729.7	28.80	731.5	48.5	9.2	96	SW	.....	.....	2	.....	10	.....	.....	.....	.....	Overcast....	John Merrifield.
Sandwick Manse, Orkneys	.....	.....	28.91	734.3	39.5	4.2	99	SE	27	12.1	.....	.....	10	.....	.....	.....	.....	Misty.....	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.61	752.1	29.68	753.9	44.0	6.7	98	Calm	.....	.....	0	.....	10	.....	.....	.....	.....	Heavy rain..	Serg't W. H. Lyne.
Sheffield	28.61	726.7	28.89	733.8	39.4	4.1	100	SSW	.....	.....	1	.....	10	.....	.....	0.02	0.5	Drizzling	W. F. Cooper.
Silloth Rectory	28.81	731.8	28.84	732.5	38.7	3.7	90	E	.....	.....	3	.....	10	.....	.....	0	0	Overcast.....	Rev. F. Redford, A. M.
Stonyhurst, Observatory	.....	.....	28.85	732.8	42.3	5.7	89	NNE	4	1.8	.....	.....	10	.....	.....	.....	.....	Misty.....	Rev. S. J. Perry.
Strathfield Turgiss	28.66	728.0	28.88	733.5	46.1	7.8	96	S	.....	.....	1	.....	10	.....	.....	.....	.....	Raining.....	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	.....	.....	28.85	732.8	52	11.1	?	SW	.....	.....	3	.....	10	.....	.....	.....	.....	Raining	W. Newcombe.
Valencia, Observatory	28.73	729.7	28.75	730.2	47.5	8.6	85	W	6	2.7	.....	.....	7	.....	.....	Blank		Misty.....	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B	29.76	755.9	29.80	756.9	15.6	— 9.1	.....	NW	4	1.8	.....	.....	1on	.....	.....	Inap.	Inap.	Snowing.....	Hon. J. Ferguson.
Chatham, N. B.*	29.63	752.6	29.70	754.4	14	—10.0	91	NW	28	12.5	.....	.....	10n	.....	NW	0.13	3.3	Cloudy.....	G. A. Blair.
Charlottetown, P. E. Island	29.50	749.3	29.54	750.3	19	— 7.2	97	NW	15	6.7	.....	0	0	.....	.....	0.775	19.69	Clear.....	H. J. Cundall, C. E.
Chicontime, Quebec	.....	.....	.....	.....	—11.2	—23.9	.....	NW	.....	.....	5	.....	10s	.....	.....	0	0	Cloudy.....	Rev. V. A. Huart.
Cornwall, Ontario	30.29	769.4	30.52	775.2	—12.8	—24.9	100	W	.....	.....	1	0	0	.....	.....	0	0	Clear.....	James Smith, M. A.
Dalhousie, N. B	29.76	755.9	29.79	756.7	10.0	— 12.2	.....	W	.....	.....	2	.....	10ks	.....	.....	0.40	10.2	Cloudy.....	H. A. Johnson.
Father Point, Quebec*	30.04	763.0	30.06	763.5	4	—15.6	63	NW	18	8.0	.....	.....	10n	.....	.....	0.10	2.5	Light snow.	J. McWilliams.
Fredericton, N. B	29.75	755.6	29.82	757.4	8.1	—13.3	80	NW	14	6.3	.....	.....	10s	.....	.....	0.200	5.08	Cloudy.....	Prof. Harrison.
Fort Garry, Manitoba*	29.40	746.7	30.36	771.1	—16	—26.7	100	N	15	6.7	.....	.....	10n	.....	.....	0.20	0.51	Light snow..	James Stewart.
Granton, Ontario	29.27	743 4	30.55	776.0	— 8.9	—22.7	64	SW	.....	.....	1	.....	10n	.....	.....	0	0	Cloudy.....	James Grant.
Halifax, N. S.*	29.41	747.0	29.54	750.3	23	— 5.0	84	NW	14	6.3	.....	.....	10ks	.....	NW	0.050	1.27	Cloudy.....	A. Allison.
Hamilton, Ontario	30.10	764.5	30.53	775.4	9.7	—12.4	85	SW	.....	.....	1	.....	10k	.....	.....	0	0	Cloudy.....	Geo. Dickson, B. A.
Kingston, Ontario*	30.16	766.1	30.55	776.0	—12	—24.4	81	N	1	0.4	.....	0	0	.....	.....	0	0	Clear.....	S. Woods, M. A.
Little Glace Bay, N. S	29.41	747.0	29.45	748.0	25.3	— 3.7	92	E	6	2.7	.....	.....	10n	.....	.....	0.10	2.5	Snowing.....	C. H Rigby.
Montreal, Quebec*	30.23	767.8	30.46	773.7	— 7	—21.7	73	W	14	6.3	.....	0	0	.....	.....	0	0	Clear.	C. H. McLeod, C. E.
Moose Factory, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. R. Nason.
Norwood, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.75	755.6	30.55	776.0	— 3	—19.4	68	E	9	4.0	.....	5k	2ks	W	W	0	0	Fair.....	Rev. R. Moseley.
Peterboro, Ontario	29.72	754.9	30.56	776.2	5.8	—14.6	61	Calm	.....	.....	0	.....	10ks	.....	.....	0	0	Cloudy.....	J. F. Jeffers, M. A.
Port Dover, Ontario	29.76	755.9	30.52	775.2	12	—11.1	100	Calm	0	0	.....	.....	10n	.....	.....	0.01	0.3	Hazy.....	H. Morgan.
Port Stanley, Ontario	29.80	756.9	30.51	774.9	12	—11.1	80	W	1	0.4	.....	.....	10n	.....	W	0	0	Cloudy.....	M. Payne.
Quebec, Quebec*	29.88	758.9	30.26	768.6	—10	—23.3	55	W	.....	.....	5	0	2s	.....	W	0	0	Fair.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.06	763.5	30.61	777.5	—24	—31.1	83	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	W. H. McIntyre.
St. Andrews	29.75	755.6	29.81	757.2	8	—13.3	86	N	25	11.2	.....	.....	10n	.....	.....	0.03	0.8	Light snow.	
St. John's, N. B	29.60	751.8	29.78	756.4	9.0	—12.8	100	NW	15	6.7	.....	.....	10s	.....	.....	0.16	4.1	Cloudy.....	G. Murdock, C. E.
Saugeen, Ontario*	29.71	754.6	30.51	774.9	7	—13.9	93	E	4	1.8	.....	2cs	2ks	.....	.....	0.06	1.5	Fair.....	K. Stewart.
Stratford, Ontario	29.11	739.4	30.54	775.7	6.2	—14.3	93	Calm	0	0	.....	.....	10s	.....	.....	0	0	Cloudy.....	C. J. Macgregor, M. A.
Sydney, C. B*	29.37	746.0	29.41	747.0	25	— 3.9	95	NE	8	3.6	.....	.....	10n	.....	.....	0.22	5.6	Light snow	T. C. Hill, C. E.
Toronto, Ontario*	30.10	764.5	30.53	775.4	9	—12.8	89	N	4	1.8	.....	.....	10n	.....	.....	0.01	0.3	Light snow.	Magnetic Observatory.
Windsor, N. S	29.46	748.3	29.56	750.8	20.0	— 6.7	100	NW	18	8.0	.....	.....	10n	.....	.....	0.20	5.1	Overcast..	
Woodstock, Ontario	29.33	745.0	30.51	774.9	9.2	—12.7	96	SW	2	0.9	.....	.....	10s	.....	.....	Inap.	Inap.	Light snow..	Prof. Wolverton.
Yarmouth, N. S.*	29.68	753.9	29.75	755.6	16	— 8.9	80	N	22	9.8	.....	.....	10n	.....	.....	0.80	20.3	Heavy snow	Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. John's, Newfoundland	29.74	755.4	29.92	760.0	11	—11.7	100	NE	2	0.9	.....	0	0	.....	.....	0.03	0.8	Fair.....	John Delany.
St. Pierre, N. F.	.....	.....	29.54	750.3	28.4	— 2.0	.....	E	.....	.....	3	.....	.....	.....	.....	0	0	.....	N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape Town, C. G. H. Obs'y	30.13	765.3	30.17	766.3	79.0	26.1	50	S	18.0	8.0	.....	8ck	8ks	.....	.....	0	0	.....	The Staff, for D. Gill.
Cape St. Francis Lt. House	30.04	763.0	.....	.....	69.0	20.6	89	SW	13.1	5.9	.....	.....	10n	.....	.....	0.090	2.29	Rainy	John Duthie.

CHINESE SERIES.

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

SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	30.21	767.3	30.24	768.0	31.3	— 0.4	72	NNE	2.5	1.1	.....	.....	0	.....	.....	0	0	Clear.	M. Marc Dechevrens, S J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	25.21	665.7	29.93	760.2	63.0	17.2	93	SE			1		2d		NE	0	0	Clear.	Federico Maison.

DANISH SERIES.

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

Copenhagen	29.24	742.7	29.29	743.9	31.1	—0.5	96	SE	13	6			10						
Fanöe	29.17	740.8	29.19	741.3	32.0	0.0	94	SE			2		10					Foggy	
Godthaab, Greenland	30.08	764.0	30.12	765.1	16.7	—8.5	100	ENE			2		1						
Stykkisholm, Iceland	29.92	759.9	29.95	761.0	-13.0	—25.0	81	NE			8		8						
Thorshavn	28.82	732.1	28.86	733.0	36.3	2.4	91	Calm	0	0			10					Raining	
Vestervig	29.12	739.7	29.22	742.1	30.4	—0.9	100	E			2		10					Snowing	

FRENCH SERIES.

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

Agen, Normal School	28.75	730.3	29.38	746.3	55.4	13	84	SSW			2	c	n		E	0.004	0.1		M. Labroue, Director.
Alençon	28.67	728.2	29.22	742.2	47.1	8.4	94	SW			1		10n		NE	0.488	12.4	Covered	M. Nicot, Director.
Arras, Engineer School	28.89	733.7	29.14	740.1	46.0	7.8	89	SW	23.3	10.4			Fog					Foggy	M. Klein, Commandant.
Avignon, Normal School	29.53	750.0	29.61	752.0	57.2	14.0	67	NE			1		0			0	0	Very clear	M. Giraud, Director.
Bar-sur-Seine‖	28.80	731.5	29.35	745.4	51.4	10.8	69	S			2		8k		W	0.138	3.5	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	28.93	734.9	29.19	741.5	48.0	8.9	87	S			2		10			0.16	4.	Raining	M. Frère Eugene Marie.
Besançon, Normal School	28.45	722.6	29.32	744.8	52.9	11.6	68	S			4		8cn		SW	0.71	18.	Very cloudy	M. Gobin, Director.
Bordeaux, Observatory	29.09	738.9	29.35	745.4	60.4	15.8	42	SW			2		10		SSW	0	0	Covered	M. Rayot, Director.
Bourges, Normal School	28.76	730.6	29.31	744.5	51.8	11	63	S			1	2c			NE	0	0	Slightly cl'dy	M. Postel, Director.
Brest, Naval Observatory	28.83	732.2	29.07	738.4	52.2	11.2	86	SW			4		5			WSW	1.280	32.50	M. de Rermaree, Dir.
Caen, Normal School	28.97	735.8	29.09	738.8	52.9	11.6	85	SSW			3		5			SSW	0.110	2.8	Cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.02	737.2	29.34	745.3	48.2	9.0	92				2		10			E	0	0	Covered	M. Jadot, Director.
Charleville, Normal School	28.75	730.6	29.27	743.4	46.4	8	81	SW			1		10			SW	0.47	12.	Covered	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.09	713.4	29.41	747.1	54.1	12.3	51	S			1		5			W	0.020	0.5		M. Alluard, Director.
Cluny, Normal School	28.64	727.4	29.47	748.4	55.4	13	66	S			2		1			SW	0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	28.54	724.8	29.40	746.8	44.4	6.9	91	SW			8		10n			SW	0.724	18.4	Raining	Dr. Coulet, Director.
Gap, Normal School	27.11	688.7	29.66	753.3	44.6	7	71	E			1		s			SE	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.50	723.8	29.64	752.8	54.7	12.6	72	E			3		2			SW	0	0		M. Kina, Director.
Grenoble, Normal School	28.80	731.4	29.57	751.1	45.9	7.7	72	ENE			1		cs			E	0	0		M. Ablard, Director.
Guéret, Normal School	27.84	707.0	29.39	746.5	51.8	11	85	SW			2		10				0	0	Covered	M. Rivoir, Director.
Lamballe, Normal School	28.80	731.4	29.05	738.2	53.6	12	73	SSW			5		5			SSW	0.441	11.2	Cloudy	M. Ollitrault, Director.
Lescar, Normal School	28.90	734.1	29.56	750.9	55.8	13.2	65	NE					2			SW	0	0	Slightly cld'y	M. Chauvin, Director.
Lorient, Naval Observatory	29.08	738.5	29.18	741.1	52.5	11.4	86	SW			8		2			SW	0.394	10.0	¼ covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.45	722.7	29.46	748.3	53.1	11.7	62	S			3	ck		NW	SW	SW	0.079	2.0		M. André, Director.
Mans, Normal School	28.95	735.3	29.26	743.3	50.7	10.4	90	SW			6		8			SW	0.165	4.2	Slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.30	744 3	29.57	751.0	61.5	16.4	75	ESE			1		1		WNW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24 59	624.5	29.82	757.5	39.2	4.0	64	S	16.8	7.5			5	SE		0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.48	748 7	29.59	751.5	53.2	11.8	76	N			2		5		NE	0.953	24.2	Raining	M. Galzin, Director.
Nancy, Normal School	28.63	727 3	29.40	746.7	47.5	8.6	79	SSE			1		5cn		SE	0.020	0.5	Cloudy	M. Larocque, Dir.
Nantes, Observatory	29.15	740.4	29.31	744.5	53.6	12	95	S			3		10		SW	0	0	Covered	Capt. Boissière, Director.
Nice	29.60	751.8	29.63	752.0	54.3	12.4	90	E			4		1	W	E	0	0	Clear	Dr. Fines.
Perpignan, Observatory	29.43	747.6	29.54	750.3	51.8	11.0	78	SE	3.8	1.7			9	NE	NE	0	0		
Pic-du-Midi, Plantade	22.00	558.7			30.4	—0.9							10		W	0.067	1.7	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.51	724.1	29.56	750.9	52.9	11.6	69	S			1	1c		S	S	0	0	Clear	M. Taillieu.
Puy de Dôme O s'y, Summit	24.57	624.1			35.8	2.1	84	WSW			8		8k			0.047	1.2		M. Alluard, Director.
Rochefort, Naval Obs'y	29.32	744.7	29.35	745.5	55.2	12.9	71	SSW			2		0			0.87	22.	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.03	737:4	29.24	742.7	54.3	12.4	79	SSW			3		5		SW	0.299	7.6	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.38	695.4	29.48	748.9	52.5	11.4	46	Calm			0		10		W			Raining	M. Richard, Director.
Rouen, Normal School	29.08	738.7	29.17	740.9	49.5	9.7	86	S			1		5		E	0.106	2.7	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	28.90	734.1	29.05	738.1	54.2	12.2	67	W			2		5	W	SW	0.217	5.5	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.09	738.8	29.25	743.0	49.6	9.8	80	SSW			4		10		SW				M. Renou, Director.
Toulouse, Observatory	28.78	730.9	29.18	748.9	53.2	11.8	80	SSE			4		10			0.276	7.0	Covered	M. Baillaud, Director.
Tours	29.08	738.7	29.28	743.7	54.0	12.2	76	SW			3		5		WSW	0.252	6.4	½ covered	M. de Tastes.
Versailles, Observatory	28.74	729.9	29.23	742.4	48.2	9.0	89	SW			4					0.046	1.18		Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	28.58	725.8	29.42	747.2	41.4	5.2	90	S			5		6k	SW		0.134	3.4		Prof. Dr. Hoh.
Berlin	29.17	740.8	29.34	745.2	40.5	4.7	81	NW			2		8			0.118	3.0	Raining	Prof. Dr. Arndt.
Breslau	28.94	735.0	29.40	748.3	40.6	4.8	86	SSW			2		8			0	0		Royal University Obs'y.
Carlsruhe	29.04	737.7	29.47	748.4	48.6	9.2	76	SW			0		10	SW		0.094	2.4		Albert Senz.
Cassel	28.69	728.8	29.29	744.0	41.4	5.2	92	S			2		10	S		0.131	3.32	Raining	Dr. H. Mohl.
Frankfort on the Main	29.07	738.3	29.44	747.7	42.6	5.9	94	SSW			1		10			0.161	4.1		Physical Society.
Friedrichshafen	28.13	714.5	29.53	751.2	42.8	6.0	82	SE			2		8	SW		0	0		Chief Telegrapher Wilhelm.
Hamburg	29.19	741.5	29.26	743.3	35.4	1.9	95	SE			2		10			0.071	1.8		Dr. R. Kleeman.
Kiel	29.21	741.8	29.22	742.2	32.9	0.5	99	Calm			0		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	28.96	735.5	29.38	746.3	40.6	4.8	84	SW			2		9	WSW		0.098	2.5		Prof. Dr. Bruhns.
Magdeburg	29.10	739.1	29.33	744.9	39.0	3.9	90	S			1		9ks	SW		0.091	2.3		Dr. Assmans.
Memel	29.50	749.2	29.54	750.3	17.8	—7.9	89	SSE			5		10n					Snowing	Reinbrecht & Issermann.
Munich	27 71	703.9	29.54	750.4	46.2	7.9	61	SW			2		7	W		0	0		Central Station.
Neufahrwasser	29.37	746.0	29.39	746.4	29.3	—1.5	86	SE			1		10			0	0		A Lothes.
Neustadt, Palatinate	28.81	731.7	29.32	744.8	47.1	8.4		SW			2		7			0	0		Dieknether.
Stuttgart	28.52	724.6	29.41	747.1	47.3	8.5	71	SW			1		6	W		0.008	0.2		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.00	711.2	29.50	749.4	40.8	4.9	87	SW			4		7	SW		0.016	0.4		Prof. Kemlein.
Wustrow	29.26	743.2	29.28	743.8	33.8	1.0	100	SE			1		10			0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.39	746.5	29.78	756.5	61.7	16.5		SW			1.0		10					Covered	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.94	760.5	29.99	761.8	74.5	23.6	71	WSW	8.0	3.6			0			0	0	Blue sky	
Deesa	29.47	748.4	29.94	760.6	81.4	27.4	16	WSW					2	WSW		0	0	D. clouds	
Bombay	29.93	760.1	29.96	761.1	80.8	27.1	45	NW	12.0	5.4			0			0	0	Blue sky	
Poona, Yarrowda	28.08	713.2	29.92	760.0	83.3	28.5	10	NW	0.5	0.2			0			0	0	Blue sky	
Belgaum	27.41	696.2	29.94	760.5	78.8	26.0	12	N	5.0	2.2			0			0	0	Blue sky	
Lahore	29.18	741.2	29.94	760.5	71.8	22.1	34	NE	1.8	0.8			0			0	0	Blue sky	
Roorkee	29.07	738.3	29.99	761.7	69.8	21.0	38	Calm	1.5	0.7			2			0	0		
Agra	29.42	747.3	30.00	761.9	75.3	24.1	28	N	2.2	1.0			0			0	0		
Nagpur	28.94	735.0	29.99	761.7	78.7	25.9	19	Calm	2.7	1.2			0			0	0	Blue sky	
Jubbulpore	28.64	727.3	30.04	763.0	68.6	20.3	42	NE	1.1	0.5			0			0	0	Blue sky	
Lucknow	29.62	752.4	30.01	762.2	70.2	21.2	39	Calm	0.7	0.3			0			0	0	Blue sky	
Allahabad	29.68	753.9	30.01	762.1	67.8	19.9	29	Calm	1.7	0.8			0			0	0	Blue sky	
Patna	29.84	758.9	30.03	762.7	65.2	18.4	69	W	0.6	0.3			0			0	0	Blue sky	
Hazaribagh	27.94	709.7	30.02	762.4	65.0	18.3	37	N	3.5	1.6			0			0	0	Blue sky	
Cuttack	29.90	759.5	29.98	761.6	73.1	22.8	43	Calm	0.3	0.1			0			0	0	Blue sky	
Calcutta, Alipore	29.96	761.0	29.98	761.6	68.3	20.2	45	NNW	1.0	0.4			0			0	0	Blue sky	
Goalpara	29.55	750.6	29.96	761.1	71.9	22.2	55	WSW	2.0	0.9			0			0	0	Blue sky	
Chittagong	29.88	759.1	29.98	761.4	70.8	21.6	68	W	3.6	1.6			0			0	0	Blue sky	
Sibsagar	29.66	753.5	30.02	762.4	62.3	16.8	86	S	1.6	0.7			2			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.34	745.2	29.77	756.1	34.3	1.3	94	Calm	0	0			10			0.189	4.8		Prof. Giovanni Clodig
Milan	29.23	742.4	29.78	756.3	28.6	— 1.9	98	WSW	1.8	0.8			10			0	0		Prof. Schiaparelli.
Padua	29.67	753.7	29.79	756.6	32.4	0.2	96	NNE	3.8	1.7			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.81	731.8	29.76	755.9	32.9	0.5	59	N	2.5	1.1			9	S		0	0		Prof. P. F. Denza.
Genoa	29.47	748.5	29.67	753.5	45.0	7.2	88	N	3.1	1.4			10	SE		0.047	1.2		Prof. G. M. Garibaldi.
Mondovi	27.79	705.8	29.80	756.9	32.4	0.2	65	W			2		9			0	0		Prof. D. C. Bruno.
Pesaro	29.69	754.1	29.74	755.4	38.8	3.8	88	SE	3.8	1.7			10			0.059	1.5		Prof. Luigi Guidi.
Florence	29.43	747.6	29.70	754.3	46.8	8.2	87	W			2		10	W		0.020	0.5		Cav. F. Meucci.
Leghorn	29.66	751.9	29.69	754.1	51.8	11.0	69	ENE	3.1	1.4			5			0	0		Prof. P. Monte.
Rome	29 56	750.8	29.74	755.3	57.6	14.2	75	WSW	3.1	1.4			7	SW		0.012	0.3		Prof. P. S. Ferrari.
Lecce	29.54	750.4	29.80	756.9	58.6	14.8	71	SSE	4.3	1.9			4			0.008	0.2		Prof. C. de Giorgi.
Cosenza	28.92	734.5	29.82	757.5	59.5	15.3	75	SW	0.7	0.3			9	WSW		0.110	2.8		Prof. D. Conti.
Cagliari	29.54	750.4	29.74	755.3	64.4	18.0	71	NW			4		2	NW		0	0		Prof. A. Pacinotti.
Palermo	29.56	750.7	29.80	757.0	69.1	20.6	47	W	21.0	9.4			1			0	0		Prof. G. Ciaccatore.
Syracuse	29.75	755.7	29.80	756.8	68.2	20.1	63	SSW	4.9	2.2			5	WSW		0	0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.26	743.1	29.77	756.2	59.0	15.0	85	E	1.8	0.8			3cs	NW		0.063	1.6		Prof. F. Brioschi
Stelvio	21.93	557.0			19.2	— 7.1	83	SW					10			0	0		P. F. Denza.
Valdobbia	21.72	551.8			22.6	— 5.2	80	WNW					2			0	0		
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y	29.74	755.4	29.75	755.6	36.3	2.4	74	WNW	15.9	7.0			2n;ck			0.160	4.06	Fair	K. Sasaki.
Kioto	29.47	748.5	29.66	753.3	31.9	— 0.1	83						10s			0.030	0.76	Cloudy	
Nagasaki, I. M. Obs'y	29.72	754.9	29.93	756.2	40.7	4.8	68	WSW	19.3	8.6			10n			0.110	2.79	Light rain	S. Takehayashi.
Tokei Obs'y, Yeddo	29.59	751.6	29.66	753.3	36.2	2.3	55	WSW	9.2	4.1		0	0			0	0	Clear	The Staff.
Wakayama	29.61	752.1	29.65	753.3	44.2	6.8	56	S	20.8	9.3			5ck;s		SW	0	0	Fair	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.84	757.9	30.03	762.6	80.0	26.7	57	ESE	26.0	11.6		2	2	W	SE	0.07	1.8	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.76	755.9	30.02	762.5	71.5	21.9	58	ENE		2			8n		ENE	0	0	Cloudy	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barreeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.09	738.8	29.09	738.8	43.7	6.5		SSW			5					0.114	2.9		
Groningen	29.09	738.9	29.15	740.3	37.2	2.9		S			1					0	0		
Helder	29.08	738.6	29.08	738.6	38.1	3.4		SSE			2					0.236	6.0		
Hellevoetsluis	29.12	739.7	29.12	739.7	37.9	3.3	97	SSW			1					0.157	4.0		
Utrecht	29.09	738.8	29.13	740.0	41.0	5.0	97	S			2		8			0.098	2.5	Very cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.13	740.0	29.20	741.6	34.9	1.6	82	Calm	0	0	.....	.....	7	.....	.....	0.008	0.7	Light fog....	
Christiania	29.27	743.4	29.42	747.3	25.8	— 2.9	76	NNE	7	3	.....	.....	10	.....	.....	0.055	1.4	Light snow..	
Gjæsvær	29.88	758.9	29.90	759.5	10.6	—11.9	.....	ENE	.....	.....	2	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.57	751.0	29.61	752.2	18.3	— 7.6	61	NE	.....	.....	4	.....	8	.....	.....	0	0	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.43	747.4	29.59	751.5	53.2	11.8	86	NNW	4.3	1.9	.....	.....	2	.....	.....	0.138	3.5	.....	Dr. J. A. Sampaio.
Campo Major	28.50	723.8	29.48	748.9	56.3	13.5	80	SSW	18.1	8.1	.....	.....	10	.....	.....	0.236	6.0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.92	759.9	30.00	762.1	66.9	19.4	71	W	11.9	5.3	.....	.....	8	.....	.....	1.724	43.8	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.21	741.9	29.57	751.0	55.0	12.8	84	W	36.7	16.4	.....	.....	8	.....	WSW	0.193	4.9	.....	The Staff.
Ponta Delgada, Azores	29.52	749.8	29.59	751.6	59.0	15.0	78	WSW	9.8	4.4	.....	.....	3	.....	.....	0.476	12.1	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.14	740.2	30.34	770.7	3.9	—15.6	95	SW	11	5	.....	.....	10	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	30.03	762.8	30.05	763.3	2.8	—16.2	86	ESE	4	2	.....	.....	10	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	30.45	773.4	30.37	771.3	25.0	— 3.9	71	E	16	7	.....	.....	28	.....	.....	.....	.....	Light clouds	Capt. Wisganow.
Barnaul	29.79	756.6	30.34	770.7	5.0	—15.0	80	SW	0	0	.....	.....	9	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.60	751.9	29.86	758.5	18.9	— 7.3	72	ESE	9	4	.....	.....	0	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	29.14	740.1	30.19	766.9	10.2	—12.1	66	W	18	8	.....	.....	7n	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	30.21	767.4	30.51	775.0	7.0	—13.9	63	WSW	2	1	.....	.....	0	.....	.....	.....	.....	.....	Observatory.
Kertch	29.79	756.6	29.81	757.1	33.4	0.8	87	E	9	4	.....	.....	10	.....	.....	.....	.....	.....	Lagorio.
Kieff	29.24	742.6	29.92	759.9	18.3	— 7.6	89	ESE	11	5	.....	.....	10n	.....	.....	.....	.....	Light snow	Observatory.
Krotkowo, N. 58°47', E. 48°34'																			Cand. Fatjanow.
Lugan	29.91	759.7	30.13	765.3	20.1	— 6.6	73	ENE	34	15	.....	.....	10	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	29.79	756.7	30.41	772.3	4.6	—15.2	59	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.79	705.8	30.49	774.4	—26.1	—32.3	77	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	29.80	756.8	29.87	758.6	27.5	— 2.5	92	E	9	4	.....	.....	10n	.....	.....	.....	.....	.....	1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.78	756.4	29.87	758.6	—23.8	—31.0	70	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Lieut. Iwanow.
Nukuss																			Dr. Dobrochotow.
Pekin, China	30.19	766.7	30.35	770.3	14.9	— 9.5	34	Calm	0	0	.....	.....	5k	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	30.00	762.0	30.02	762.4	18.9	— 7.3	64	SSE	16	7	.....	.....	0	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.71	729.2	30.17	766.3	42.1	5.6	44	E	2	1	.....	.....	8cs	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.07	738.3	29.51	749.5	25.9	— 3.4	91	SE	18	8	.....	.....	10ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.32	744.7	29.77	755.1	19.4	— 7.0	79	SE	7	3	.....	.....	10	.....	.....	.....	.....	Heavy cld's	Berg, Assistant.
Yeniseisk	29.98	761.4	30.30	769.6	— 6.5	—21.4	77	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	M. O. Marks.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	28.90	734.0	38.8	3.8	90	E	.....	.....	1	.....	10k	.....	.....	0.01	0.3	Overcast....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	28.66	728.0	44	6.7	92	S	.....	.....	4	.....	10	.....	.....	0	0	.....	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	28.94	735.1	.....	.....	.....	S	.....	.....	4	.....	10	.....	.....	Blank		.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.44	747.8	29.54	750.4	57.2	14.	75	SSW	0.2	0.08	.....	.....	10	.....	.....	0	0	Covered.....	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.32	744.8	29.38	746.2	62.2	16.8	48	SE	6.8	3.05	.....	1	8	S	.....	0	0	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.49	672.9	.....	.....	47.8	8.8	68	S	7.4	3.29	.....	.....	10	.....	.....	0.197	5.0	Covered.....	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.25	692.2	29.48	748.8	48.2	9.0	95	S	23.0	10.3	.....	.....	10	.....	.....	0.134	3.4	Rainy.....	The Staff.
Murcia, Met. Obs'y ‡	29.51	749.6	29.67	753.5	59.9	15.5	80	NE	8.9	4.0	.....	3	4	SE	.....	0.020	0.5	Misty.....	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.37	720.5	29.26	743.2	46.6	8.1	97	SE	4.2	1.9	.....	.....	10	.....	.....	3.000	76.2	Raining	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.20	767.1	29.27	768.8	67.7	19.8	83	E	9.4	4.2	.....	1c	9k;ks	WSW	E	0	0	Cloudy.....	Benito Vines, S. J.
Manilla, Phillippine Islands	29.96	760.9	30.01	762.2	75.8	24.3	69	ESE	2.2	1.0	.....	.....	fs	.....	.....	0	0	Clear.....	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.70	754.6	29.81	757.0	64.0	17.8	78	WSW	35.4	15.8	.....	.....	10	.....	SW	1.388	35.3	Raining	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.11	764.9	30.21	767.2	72.0	22.2	85	S	0	0	.....	2s	0	S	.....	0	0	Clear.....	Enrique Gadea, Chief Engineer.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.78	756.5	29.82	757.5	3.9	—15.6	100	N	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	29.65	753.2	29.71	754.5	8.6	—13.0	100	N	.....	.....	4	.....	10	.....	.....	0.055	1.4	.....	
Hernosand	29.59	751.6	29.64	752.9	23.9	— 4.5	93	ENE	.....	.....	2	.....	10	.....	.....	0.193	4.9	.....	
Stockholm	29.31	744.5	29.49	749.0	27.0	— 2.8	87	E	.....	.....	2	.....	10	.....	.....	0	0	.....	
Wisby	29.39	746.5	29.45	748.0	27.3	— 2.6	83	SSE	.....	.....	2	.....	10	.....	.....	0	0	.....	
Sub-Series.																			
Upsala	29.40	746.8	29.49	749.0	26.8	— 2.9	94	ESE	5.4	2.4	.....	.....	10	.....	.....	0.010	0.25	Snowing.....	Nils Ekholm.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.14	714.8	29.60	751.8	44.2	6.8	80	N	.....	.....	1	.....	1	.....	.....	0.110	2.8	Clear.....	The Observatory.
Zurich	27.95	709.8	29.62	752.4	42.8	6.0	82	SE	.....	.....	2	.....	4	.....	.....	0.098	0.5	Rainy.....	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —12.4 mm.; Ther. +4°.7 cent.; Hum. +4 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.72	755.0	44.4	6.9	97	NW	0	0	.....	.....	10	.....	WSW	0.650	16.5	Rain & fog..	The Observatory.
Valona	.....	.....	29.84	757.8	63.1	17.3	.....	S	.....	.....	1	.....	5	.....	.....	0	0	Cloudy.....	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.98	761.4	66.6	19.2	62	SW	.....	.....	3	.....	9cs	.....	SW	0	0	.....	Prof. C. V. A. van Dyck.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	

STATIONS.	BAROMETER. Corrected for instru-m'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.37	771.4	30.47	773.9	8	—13.3	78	N	5	2.2		0	0			0	0	Clear	
Alpena, Michigan	29.76	755.9	30.48	774.2	8	—13.3	78	N	4	1.8			10s		Calm	0	0	Cloudy	
Attou Id., Alaska‡																			
Atlanta, Georgia	29.31	744.5	30.55	776.0	32	0.0	50	NW	3	1.3		0	Sm'e		Calm	0	0	Clear	
Atlantic City, New Jersey	30.50	774.7	30.51	774.9	16	— 8.9	74	NW	12	5.4		8c;cs	0	Calm		0	0	Fair	
Augusta, Georgia	30.40	772.1	30.62	777.7	29	— 1.7	78	Calm	0	0		0	0			0	0	Clear	
Baltimore, Maryland	30.53	775.4	30.58	776.7	22	— 5.6	58	W	4	1.8		0	Fog		Calm	0	0	Clear	
Barnegat, New Jersey	30.44	773.2	30.47	773.9	16	— 8.9	66	NW	16	7.2		10cs	0	NW		0	0	Cloudy	
Benton, Montana	26.93	684.0			3	—16.1	100	Calm	0	0			10n		Calm	0.19	4.8	Light snow	
Bismarck, Dakota	28.06	712.7	29.91	759.7	— 3	—19.4		E	12	5.4			10s		Calm	0.08	2.0	Cloudy	
Boise City, Idaho	27.02	686.3	29.98	761.5	36	2.2	80	NW	8	3.6			10n		Calm	0.25	6.3	Light rain	
Boston, Massachusetts	30.06	763.5	30.24	768.1	6	—14.4	52	NW	20	8.9		0	0			0	0	Clear	
Brackettville, Texas	29.17	740.9	30.27	768.8	47	8.3	92	SE	4	1.8			10s		SE	0.02	0.5	Cloudy	
Brownsville, Texas	30.31	769.9	30.36	771.1	53	11.7	100	N	2	0.9		5cs	0	Calm		0.04	1.0	Fair	
Buffalo, New York	29.74	755.4	30.53	775.4	11	—11.7	80	SW	4	1.8			10s		Calm	0	0	Cloudy	
Burlington, Vermont	30.20	767.1	30.54	775.7	— 5	—20.6	63	NE	9	4.0		0	0			0	0	Clear	
Cairo, Illinois	30.04	763.0	30.45	773.4	34	1.1	70	SE	4	1.8			10s		S	0	0	Cloudy	
Campo, California	27.51	698.7	30.08	764.0	33	0.6	79	S	3	1.3		0	5s		W	0	0	Fair	
Camp Thomas, Arizona	27.42	696.2			30	— 1.1	78	Calm			0	5ck	0	Calm		0	0	Fair	
Cape Henry, Virginia	30.56	776.2	30.58	776.7	30	— 1.1	68	N	8	3.6		0	0			0	0	Clear	
Cape May, New Jersey	30.50	774.7	30.54	775.7	21	— 6.1	71	NW	25	11.2		10cs	0	W		0	0	Cloudy	
Castroville, Texas	29.56	776.2	30.29	769.4	48	8.9	85	SE	3	1.3			10s		Calm	Inap.	Inap.	Cloudy	
Cedar Keys, Florida	30.45	773.4	30.48	774.2	44	6.7	84	NE	10	4.5		5c	0	Calm		0	0	Fair	
Champaign, Illinois	29.52	749.8	30.38	771.6	23	— 5.0	73	SE	5	2.2			10s		SE	0	0	Cloudy	
Charleston, S. Carolina	30.52	775.2	30.58	776.7	38	3.3	72	N	4	1.8		0	0			0	0	Clear	
Charlotte, N. Carolina	29.65	753.1	30.54	775.7	25	— 3.9	81	SW	2	0.9		0	Fog		Calm	0	0	Clear	
Chattanooga, Tennessee	29.69	754.1	30.57	776.5	24	— 4.4	87	S	3	1.3		2cs	Fog	SW	SW	0	0	Fair	
Cheyenne, Wyoming	23.80	604.5	29.74	755.4	45	7.2	4	SW	12	5.4		0	0			0	0	Clear	
Chicago, Illinois	29.60	751.8	30.35	770.9	20	— 6.7	70	S	4	1.8			10n		Calm	Inap.	Inap.	Light snow	
Chincoteague, Virginia	30.55	776.0	30.57	776.5	22	— 5.6	58	NW	13	5.8		1cs	1s	Calm	Calm	0	0	Fair	
Cincinnati, Ohio	29.86	758.4	30.58	776.7	21	— 6.1	71	SE	4	1.8			10s		Calm	0	0	Cloudy	
Cleveland, Ohio	29.73	755.1	30.54	775.7	14.5	— 9.7	73	S	3	1.3			10s		Calm	0	0	Cloudy	
Coleman City, Texas	28.47	723.1	30.22	767.6	40	4.4	65	S	8	3.6		0	0			0	0	Clear	
Columbus, Ohio	29.63	752.6	30.56	776.2	16	— 8.9	83	S	4	1.8		5cs	Sm'e	Calm	Calm	0	0	Fair	
Concho, Texas	28.32	719.3	30.04	763.0	49	9.4	85	S	24	10.7			10s		Calm	0	0	Cloudy	
Corsicana, Texas	29.94	760.5	30.44	773.2	40	4.4	73	S	4	1.8		0	0			Inap.	Inap.	Clear	
Davenport, Iowa	29.54	750.3	30.23	767.8	20	— 6.7	85	SE	11	4.9			10s		Calm	0.01	0.3	Cloudy	
Dayton, Washington T'y	28.00	711.2	29.69	754.1	35	1.7	70	S	10	4.5		0	0			0.29	7.4	Clear	
Deadwood, Dakota	24.97	634.2			41	5.0	91	SW	27	12.1			10s		Calm	0	0	Cloudy	
Decatur, Texas	29.07	738.4	30.30	769.6	40	4.4	82	S	16	7.2		0	0			0	0	Clear	
Delaware Breakwater, Del.	30.50	774.7	30.53	775.4	22	— 5.6	86	NW	24	10.7		5cs	2ks	Calm	Calm	0	0	Cloudy	
Denison, Texas	29.47	748.5	30.30	769.6	41	5.0	91	S	16	7.2		0	0			0	0	Clear	
Denver, Colorado	24.60	624.8	29.82	757.4	35	1.7	70	SW	3	1.3		0	1s		Calm	0	0	Clear	
Des Moines, Iowa	29.15	740.4	30.08	764.0	25	— 3.9	87	SE	4	1.8			10s		Calm	Inap.	Inap.	Threatening	
Detroit, Michigan	29.74	755.4	30.48	774.2	14	—10.0	82	SW	5	2.2			10s		Calm	0	0	Cloudy	
Dodge City, Kansas	27.26	692.4	29.61	752.1	32	0.0	69	SW	7	3.1			10s		Calm	0	0	Cloudy	
Dubuque, Iowa	29.46	748.3	30.22	767.6	16	— 8.9	83	SE	3	1.3			10s		Calm	Inap.	Inap.	Threatening	
Duluth, Minnesota	29.47	748.5	30.22	767.6	12	—11.1	90	NE	16	7.2			10s		NE	0.26	6.6	Cloudy	
Eagle Pass, Texas	29.59	751.6	30.35	770.9	49	9.4	93	SE	5	2.2			10s		Calm	0.10	2.5	Cloudy	
Eagle Rock, Texas	25.08	637.0	29.73	755.1	29	— 1.7	89	SW	35	15.6			10s		SW	0.26	6.6	Cloudy	
Eastport, Maine	29.74	755.4	29.81	757.2	8	—13.3	100	NW	31	13.9			10n		NW	0.02	0.5	Light snow	
Edinburg, Texas					53	11.7	80	N			1	0	8k		Calm	0.10	2.5	Fair	
El Paso, Texas	26.40	670.6			32	0.0	79	Calm	0	0		0	1s		Calm	0	0	Clear	
Erie, Pennsylvania	29.72	754.9	30.50	774.7	17	— 8.3	83	S	4	1.8			10s		Calm	0	0	Cloudy	
Escanaba, Michigan	29.67	753.6	30.41	772.4	2	—16.7	87	N	8	3.6			10n		Calm	Inap.	Inap.	Light snow	
Florence, Arizona	28.62	726.9	30.22	767.6	47	8.3	70	E	3	1.3			10ks		SW	0	0	Cloudy	
Fort Apache, New Mexico	25.12	638.0	30.57	776.5	28	— 2.2	43	NE	2	0.9		0	5s		Calm	0	0	Fair	
Fort Assinniboine, Montana	27.03	686.6			— 8	—22.2	100	NE	6	2.7			10n		NE	0.45	11.4	Heavy snow	
Fort Bennett, Dakota	28.21	716.5			10	—12.2	79	E	4	1.8			10s		Calm	0	0	Cloudy	
Fort Buford, Dakota	27.79	705.9	29.82	757.4	— 3	—19.4	100	E	20	8.9			10n		Calm	0.63	16.0	Heavy snow	
Fort Custer, Montana	26.50	673.1			— 3	—19.4	100	N	10	4.5			10n		Calm	0.02	0.5	Light snow	
Fort Davis, Texas	25.39	644.9	30.35	770.9	39	3.9	91	W	10	4.5		0	0			0	0	Clear	
Fort Elliott, Texas	27.23	691.6	29.58	751.3	34	1.1	70	SE	4	1.8			10s		SE	0	0	Cloudy	
Fort Gibson, Indian T'y	29.61	752.1	30.17	766.3	39	3.9	64	S	16	7.2			10s		Calm	0	0	Cloudy	
Fort Grant, Arizona	25.33	643.4	30.13	765.3	45	7.2	19	N	5	2.2		2k	0	Calm		0	0	Clear	
Fort Griffin, Texas	28.83	732.3	30.12	765.0	51	10.6	72	S	34	15.2		0	5s		S	0	0	Fair	
Fort Keogh, Montana	27.19	690.6			4	—15.6	74	N	4	1.8			10s		Calm	0	0	Cloudy	
Fort Macon, North Carolina	30.56	776.2	30.57	776.5	32	0.0	79	NW	5	2.2		0	0			0	0	Clear	
Fort Missoula, Montana	26.32	668.5			33	0.6	100	SW	4	1.8			10n		Calm	1.02	25.9	Heavy snow	
Fort McKavett, Texas	28.00	711.2	29.98	761.5	46	7.8	92	S	15	6.7			10s		Calm	0	0	Cloudy	
Fort Shaw, Montana	25.99	660.1			—16	—26.7	100	Calm	0	0		0	0			0.13	3.3	Clear	
Fort Sill, Indian Territory	28.92	734.6	30.06	763.5	42	5.6	83	S	12	5.4			10s		Calm	0	0	Cloudy	
Fort Stevenson, Dakota	28.04	712.2			— 5	—20.6	81	E	18	8.0			10ks		E	0.20	5.1	Cloudy	
Fort Verde, Arizona					30	— 1.1	47	W			1	0	5s		W	0	0	Fair	
Fredericksburg, Texas	28.59	726.2	30.21	767.3	46	7.8	84	W	5	2.2		0	0			0	0	Clear	
Galveston, Texas	30.39	771.9	30.44	773.2	50	10.0	86	E	7	3.1		0	2s		Calm	0	0	Clear	
Grand Haven, Michigan	29.70	754.4	30.42	772.7	14	—10.0	82	SE	8	3.6			10s		Calm	0.02	0.5	Cloudy	
Hatteras, North Carolina	30.55	776.0	30.58	776.7	33	0.6	70	W	8	3.6		0	0			0	0	Clear	
Helena, Montana	25.40	645.2			2	—16.7	72	NW	2	0.9		0	0			0.28	7.1	Clear	
Henrietta, Texas	29.30	744.2	30.28	769.1	40	4.4	82	S	5	2.2		0	5s		Calm	0	0	Fair	
Indianapolis, Indiana	29.62	752.3	30.47	773.9	22	— 5.6	60	S	4	1.8			10s		Calm	0	0	Cloudy	
Indianola, Texas	30.40	772.1	30.43	772.9	47	8.3	92	NE	10	4.5		0	2s		Calm	Inap.	Inap.	Fair	
Jacksboro, Texas	29.08	738.6	30.27	768.8	44	6.7	76	SW	9	4 0		0	0			0	0	Clear	
Jacksonville, Florida	30.45	773.4	30.50	774.7	44	6.7	76	NE	4	1.8		5cs	0	Calm		0	0	Fair	
Keokuk, Iowa	29.50	749.3	30.19	766.8	29	— 1.7	83	SE	8	3.6			10s		Calm	Inap.	Inap.	Threatening	
Key West, Florida	30.28	769.1	30.32	770.1	65	18.3	84	NE	15	6.7		5k	0		NE	0	0	Fair	
Kittyhawk, North Carolina	30.55	776.0	30.58	776.7	27	— 2.8	76	NE	8	3.6		0	0			0	0	Clear	
Knoxville, Tennessee	29.50	749.3	30.61	777.5	20	— 6.7	95	Calm	0	0		0	Fog		Calm	0	0	Clear	
La Crosse, Wisconsin	29.34	745.2	30.13	765.3	16	— 8.9	83	SE	4	1.8			10s		Calm	0	0	Cloudy	
La Mesilla, New Mexico	26.27	667.2	30.42	772.7	29	— 1.7	78	S	1	0.4		0	0			0	0	Clear	
Laredo, Texas	29.95	760.7	30.31	769.9	49	9.4	93	NW	1	0.4		0	5s		Calm	0.21	5.3	Fair	
Leavenworth, Kansas	29.11	739.4	29.97	761.2	37	2.8	81	S	10	4.5			10s			0.03	0.8	Cloudy	
Lewiston, Idaho	29.01	736.8	29.86	753.4	40	4.4	56	W	12	5.4		0	5s		W	0.17	4.3	Fair	
Little Rock, Arkansas	30.07	763.8	30.41	772.4	35	1.7	90	SE	3	1.3			10s		Calm	0	0	Cloudy	
Los Angeles, California	29.71	754.6	30.08	764.0	52	11.1	79	NE	8	3.6			10s		Calm	0	0	Cloudy	
Louisville, Kentucky	29.90	759.4	30.51	774.9	28	— 2.2	77	S	1	0.4			10s;ks		Calm	0	0	Cloudy	
Lynchburg, Virginia	29.81	757.2	30.56	776.2	22	— 5.6	86	Calm	0	0		5cs	0	Calm		0	0	Fair	
Madison, Wisconsin	29.23	742.4	30.31	769.9	12	—11.1	80	E	6	2.7			10s		Calm	Inap.	Inap.	Cloudy	
Marquette, Michigan	29.65	753.1	30.45	773.4	4	—15.6	74	N	4	1.8		0	5s		NW	0.01	0.3	Fair	
Mason, Texas	28.66	728.0	30.48	774.2	47	8.3	92	SE	5	2.2		0	2ks		SE	0	0	Fair	
Memphis, Tennessee	30.11	764.8	30.47	773.9	35	1.7	80	SE	6	2.7		0	0			0	0	Clear	

UNITED STATES SERIES.
By authority of the SECRETARY OF WAR.
Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.54	750.3	30.33	770.4	19	— 7.2	85	SE	1	0.4			10s		Calm	0	0	Cloudy	
Mobile, Alabama	30.43	772.9	30.51	774.9	33	0.6	79	NW	7	3.1		0	0			0	0	Clear	
Montgomery, Alabama	30.32	770.1	30.58	776.7	31	— 0.6	79	N	4	1.8		0	0			0	0	Clear	
Morgantown, W. Virginia	29.49	749.0	30.59	777.0	18	— 7.8	76	Calm	0	0		0	0			0	0	Clear	
Moorhead, Minnesota	29.02	737.1	30.07	763.8	5	—15.0	82	E	6	2.7			1on		E	0.14	3.6	Light snow.	
Mt. Washington, N. H.	23.18	588.8	29.54	750.3	—14	—25.6	45	NW	101	45.2		2k	1s	NW	NW	0	0	Clear	
Nashville, Tennessee	29.97	761.2	30.55	776.0	27	— 2.8	76	NW	2	0.9		1cck	Sm'e	W	Calm	0	0	Cloudy	
New Haven, Connecticut	30.27	768.8	30.40	772.1	11	—11.7	60	NW	12	5.4		0	0			0	0	Clear	
New London, Connecticut	30.32	770.1	30.37	771.4	11	—11.7	60	W	12	5.4		0	0			0	0	Clear	
New Orleans, Louisiana	30.42	772.7	30.48	774.2	41	5.0	57	NE	6	2.7		0	0			0	0	Clear	
Newport, Rhode Island	30.21	767.3	30.27	768.8	12	—11.1	61	W	21	9.4		1c	1s	W	Calm	0	0	Fair	
New River, N. Carolina					30	— 1.1	79	N			2	2cs	0	Calm				Clear	
New Shoreham, Rhode I'd	30.27	768.8	30.31	769.9	13	—10.6	62	NW	24	10.7		0	0			0	0	Clear	
New York, New York	30.24	768.1	30.44	773.2	17	— 8.3	83	W	9	4.0		5cs	0	NW		0	0	Fair	
Norfolk, Virginia	30.52	775.2	30.58	776.7	28	— 2.2	66	W	2	0.9		0	Fog		Calm	0	0	Clear	
North Platte, Nebraska	26.88	682.7	29.57	751.1	18	— 7.8	84	SW	4	1.8			10s		Calm	0	0	Cloudy	
Olympia, Washington T'y	29.68	753.9	29.72	754.9	40.0	4.4	91	S	11	4.9		0	8s		Calm	1.60	40.6	Cloudy	
Omaha, Nebraska	28.75	730.2	29.88	758.9	32	0.0	100	S	10	4.5			1on		Calm	0.02	0.5	Light rain	
Oswego, New York	30.18	766.6	30.54	775.7	10	—12.2	79	SE	8	3.6			10s		Calm	Inap.	Inap.	Cloudy	
Pensacola, Florida	30.49	774.4	30.53	775.4	36	2.2	71	N	5	2.2		0	Haze		Calm	0	0	Clear	
Philadelphia, Pa	30.40	773.7	30.52	775.2	17	— 8.3	83	NW	12	5.4		8c	0	W		0	0	Cloudy	
Phœnix, Arizona	28.98	736.1	30.86	783.8	42	5.6	66	E	3	1.3		0	8ks		Calm	0	0	Cloudy	
Pike's Peak, Colorado	17.60	447.0	29.80	756.9	12	—11.1	61	W	70	29.3		0	5s		W	0	0	Fair	
Pilot Point, Texas	29.00	736.6	29.87	758.7	40	4.4	91	S	12	5.4		0	0			0	0	Clear	
Pioche, Nevada	24.00	609.6	29.77	756.1	36	2.2	61	SW	9	4.0		7k	0	Calm		0	0	Fair	
Pittsburg, Pennsylvania	29.67	753.6	30.57	776.5	16	— 8.9	83	NE	2	0.9		0	Fog		Calm	0	0	Clear	
Port Huron, Michigan	29.76	755.9	30.50	774.7	11	—11.7	80	S	6	2.7			10s		Calm	0	0	Cloudy	
Portland, Maine	30.03	762.7	30.08	764.0	9	—12.8	57	NW	14	6.3		0	2s		Calm	0	0	Clear	
Portland, Oregon	29.79	756.7	29.86	758.4	42	5.6	74	S	8	3.6		0	5s		SW	0.53	13.5	Fair	
Portsmouth, N. Carolina					37	2.8	71	NW	8	3.6		0	Haze		Calm	0	0	Clear	
Prescott, Arizona	24.85	631.2	30.21	767.3	33	0.6	70	S	4	1.8		0	0			0	0	Clear	
Punta Rassa, Florida	30.36	771.1	30.38	771.6	55	12.8	87	NE	14	6.3		1cck	0	SW		0	0	Cloudy	
Red Bluff, California	29.55	750.6	29.90	759.4	49.5	9.7	96	SW	8	3.6			1on		Calm	1.71	43.4	Light rain	
Rio Grande City, Texas	30.21	767.3	30.43	772.9	50	10.0	93	NW	4	1.8			10s		Calm	0.21	5.3	Cloudy	
Rochester, New York	29.84	757.9	30.52	775.2	14	—10.0	82	W	4	1.8			10s;fg		Calm	0.08	2.0	Cloudy	
Roseburg, Oregon	29.35	745.5	29.92	760.0	41.5	5.3	87	Calm	0	0			10s		Calm	0.59	15.0	Cloudy	
Sacramento, California	29.83	757.7	29.91	759.7	51	10.6	93	SE	16	7.2			1on		Calm	1.59	40.4	Light rain	
St. Louis, Missouri	29.71	754.6	30.32	770.1	31	— 0.6	79	SE	11	4.9			10s		Calm	0	0	Cloudy	
St. Paul, Minnesota	29.18	741.1	30.08	764.0	12	—11.1	80	E	9	4.0			10s		E	0.28	7.1	Cloudy	
Salt Lake City, Utah	25.49	647.4	29.82	757.4	49	9.4	31	SE	24	10.7			10s		Calm	0	0	Threatening	
San Antonio, Texas	29.68	753.9	30 41	772.4	48	8.9	85	Calm	0	0			10s		Calm	0	0	Cloudy	
San Diego, California	30.01	762.2	30.08	764.0	53	11.7	42	N	5	2.2			10ks		Calm	0	0	Cloudy	
Sandusky, Ohio	29.77	756.1	30.51	774.9	18	— 7.8	68	S	7	3.1			10s		Calm	0	0	Cloudy	
Sandy Hook, New Jersey	30.39	771.9	30.43	772.9	16	— 8.9	83	W	20	8.9		5ck	0	W		0	0	Fair	
San Francisco, California	29.79	756.7	29.85	758.2	57	13.9	87	SE	15	6.7			1on		Calm	3.10	78.7	Light rain	
Santa Fé, New Mexico	23.36	599.3	29.90	759.4	27	— 2.8	64	E	4	1.8		0	0			0	0	Clear	
Savannah, Georgia	30.46	773.7	30.56	776.2	39	3.9	73	NE	4	1.8		0	1ks		Calm	0	0	Clear	
Shreveport, Louisiana	30.18	766.6	30.44	773.2	37	2.8	81	S	6	2.7		0	0			Inap.	Inap.	Clear	
Silver City, New Mexico	24.42	620.3	30.93	785.6	26	— 3.3	63	N	2	0.9		0	0			0	0	Clear	
Smithville, North Carolina	30.54	775.7	30.58	776.7	28	— 2.2	66	N	5	2.2		0	0			0	0	Clear	
Socorro, New Mexico	25.38	644.6	29.42	747.3	38	3.3	32	SE	1	0.4		0	0			0	0	Clear	
Springfield, Illinois	29.00	751.8	30.32	770.1	28	— 2.2	88	S	13	5.8			1on			Inap	Inap.	Misty	
Springfield, Massachusetts	30.21	767 3	30.36	771.1	9	—12.8	57	NW	8	3.6		0	0			0	0	Clear	
Stockton, Texas	27.15	689.6	30.15	765.8	36	2.2	90	S	8	3.6		0	0			0	0	Clear	
St. Vincent, Minnesota	29.23	742.4	30.13	765.3	— 4	20.0	100	NE	8	3.6			1on		Calm	0.02	0.5	Light snow.	
Thatcher's Island, Mass	30.10	764.5	30.16	766.1	5	—15.0	50	NW	47	21.0		2k	0	NW		0	0	Clear	
Toledo, Ohio	29.73	755.1	30.48	774.2	20	— 6.7	86	SW	5	2.2			10s		Calm	0	0	Cloudy	
Tucson, Arizona	27.64	702.0	30.19	766.8	40	4.4	56	S	2	0.9		0	0			0	0	Clear	
Umatilla, Oregon	29.47	748.5	29.97	761.2	34	1.1	79	NW	14	6.3		0	0			0.24	6.1	Clear	
Uvalde, Texas	29.37	746.0	30.22	767.6	50	10.0	86	SE	1	0.4		0	0			0	0	Clear	
Vicksburg, Mississippi	30.24	768.1	30.52	775.2	36	2.2	61	SE	8	3.6		5cs	0	Calm		0	0	Fair	
Visalia, California	29.60	751.8	29.97	761.2	50.5	10.3	79	E	3	1.3			10s		Calm	0.03	0.8	Cloudy	
Washington, D. C.	30.44	773.2	30.57	776.5	21	— 6.1	71	N	4	1.8			10s		Calm	0	0	Cloudy	
Wickenburg, Arizona					37	2.8	71	W			1	2c	5s	Calm	Calm	0	0	Cloudy	
Wilmington, N. Carolina	30.54	775.7	30.60	777.2	31	— 0.6	79	Calm	0	0		1c	0	Calm		0	0	Clear	
Winnemucca, Nevada	25.48	647.2	29.84	757.9	42	5.6	91	SW	10	4.5			1on		Calm	0.01	0.3	Light rain	
Wood's Holl, Mass	30.18	766.6	30.22	767.6	10	—12.2	58	NW	32	14.3		0	0			0	0	Clear	
Yankton, Dakota	28.56	725.4	29.90	759.4	27	— 2.8	88	SW	9	4.0			10s		Calm	0	0	Cloudy	
Yuma, Arizona	29.91	759.7	30.06	763.5	51	10.6	65	NE	3	1.3			10s		Calm	0	0	Cloudy	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8			55.0	12.8	67	Calm	0	0		8k	0			0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jam ica.‡																			
Havana, Cuba, W. I.	30.22	767.6	30.27	768.8	70	21.1	75	Calm	0	0			8ks		E	0	0	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	30.19	766.7	30.25	768.3	7.9	—13.4		S			2		1			0	0		
Kingston, Jamaica, W. I.	30.10	764.5	30.11	764.8	68.5	20.3	78	Calm	0	0		0	0			0	0	Clear	Maxwell Hall.
Navassa, W. I.	30.01	762.2	30.09	764.3	75	24.4	69	NE	15	6.7		2k	5s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.03	762.7	30.03	762.7	78	25.6	86	E			3	3c	4k	E		0.020	0.51	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.42	747 3	29.98	761.5	80	26.7	85	Calm			0	0	2s		Calm	0	0	Fair	Francesco J. Cisneros
Rivas, Nicaragua					73	23		SE			5	0	2ks		SE	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.14	765.5	30.16	766.1	75	23.9	81	NNE	8.4	3.8		0	5ks		NE	0	0		Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	30.27	768.9	30.33	770.4	—12.1	—24.5		Calm			0		1			0.110	2.8		
York Factory, B. A.	29.99	761.7	30.04	763.0	—31.0	—35.0		NW	14	6.3		1c	0		NW	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H.M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, N. 35° 53′, E. 14° 31′	29.90	759.4	68	20.0	70	W			1		1							Blue sky	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 53′, E 62° 24′	30.03	762.7	77	25.0	69	WNW			1		2	NW				1	NW	D. clouds	Comm. G. W. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 22° 17′, E. 114° 32′	30.03	762.7	67	19.4	74						0					1	NE	Misty	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.17	766.3	54	12.2	74	NW			6-7		3	NW						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 32′, E. 81° 22′	29.84	757.9	79	26.1		N			2		4	NE				1	NE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.97	761.2	81	27.2	62	N			1-3		0							Squally	Capt. R. D. King.
H. M. S. Falcon, N. 38° 38′, E. 19° 45′	29.74	755.4	64	17.8		Calm			0		1							Blue sky	Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Chimbote, Peru	29.87	758.7	68	20.0	92	S			1		10							Foggy	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 40′, E. 122° 30′	30.18	766.6	39.4	4.1	65	N			4		0							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 23° 20′ E. 36° 56′	30.04	763.0	76	24.4	73	NNW			2-3		3	NNW				2	NNW	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 42° 14′, W. 8° 40′	29.33	745.0	54	12.2	87	S			1		10	SW						Raining	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Barbadoes, W. I.	30.09	764.3	79	26.1	78	ENE			3		3	E						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis, N. 38° 42′, W. 9° 06′	29.56	750.8	57	13.9	87	WNW			7-9		7	Calm				3		D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 45° 56′	29.68	753.9	78	25.6	57	ESE			1		1					1	ESE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, Chimbote, Peru	29.87	758.7	68.5	20.3	90	Calm			0		6					1	SSE		Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	30.15	765.8	65.5	18.6	41	Calm			0		0							Blue sky	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, N. 12° 20′, W. 16° 46′	29.96	761.0	79.2	26.2	88	NE			1		2			0	0	1		D. clouds	S. C. da Silva Costa, Comd't.
Sado, S. 4° 02′, E. 10° 17′	29.96	760.9	82.8	28.2	75	S			3		5			0	0	2	S	D. clouds	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			

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

UNITED STATES NAVAL SERIES.

By authority of the Secretary of the Navy.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

N. Yard, Pensacola, Fla	30.62	777.7	39	3.9	82	N	3	1.3	4		8		NE	0	0			Fair	
N. Yard, Portsmouth, N. H.	30.09	764.3	4	—15.6	22	NW	27	12.1			0?			0	0			Cloudy?	
Naval Hospital, Yokohama, Japan	29.57	751.1	38	3.3	45	SW			6		0			0	0			Clear	
Adams, Callao, Peru	29.85	758.2	67	19.4	95	Calm			0		10					Long		Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	29.84	757.9	53	11.7	93	Calm			0		10			3.35	82.1			Rainy	
Alert, Hong-Kong, China *	30.00	762.0	65	18.3	58	Calm			0		0			0	0	Sm'h		Hazy	
Alliance, Matanzas, Cuba, W.I.	30.36	771.1	72	22.2	71	ENE			2		5		ENE	0	0	Sm'h		Fair	
Ashuelot, Tientsin, China	30.28	769.1	15	— 9.4	?	Calm			0		0							Clear	
Colorado, New York, N. Y.	30.43	772.9	18	— 7.8		WNW	10	4.5			5		Calm	0	0			Fair	
Constitution, N. Yard, League I'd., Pa			16	— 8.9		WNW	2	0.9			2							Fair	
Franklin, Off N. Yard, Norfolk, Va	30.51	774.9	26	— 3.3		Calm	0	0			0			0	0			Clear	
Galena, Villafranca, France	29.57	751.1	58	14.4	76	SSE			1		0					Sm'h		Clear	
Independence, N. Yard, Mare I'd, Cal.	29.88	758.9	52	11.1	86	E	9.6	4.3			10		E	2.84	69.6			Overcast	
Jamestown, Sitka, Alaska *	29.80	756.9	28	— 2.2		E			1		0			0	0	Sm'h		Clear	
Kearsarge, Kingston, Jamaica, W.I.	30.10	764.5	74	23 3	76	Calm			0		0					Sm'h		Clear	
Lackawanna, Chimbote, Peru †	29.97	761.2	70	21.1	95	S			1-2		8		S	0	0			Cloudy	
Marion, Straits of Magellan	29.39	746.5	51	10.6	79	WSW			3		5		WSW	Heavy		Sm'h		Fair	
Michigan, Erie, Pennsylvania	30.48	774.2	16	— 8.9		SSW			1		10							Cloudy	
Minnesota, New York, N. Y.	30.46	773.7	20	— 6.7		NNW			2		2		N					Hazy	
Monocacy, Shanghai, China	30.20	767.1	35	1.7	63	NE			2		0							Clear	
New Hampshire, Port Royal, S. C.	30.54	775.7	40	4.4	73	ENE	7	3.1			5		NE	0	0			Fair	
Nipsic, Marseills, France	29.57	751.1	61	16.1	71	ENE			2		2					Sm'h		D. clouds	
Onward, Chimbote Bay, Peru †	29.84	757.9	71	21.7	85	S			4		2		N			Long	N;W	Clear	
Palos, Shanghai, China	30.26	768.6	30	— 1.1	78	NNE			1		0							Clear	
Passaic, Washington, D. C.	30.58	776.7	23	— 5.0	86	NE			1		0							Clear	
Pensacola, N. 17° 07 W. 101° 07'	29.90	759.4	78	25.6	69	ENE			3		8		E			Sm'h		Cloudy	
Portsmouth, Washington, D. C.	30.56	776.2	21	— 6.1	100	N			1		10							Overcast	
Powhatan, New York, N. Y.	30.41	772.4	18	— 7.8	84	NW			3		5		NNW					Hazy	
Quinnebaug, Naples, Italy	29.77	756.1	61	16.1	82	SW			3		2		SW			Sm'h			
Richmond, Hong-Kong, China	30.17	766.3	62	16.7	100	Calm			0		0			0	0			Clear	
Saratoga, Baltimore, Md	30.53	775.4	20	— 6.7	100	Calm			0		8			0	0			Cloudy	
Shenandoah, Montevideo, Uruguay *	30.12	765.0	73	22.8	72	NE			1		2					Sm'h		Fair	
St. Louis, League Island, Pa	30.62	777.7	16	— 8.9	83	W	10	4.5			8		Var.	0	0			Cloudy	
Swatara, Simonosiki, Japan †	29.72	754.9	39	3.9	64	W			7		10		WSW			R'gh	W	Squally	
Tennessee, Kingston, Jamaica, W.I.	30.14	765.5	73	22.8	90	NW	1	0.4			2		Calm	0	0	Sm'h		Hazy	
Trenton, Villafranca, France *	29.58	751.3	61	16.1	61	ESE			1		0			0	0			Clear	
Vandalia, Bridgetown, Barbadoes, W.I			81	27.2	74	ENE			3		5		E					Fair	
Wabash, Boston, Massachusetts	30.26	768.6	6	—14.4	52	NW	19	8.5			0			0	0			Clear	
Wachusetts, Panama, Panama *	29.51	749.5	77	25.0	95	NNW			2		10		N	0	0	Sm'h		Cloudy	
Wyoming, Villafranca, France	29.62	752.3	61	16.1	66	ESE			1		5		E			Sm'h		Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic,																			
N. 50° 35′, W. 29° 25′	29.22	742.2	39	3.9	73	NNW			6		8					6	N; WNW	Showery	Capt. H. Parsell.
Ship Baroda, ‡																			
S. 19° 50′, W. 1° 00′	30.11	764.8	76	24.4	73	E			4		2							Blue sky.	Capt. C. J Russell.
S. S. Bateshire,																			Capt. John Arbuckle
Barque Belleisle,																			
N. 31° 00′, W. 19° 49′	30.05	763.3	68	20.0	84	WSW			4		5							D. clouds	Capt. A. J. Brown.
Ship Blychswood																			Capt. E. Heggum.
British Merchant ‡																			Capt. E. J. Molony.
Barque Chin Yang, ‡																			
N. 23° 02′, W. 23° 47′	30.16	766.1	71.5	21.9	69	NE			2		1							Blue sky	Capt. H. Youlden.
S. S. Cipero,																			Capt. W. N. Lalley.
City of Agra, ‡																			
S. 38° 20′, W. 27° 43′	29.88	758.9	65.3	18.5	99	NNW			5		6							D. clouds	Capt. T. Young.
Barque Commewyne, ‡																			
N. 21° 30′, W. 61° 55′	30.27	768.8	73.2	22.9	91	NE			4		9							Overcast	Capt. W. Scott.
Barque Coppename,																			
N. 13° 24′, W. 42° 25′	30.13	765.3	80.3	26.8	59	NE			5		4							D. clouds	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra ‡																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡																			
N. 42° 44′, W. 61° 14′	29.32	744.7	29	— 1.7	100	WNW			6		8					6	WNW	Snowing	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle,																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamports																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majastic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 20° 06′, W. 23° 14′	30.17	766.3	69.5	20.8	88	NNE			5		6					4	NNW	D. clouds	Capt. H. W. Dyke.
Barque Mertola,																			
N. 48° 32′, W. 12° 36′	28.86	733.8	52.2	11.2	98	WSW			5		4							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven ‡																			Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton, ‡																			
N. 50° 20′, W. 2° 10′	28.86	733.0	49	9.4	100	SSW			6		10							Raining	Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian,																			
N. 40° 41′, W. 55° 09′	29.36	745.7	36	2.2		Var.			1		10		W			Mod.	W	Sleeting	Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic,																			
N. 50° 32′, W. 29° 27′	29.18	741.1	40	4.4	73	NNE			6		7		N;NW				N;NE	Cloudy	
S. S. Britanic,																Very			
N. 41° 58′, W. 64° 57′ †	29.66	753.4	30	— 1.1		NW			7		10		NW			h'vy	WNW	Snowing	Capt. H. Perry.
S. S. Celtic,																			
Off Roches Point, England †	28.75	730.2	46	7.8		SW			3		10		SW	8h'rs	fine	Sm'h		Cloudy	Capt. Benj. Gleadell.
S. S. Germanic,																			
Liverpool, England †	28.85	732.8	48	8.9		SE			2		10		SE	0	0			Foggy	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann,																			
N. 44° 21′, W 47° 42′	29.35	745 5	40.1	4.5		NNE			6		10		NNE	Ra	in	Mod.	NNE	Light rain	Capt. H. Baur.
S. S. Köln																			
S. S. Leipzig ‡																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Direction from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec.	0—10	0—10	0—10			Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Philadelphia, Pa	30.35	770.9	19	— 7.2	85	W			3		2		SW					Clear.	Capt. J. W. Shackford.
S. S. Indiana, ‡ Liverpool, England †	29.75	755.9	43	6.1	75	SSE			4		8		SE		Light				Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 41° 51′, W. 63° 04′ *†	29.62	752.3	27	— 2.8	88	NNW			7		10		NNW		Snow squalls	L'ge	NNW	Cloudy	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, N. 51° 14′, W. 17° 12′ †	28.72	729.5	48	8.9		W			5		8		W	o	o	R'gh	W	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ Hong Kong, China †	30.16	766.1	64	17.8	94	Calm			0		0			o	o	Sm'h			Capt. H. Davison.
S. S. Gaelic, N. 38° 05′, W. 159° 55′ *†	29.78	756.4	59	15.0	76	E			4		2		ESE			Mod.	E	Clear	Capt. W. H. Kidley.
S. S. Oceanic, San Francisco, Cal	29.85	758.2	57	13.9	58	SE			6		10		SE					Cloudy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia																			Capt. Fred. Bolles
S. S. Oregon, N. 45° 58′, W. 124° 25′ †	29.73	755.1	45.0	7.2	68	W			1		8		WNW			Mod.	SW	Clearing	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal †	29.82	757.4	57	13.9	87	SE			7		10		SE					Rainy	Capt. J. N. Ingalls.
S. S. Idaho, N. 47° 50′, W. 124° 40′ †	29.62	752.3	55	7.2	100	SE			4		8		SE			Light	SW	Fine	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, N. 36° 25′, W. 122° 15′ †	30.10	764.5	57	13.9	94	SE			3		8		SE			Mod.	S	Raining	Thos. Wallace.
S. S. State of California, Astoria, Oregon †	29.81	757.2	40	4.4	?	SW			2		10		SW					Cloudy	Capt. G. Debney.
S. S. Victoria, Seattle, Wash. Ter *†	29.57	751.0	40	4.4	91	S			4		0					Light	W	Clear	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 34° 20′, E. 162° 03′	29.77	756.1	70	21.1	90	NNE			6		8		NE			R'gh	NE	Cloudy	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W †	29.74	755.4	70	21.1	100	NE			2		0			o	o			Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Acapulco, Mexico †	30.03	762.7	85	29.4	41	ENE			2		10		W			Sm'h	W	Overcast	Capt. D. S. Austin.
S. S. City of Peking, N. 32° 49′, E. 144° 30′ †	29.75	755.6	58	14.4	64	WSW			7		5		W	o	o	R'gh	WSW	Fair	Capt. G. G. Berry.
S. S. City of Sidney, N. 37° 27, W. 124° 01′ †	29.78	756.4	60	15.6	82	SSW			6		10		SW	0.25	6.3	H'vy	SW	Light rain	Capt. H. C. Dearborr.
S. S. City of Tokio, N. 36° 39′, E. 176° 18′ †	29.95	760.7	49	9.4	78	NNW			7		10		NNW	o	o	R'gh	NNW	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima ‡																			Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, Panama, Panama †	29.81	757.2	78	25.6	86	NW			3		10		N	o	o			Gloomy	
S. S. Zealandia, N. 10° 09′, W. 161° 37′	29.86	758.4	77	25.0	73	SE			6		8		S			Sm'h	SE	Cloudy	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland, ‡ Flushing, Netherlands †	29.06	738.1	44	6.7	84	S			4		10		SW			Sm'h		Light rain	Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland, ‡ N. 49° 50′, W. 5° 49′	28.78	731.0	51	10.6	100	SW			6		5		WSW	0.1	2.	Long	SW	Hazy	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 41° 07′, W. 63° 02′	29.93	760.2				W			9		10			Heavy		H'vy	WNW	Sleeting	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Morehead City, N. C †	30.24	768.1	45	7.2		NW			2		0			o	o			Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 36° 38′, W. 75° 09′	30.52	775.2	37	2.8	53	NNW	8	3.6			0			o	o	Mod.	NNE	Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, N. 31° 00′, W. 68° 32′ †	30.27	768.8	60	15.6		NW			5		8		NW	Light		H'vy Cross	N;W	Cloudy	Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George ‡																			Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	30.49	774.4	26	— 3.3		Calm	o	o		o	28			o	o			Clear	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Portugal †	29.52	749.8	57	13.9	100	SW			7		10		W	Moderate				Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 30, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Uppor.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.16	766.1	69.1	20.6	82	SW			2		1			0	0	Very fair	Dr. Ollive.
Nemours			29.85	758.2	68.0	20.0	78	S			3		1			0	0	Very fair	Raynard.
Algie s			29.89	759.3	68.0	20.0	47	W			6		3			0	0	Pretty fair	Nicolas.
La Calle			29.86	758.4	68.0	20.0	38	NW			7		4			0	0	Cloudy	Fonfrède.
Tunis			29.82	757.5															Jacques.
Sfax			29.98	761.6															Gau.
Saida			30.03	762.7	66.4	19.1	31	WNW			6		2			0	0	Fair	Dumas.
Tebessa			29.98	761.4	63.0	17.2	11	NW			5		2			0	0	Fair	Watrin.
Gerville																			Lonchamp.
Laghouat			30.07	763.6	68.0	20.0	49	WSW			4		10			0	0	Covered	Herbin.
Biskra			30.00	762.0	73.0	22.8	40	NW			5		10			0	0	Covered	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.92	759.9	30.01	762.2	56.9	13.8	70	NE	4	1.8			1			0	0	Very fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.70	754.4	71	21.7		NW			2		5kn			0.13	3.3	Raining	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.00	736.5	29.56	750.7	40.1	4.5	85	Calm			0		10			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.82	732.0	29.60	751.9	34.9	1.6	82	SW	0	0			5			0	0		Dr. Wiersbicki.
Eperies	28.78	730.9	29.68	753.8	37.0	2.8	87	S			1		10s			0	0		Julius Mikolik.
Gratz‡	28.33	719.5	29.62	752.3	31.8	— 0.1	81	S			3		7			0	0		Andreas Rospini.
Hermannstadt	28.24	717.4	29.73	755.1	30.2	— 1.0	85	S			3		0			0.100	2.55		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.15	715.1	29.54	750.3	30.9	— 0.6	98	ENE			1		10			0	0		The Staff.
Lemberg	28.65	727.7	29.67	753.6	32.2	0.1	81	S			1		1			0	0		Dr. T. Stanecki.
Pola	29.34	745.1	29.45	747.9	51.3	10.7	97	SE			4		10			0.157	4.0		I. R. HydrographicOffice
Szathmar	29.24	742.8	29.69	754.2	40.5	4.7	94	E			2		8			0.130	3.3		Beicht Peter, S. J.
Szegedin	29.32	744.7	29.61	752.0	35.6	2.0	85						10			0	0		Karl Stancel.
Trieste	29.52	749.9	29.63	752.5	49.1	9.5	85	Calm			0		10			0.213	5.4	Raining	P. Busin.
Vienna	28.86	733.0	29.60	751.7	32.0	0.0	96	SE			2		10			0.028	0.7		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.18	741.2	29.38	746.3	46.2	7.9	86	SSW			2		10		SW	0.039	1.0		Royal Observatory
Furnes																			M. E. de Cae.
Maeseyck	29.19	741.5	29.32	744.7	47.3	8.5	87	W			2		10			0.008	0.2		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 3, 1882.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.

BRITISH SERIES.

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

Aberdeen	28.98	736.1	29.08	738.6	37.4	3.0	100	S	3.	1.3						0.140	3.56	Dense fog	W. Boswell.
Armagh, Observatory	28.68	728.5	28.93	734.8	44.4	6.9	96	SE	21	9.4									S. Call.
Bidston, Liverpool Obs'y			29.04	737.6	41.0	5.0	91	SE	18	8.0			6					D. clouds	John Hartnup.
Bolton, Sharples	28.59	726.2	29.12	739.6	42.0	5.6	91	SSE	4	1.8			10					Foggy	Thomas Mackereth.
Bradford, Yorkshire																0.01	0.3		J. McLandsborough, F.R.S
Bridgetown, Barbadoes	30.06	763.3	30.08	764.0	80	26.7	74	NE			3		3					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			29.15	740.4	45.0	7.2	88	S			0.2		8					Overcast	John McLaren.
Chatham, School M. E.	29.11	739.4	29.24	742.7	46.1	7.8	93	SW			2		10			Blank		Gloomy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	28.79	731.3	29.02	737.1	48.8	9.3	90	SSE			2		9					Overcast	The Staff.
Fort Napier, Natal	27.77	705.4	29.98	761.5	75.4	24.1	85	NE			1		6?					Overcast?	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.66	753.4	29.90	759.4	86	30.0	83	SW			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			28.78	731.0	43	6.1	75	S			2		10					Showery	J. O'Donaghadue.
Gibraltar, Mediterranean	30.00	762.0	30.05	763.3	63.6	17.6	92	SW			5		10					Raining	2nd Cpl. O. Baldwin.
Glasgow, Observatory	28.76	730.5	28.96	735.6	41.2	5.1	91	SE			2		10					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.02	737.1	29.20	741.7	47.0	8.3	92	S			1		9					Drizzling	The Staff.
Guernsey	28.88	733.5	29.11	739.4	47.5	8.6	85	SSW			3		5					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.16	740.7	29.20	741.7	45.7	7.6	92	S	12	5.4			10					Gloomy	The Met'g'l Office.
Leicester, Museum	28.90	734.0	29.15	740.4	42.8	6.0	93	S			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.69	754.1	29.76	755.9	68.4	20.2	56	W			2		2					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			30.27	768.8	69.0	20.6	70	NE			2		7					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.60	726.4	29.13	739.9	40.9	4.9	100	SSE			3		10					Overcast	Robert Pate.
Oxford, Radcliffe Obs'y	28.92	734.6	29.17	740.9	44.8	7.1	96	SE			3		10					Drizzling	The Staff.
Plymouth	28.97	735.8	29.04	737.6	50.2	10.1	93	S			2		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.07	738.4	40	4.4	100	SE	20	8.9			10					Misty	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.79	756.7	29.86	758.4	48.0	6.9	74	SE			0		8			Blank		D. clouds	Serg't W. H. Lyne.
Sheffield	28.84	732.5	29.12	739.6	44.4	6.9	69	SSW			1		10			0	0	Overcast	W. F. Cooper.
Silloth Rectory	29.03	737.3	29.06	738.1	46.3	7.9	81	NE			4		0			0.097	2.47	Blue sky	Rev. F. Redford, A. M.
Stonyhurst, Observatory			29.10	739.1	42.5	5.8	91	SE	3	1.3			10					Overcast	Rev. S. J. Perry.
Strathfield Turgiss	28.96	735.6	29.17	740.9	46.3	7.9	98	S			1		10					Drizzling	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution			29.11?	739.4?	52	11.1	86	NW			4		10					Raining	W. Newcombe.
Valencia, Observatory	28.82	732.0	28.84	732.5	46.1	7.8	77	SSW	34	15.2			8					Gloomy	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B.																0.01	0.3	Clear	Hon. J. Ferguson.
Chatham, N. B.*	30.01	762.2	30.07	763.8	0	—17.8	94	Calm	0	0		0	0			0.100	2.54	Threatening	G. A. Blair.
Charlottetown, P. E. Island	29.95	760.7	29.99	761.7	14	—10.0	100	NW	8	3.6			10n			0	0	Clear	H. J. Cundall, C. E.
Chicontime, Quebec					—21.9	—29.9		N			1	0	1s			Inap.	Inap	Cloudy	Rev. V. A. Huart.
Cornwall, Ontario	29.91	759.7	30.12	765.0	— 4.0	—20.0	100	E			3		10s			0	0	Clear	James Smith, M. A.
Dalhousie, N. B.	30.05	763.3	30.09	764.3	— 2.0	—18.9		W			1	0	0			0.30	7.6	Cloudy	H. A. Johnson.
Father Point, Quebec*	30.14	765.5	30.16	766.1	— 4	—20.0	83	SW	10	4.5			10n			0.100	2.54	Cloudy	J. McWilliams.
Fredericton, N. B.	30.06	763.5	30.14	765.5	1.1	—17.2	82	NW	9	4.0			10s			0.100	2.54	Clear	Prof. Harrison
Fort Garry, Manitoba*	29.39	746.5	30.37	771.4	—21	—29.4	100	NW	10	4.5		0	0			0.10	2.5	Cloudy	James Stewart.
Granton, Ontario	28.77	730.7	29.94	760.5	20.3	— 6.5	96	Calm			0		10n			0	0	Fair	James Grant.
Halifax, N. S.*	29.85	758.2	29.99	761.7	17	— 8.3	94	NW	8	3.6		0	2s			0.13	3.3	Cloudy	A. Allison.
Hamilton, Ontario	29.55	750.6	29.98	761.5	17.2	— 8.2	89	NE			1	10k	0			0.17	4.3	Light snow	Geo. Dickson, B. A.
Kingston, Ontario*	29.68	753.9	30.05	763.3	— 2	—18.9	89	NE	12	5.4			10n		NE	0.15	3.8	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S.	29.75	755.6	29.79	756.7	28.5	— 1.9	96	N	4	1.8		0	9ks			0	0	Cloudy	C. H. Rigby.
Montreal, Quebec*	29.98	761.5	30.21	767.3	— 7	—21.7	84	E	8	3.6			10n						C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.26	743.2	30.02	762.5	.5	—15.0	83	E	2	0.9			10n		E	0.20	5.1	Light snow	Rev. R. Moseley.
Peterboro, Ontario	29.27	743.4	30.10	764.5	3.6	—15.8	46	NE			1		10ks			0.70	43.2	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.18	741.1	29.92	760.0	20	— 6.7	99	NW	5	2.2			10n			0.30	7.6	Threatening	H. Morgan.
Port Stanley, Ontario	29.24	742.7	29.92	760.0	28	— 2.2	97	SW	2	0.9			10n		SW	0.25	6.3	Cloudy	M. Payne.
Quebec, Quebec*	29.85	758.2	30.22	767.6	—15	—26.1	73	W			3	0	2s		W	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.64	752.8	30.19	766.8	— 5	—20.6	100	E	6	2.7			10n			0.21	5.3	Light snow	W. H. McIntyre.
St. Andrews	30.04	763.0	30.10	764.5	2	—16.7	75	NW	1	0.4		0	0			0.03	0.8	Clear	
St. John's, N. B.	29.88	758.9	30.06	763.5	3.0	—16.1	100	NE	11	4.9		0	7k			0.07	1.8	Fair	G. Murdock, C. E.
Saugeen, Ontario*	29.15	740.4	29.90	759.4	20	— 6.7	93	SE	2	0.9			10s			0.25	6.3	Cloudy	K. Stewart.
Stratford, Ontario	28.61	726.7	29.96	761.0	21.0	— 6.1	93	Calm	0	0			10s			0.25	6.3	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.73	755.1	29.78	756.4	29	— 1.7	84	N	14	6.3			10n			0.24	6.1	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.55	750.6	29.97	761.2	10	—12.2	96	NE	16	7.2			10n			0.29	4.8	Light snow	Magnetic Observatory.
Windsor, N. S.	29.89	759.2	29.99	761.7	16.0	— 8.9	100	NW	5	2.2			10n			0	0	Overcast	
Woodstock, Ontario	28.79	731.3	29.93	760.2	18.1	— 7.8	97	NE	3	1.3			10s			0.15	3.8	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*	29.96	761.0	30.03	762.7	16	— 8.9	69	NE	3	1.3			10s		N	0.45	11.4	Cloudy	Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. John's, Newfoundland	29.79	756.7	29.97	761.2	33	0.6	100	NE	1	0.4			5s			0.05	1.3	Fair	John Delany.
St. Pierre, N. F.			29.52	749.8	33.1	0.6		NE			3					0.08	2.0		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																0	0		The Staff, for D. Gill.
Cape Town, C. G. H. Obs'y	30.06	763.5	30.10	764.5	84.3	29.1	51	S	19.8	8.9		ck	0			0	0	Fine	John Duthie.
Cape St. Francis Lt. House	30.22	767.6			67.6	19.8	77	E	20.6	9.2			1s						

CHINESE SERIES.

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

SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	30.33	770.4	30.36	771.1	30.2	— 1.0	96	ENE	4.0	1.8			0			0	0	Clear	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.21	665.7	29.93	760.2	63.5	17.5	82	NE			2		2d		NE	0	0	Clear.	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.32	744.6	29.36	745.8	34.3	1.3	98	SSE	11	5			10						
Fanöe	29.24	742.8	29.26	743.3	34.0	1.1	100	SSW			4		10						
Godthaab, Greenland	29.98	761.6	30.03	762.7	19.9	— 6.7	73	ENE			4		2						
Stykkisholm, Iceland	29.39	746.5	29.43	747.6	4.3	—15.4	90	NE			9		10					Snowing	
Thorshavn	29.05	737.9	29.09	738.8	40.6	4.8	92	ESE	25	11			10					Raining	
Vestervig	29.13	739.8	29.22	742.2	33.8	1.0	100	S			4		10					Foggy	
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	28.95	736.2	29.60	751.7	54.0	12.2	73	SSW			1		k		NE	0.004	0.1		M. Labroue, Director.
Alençon	28.84	732.6	29.39	746.0	45.7	7.6	97	SW			1		8n		NE	0.12	3.	Raining	M. Nicot, Director.
Arras, Engineer School	29.07	738.4	29.33	744.9	47.3	8.5	92	SW	17.7	7.9			kn						M. Klein, Commandant.
Avignon, Normal School	29.48	748.7	29.56	750.7	57.2	14.0	69	N			1		0			0.449	11.4	Very clear	M. Giraud, Director.
Bar-sur-Seine ‖	28.91	734.2	29.46	748.3	47.1	8.4	92	SSE			1		10			0.138	3.5	Light rain	M. Saillard, Director.
Beauvais, Normal School	29.10	739.1	29.36	745.8	48.9	9.4	84	SW			2		8		WSW	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	28.66	728.0	29.59	751.6	46.0	7.8	97	S					10n		S	0.55	14.	Raining	M. Gobin, Director.
Bordeaux, Observatory	29.28	743.6	29.54	750.2	56.7	13.7	64	W			2		8		WSW	0.244	6.2	Very cloudy	M. Rayet, Director.
Bourges, Normal School	28.89	733.9	29.44	747.7	53.2	11.8	47	SSW			1		5kn		SE	1.102	28.	Raining	M. Postel, Director.
Brest, Naval Observatory	28.84	732.5	29.08	738.7	50.0	10.0	95	SW			2		10		SW	0.236	6.00	Raining	M. de Rermaree, Dir.
Caen, Normal School	29.13	739.9	29.25	742.9	51.4	10.8	93	SE			2		8		SSE	0.059	1.5	Very cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.14	740.2	29.46	748.3	44.6	7.0	91				1		5			0.94	24.	Cloudy	M. Jadot, Director.
Charleville, Normal School	28.90	734.0	29.41	747.1	45.0	7.2	85	SW			1		10		SW	0	0	Covered	M. Baumier, Director.
Clermont-Ferrand Obs'y	28.15	715.1	29.49	749.0	54.0	12.2	54	WSW			1		5			0	0		M. Alluard, Director.
Cluny, Normal School	28.67	728.3	29.51	749.6	48.9	9.4	95	N			2		10		E	0	0	Covered	M. de Villemontée, Dir.
Commercy, Normal School	28.60	726.4	29.46	748.2	44.2	6.8	94	SW			4		10n		SW	0.114	2.9	Raining	Dr. Coulet, Director.
Gap, Normal School	27.04	686.8	29.57	751.0	46.4	8	64	NE			1		cs		S	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.44	722.4	29.58	751.4	52.0	11.1	77	NW			2		8		W	0.504	12.8		M. Kina, Director.
Grenoble, Normal School	28.80	731.6	29.58	751.3	43.2	6.2	85	NE			1		kn			0.075	1.90		M. Ablard, Director.
Guéret, Normal School	27.96	710.2	29.53	750.0	48.9	9.4	81	SW			1		5k		NE	0	0	Cloudy	M. Rivoir, Director.
Lamballe, Normal School	28.98	736.1	29.28	743.8	50.5	10.3	89	S			1		10		S	0.16	4.	Raining	M. Ollitrault, Director.
Lescar, Normal School	29.01	736.8	29.69	754.0	48.2	9	78	N			1		1		N	0.016	0.4	Clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.10	739.2	29.21	741.8	50.0	10.0	86	SW			8		2		SW	0.236	6.0	Raining	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.50	724.0	29.52	749.8	49.3	9.6	85	S			1		10n		W	0.039	1.0	Rainy	M. André, Director.
Mans, Normal School	29.07	738.3	29.37	746.1	49.1	9.5	97	SW			4		8		WSW	0.091	2.3	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.25	743.0	29.53	750.0	55.4	13.0	80	WNW			1		6		NW	0.516	13.10		M. Stephan, Director.
Montlouis l'Instituteur	24.43	620.4	29.66	753.4	37.4	3.0	72	SW	11.2	5.0			5	E		0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.41	747.0	29.52	749.8	57.6	14.2	57	NW			3		2		W	0	0	Slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	28.70	728.9	29.47	748.4	47.8	8.8	86	SSW			2		10kn			0	0		M. Hasse.
Nantes, Observatory	29.27	743.5	29.43	747.6	52.9	11.6	89	SW			2		6n		WSW	0	0		M. Larocque, Dir.
Nice	29.40	746.7	29.43	747.5	55.0	12.8	83	W			3		5	W	W	0.276	7.0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.51	749.6	29.62	752.3	56.5	13.6	47	NW	5.6	2.5			6			0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.11	561.8			23.4	—4.8							5		W	0.055	1.4	Cloudy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.50	724.0	29.56	750.9	52.2	11.2	86	N			1	5c		NW	NW	0	0	Cloudy	M. Tullieu.
Puy de Dôme Obs'y, Summit	24.64	625.8			32.7	0.4	100	W			6		10			0.110	2.8	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.43	747.6	29.47	748.4	54.0	12.2	78	SSW			2		10			0.83	21.	Raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.19	741.3	29.39	746.6	49.3	9.6	84	SSW			1		5		SW	0.067	1.7	Raining	M. Mouillot, Director.
Rodez, Normal School	27.45	697.5	29.61	752.0	46.0	7.8	77	NW			1		10		NW	0.039	1.0	Raining	M. Richard, Director.
Rouen, Normal School	29.31	744.5	29.40	746.7	52.2	11.2	29	SE			1		8		NE	0	0	Very cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.09	738.8	29.24	742.8	51.3	10.7	82	SW			1		5		SW	0	0	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.23	742.5	29.40	746.7	48.6	9.2	89	S			1		10		SW				M. Renou, Director.
Toulouse, Observatory	28.92	731.6	29.63	752.7	52.0	11.1	75	SE			1		2			0	0	Slightly cl'dy	M. Bailland, Director.
Tours	29.23	742.4	29.43	747.4	51.8	11.0	83	SW			3		8			0.063	1.6	¾ covered	M. de Tastes.
Versailles, Observatory	28.90	734.0	29.39	746.5	47.1	8.4	92	SW			1					0.039	0.10		Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.58	726.0	29.43	747.5	43.9	6.6	70	SE			3		3k	S		0	0		Prof. Dr. Hoh.
Berlin	29.27	743.4	29.44	747.8	43.5	6.4	91	S			1		6			0.043	1.1		Prof. Dr. Arndt.
Breslau	29.01	736.8	29.53	750.1	40.3	4.6	81	SE			1		9			0.027	0.68		Royal University Obs'y.
Carlsruhe	29.07	738.3	29.49	749.1	47.8	8.8	76	SW			0		10	SW		0.039	1.0	Raining	Albert Senz.
Cassel	28.77	730.7	29.36	745.8	43.3	6.3	90	SW			2		6	SW		0.182	4.63	Raining	Dr. H. Möhl.
Frankfort on the Main	28.85	732.7	29.21	742.0	44.2	6.8	91	S			2		9			0.197	5.0		Physical Society.
Friedrichshafen	28.06	712.6	29.50	749.3	42.3	5.7	83	W			1		9	W		0.193	4.9		Chief Telegrapher Wilhelm.
Hamburg	29.30	744.2	29.[illegible]7	746.0	42.1	5.6	85	SSE			2		10			0.079	2.0		Dr. R. Kleeman.
Kiel	29.28	743.6	29.29	744.0	38.7	3.7	95	SSW			2		10			0.194	4.92		Prof. Dr. G. Karsten.
Leipsic, Astroin'l Obs'y	29.03	737.3	29.45	748.0	44.2	6.8	74	SSE			1		7			0.051	1.3		Prof. Dr. Bruhns.
Magdeburg	29.19	741.4	29.42	747.2	37.6	3.1	91	ESE			1		9ks	SW		0.055	1.4	Light rain	Dr. Assmams.
Memel	29.57	751.1	29.62	752.3	30.4	—0.9	92	SE			3		10n						Reinbrecht & Issermann.
Munich	27.63	701.7	29.45	748.1	40.5	4.7	76	N			1		3	NW		0	0		Central Station.
Neufahrwasser	29.91?	759.6?	29.92?	760.0?	36.1	2.3	89	SE			1		10			0.004	0.1		A Lothes.
Neustadt, Palatinate	28.91	734.4	29.43	747.5	43.9	6.6		Calm			0		7			0	0		Dicknether.
Stuttgart	28.52	724.3	29.41	747.0	44.2	6.8	74	E			1		10			0.083	2.1		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	27.99	711.0	29.50	749.2	44.1	6.7	82	Calm			0		7			0.024	0.6		Prof. Kemlein.
Wustrow	29.38	746.2	29.40	746.8	37.4	3.0	93	SSE			2		10s			0.039	1.0		Profs. Brandes & Reimer.

‖ Observation taken 25 minutes late.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill	Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.45	747.9	29.84	757.9	57.7	14.3	.....	S	.....	.....	1.0	.....	10	.....	.....	.....	.....	Covered.....	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.95	760.6	30.00	762.0	74.4	23.6	85	S	8.0	3.6	.....	.....	5	W	.....	0	0	D. clouds....	
Deesa	29.49	748.9	29.96	761.0	83.1	28.4	21	WSW	.....	.....	.....	.....	4	WSW	.....	0	0	D. clouds.....	
Bombay	29.94	760.4	29.98	761.4	80.2	26.8	49	NW	12.0	5.4	.....	.....	0	.....	.....	0	0	Blue sky.....	
Poona, Yarrowda	28.08	713.3	29.93	760.2	83.0	28.3	13	S	3.0	1.3	.....	.....	0	.....	.....	0	0	Blue sky.....	
Belgaum	27.42	696.5	29.95	760.7	80.0	26.7	15	E	3.0	1.3	.....	.....	0	.....	.....	0	0	Blue sky.....	
Lahore	29.23	742.4	29.99	761.6	71.8	22.1	38	NE	1.9	0.8	.....	.....	0	.....	.....	0	0	Blue sky.....	
Roorkee	29.08	738.8	30.01	762.2	68.8	20.4	41	Calm	1.4	0.6	.....	.....	2	.....	.....	0	0	.....	
Agra	29.44	747.6	30.01	762.2	76.3	24.6	31	Calm	2.0	0.9	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28.95	735.2	30.00	762.0	76.9	24.9	21	Calm	2.3	1.0	.....	.....	0	.....	.....	0	0	Blue sky.....	
Jubbulpore	28.63	727.1	30.02	762.4	73.3	22.9	25	NE	2.0	0.9	.....	.....	0	.....	.....	0	0	Blue sky..	
Lucknow	29.63	752.6	30.02	762.5	70.2	21.2	27	Calm	1.0	0.4	.....	.....	0	.....	.....	0	0	Blue sky.....	
Allahabad	29.68	753.9	30.00	762.1	71.8	22.1	40	Calm	1.1	0.5	.....	.....	0	.....	.....	0	0	Blue sky.....	
Patna	29.83	757.7	30.02	762.5	65.6	18.7	73	W	0.5	0.2	.....	.....	0	.....	.....	0	0	Blue sky.....	
Hazaribagh	27.96	710.0	30.02	762.5	66.8	19.3	34	NW	3.4	1.5	.....	.....	0	.....	.....	0	0	Blue sky.....	
Cuttack	29.93	760.3	30.02	762.4	73.8	23 2	46	Calm	0.2	0.1	.....	.....	0	.....	.....	0	0	Blue sky.....	
Calcutta, Alipore	29.97	761.2	29.99	761.8	67.5	19.7	60	W	1.0	0.4	.....	.....	0	.....	.....	0	0	Blue sky.....	
Goalpara	29.55	750.6	29.96	761.0	71.0	21.7	62	Calm	1.5	0.7	.....	.....	0	.....	.....	0	0	Blue sky.....	
Chittagong	29.90	759.5	29.99	761.8	71.3	21.8	68	WSW	3.4	1.5	.....	.....	0	.....	.....	0	0	Misty.....	
Sibsagar	29.65	753.2	30.00	762.1	64.1	17.8	77	SE	2.0	0.9	.....	.....	10	SW	SW	0	0	D. clouds.....	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.11	739.3	29.54	750.2	41.7	5.4	88	N	0.7	0.3	.....	.....	10	.....	.....	0.134	3.4	.....	Prof. Giovanni Clodig
Milan	29.00	736.6	29.55	750.5	34.9	1.6	96	W	1.3	0.6	.....	.....	10	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.37	746.1	29.49	749.0	42.4	5.8	97	NNE	16.8	7.5	.....	.....	10	.....	.....	0.437	11.1	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.63	727.2	29.58	751.3	37.8	3.2	80	NW	1.3	0.6	.....	.....	9	W	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.26	743.2	29.46	748.2	42.1	5.6	61	N	14.3	6.4	.....	.....	10	SE	.....	0.807	20.5	.....	Prof. G. M. Garibaldi.
Mondovi	27.63	701.9	29.65	753.0	36.3	2.4	79	W	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.41	746.9	29.46	748.2	38.1	3.4	90	W	8.7	3.9	.....	.....	10	.....	.....	0.020	0.5	.....	Prof. Luigi Guidi.
Florence	29.12	739.6	29.38	746.3	48.9	9.4	76	NNE	.....	.....	2	.....	10	.....	.....	0.303	7.7	.....	Cav. F. Meucci.
Leghorn	29.28	743.6	29.36	745.8	51.3	10.7	90	ENE	10.5	4.7	.....	.....	10	.....	.....	1.016	25.8	.....	Prof. P. Monte.
Rome	29.22	742 1	29.39	746.6	56.1	13.4	83	SW	1.3	0.6	.....	.....	10	.....	.....	0.957	24.3	.....	Prof. P. S. Ferrari.
Lecce	29.33	745.0	29.59	751.5	59.2	15.1	76	SSW	14.3	6.4	.....	.....	6	SW	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	28.71	729.3	29.62	752.3	58.1	14.5	77	SW	1.3	0.6	.....	.....	10	SSW	.....	1.339	34.0	.....	Prof. D. Conti.
Cagliari	29.39	746.4	29.58	751.3	59.4	15.2	57	WNW	.....	.....	6	.....	7	WNW	.....	0.098	2.5	.....	Prof. A. Pacinotti.
Palermo	29.41	746.9	29.65	753.2	63.0	17.2	51	W	22.4	10.0	.....	.....	7	W	.....	0.035	0.9	.....	Prof. G. Ciacciatore.
Syracuse	29.62	752.3	29.66	753.4	66.2	19.0	54	WNW	9.8	4.4	.....	.....	5	WNW	.....	0	0	.....	Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	28.91	734.4	29.43	747.4	58.3	14.6	76	WSW	12.5	5.6	.....	.....	10k	W	.....	0.496	12.6	.....	Prof. F. Brioschi.
Stelvio	21.92	556.7	.....	.....	25.5	— 3.6	86	ENE	.....	.....	.....	.....	10	.....	.....	1.181	30.0	.....	P. F. Denza.
Valdobbia	21.69	551.1	.....	.....	24.8	— 4.0	93	S	.....	.....	.....	.....	10	.....	.....	1.181	30.0	.....	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.17	766.3	30.19	766.8	24.9	— 3.9	97	NNE	1.2	0.5	.....	.....	kn	.....	.....	0.014	0.36	Clear.....	K. Sasaki.
Kioto	29.82	757.4	30.01	762.2	25.3	— 3.7	63	.....	.....	.....	.....	.....	1s	.....	.....	0.004	0.10	Clear	.....
Nagasaki, I. M. Obs'y	30.07	763.8	30.29	769.3	31.6	— 0.2	68	NW	6.3	2.8	.....	.....	10s	.....	.....	0.020	0.51	Overcast.....	S. Takehayashi.
Tokei Obs'y, Yeddo	29.69	754.1	29.76	755.9	30.2	— 1.0	74	NNW	12.6	5.6	.....	0	0	.....	.....	0	0	Clear.....	The Staff.
Wakayama	30.02	762.5	30.08	764.0	27.8	— 2.3	73	WNW	19.6	8.8	.....	0	0	.....	.....	0.003	0.08	Clear.....	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.89	759.2	30.08	763.9	77.8	25.4	55	SE	23.0	10.3	.....	.....	9	.....	SE	0	0	Squally.....	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. Banda, C. E.
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanaxuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Leal.
Mazatlan	29.78	756.3	30.04	762.9	72.5	22.5	52	NE	.....	.....	2	0	9n	.....	ENE	Inap.	Inap.	Threatening	F. Quijano, C. E.
Mexico, Central Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff.
Morelia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Fena, M. D.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barreda, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.31	744.4	29.31	744.4	44.4	6.9	.....	SSW	.....	.....	4	.....	.....	.....	.....	0.028	0.7	.....	
Groningen	29.25	742.9	29.30	744.3	40.6	4.8	.....	SSW	.....	.....	2	.....	.....	.....	.....	0.205	5.2	.....	
Helder	29.25	743.0	29.25	743.0	39.2	4.0	.....	SSW	.....	.....	4	.....	.....	.....	.....	0.047	1.2	.....	
Hellevoetsluis	29.34	745.2	29.34	745.2	41.9	5.5	98	S	.....	.....	1	.....	.....	.....	.....	0.071	1.8	.....	
Utrecht	29.26	743.2	29.31	744.4	43.6	6.1	96	SSW	.....	.....	2	.....	10	.....	.....	0.012	0.3	Dull	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.15	740.4	29.21	742.0	39.9	4.4	56	Calm	0	0			7			0	0		
Christiania	29.35	745.5	29.50	749.4	26.4	— 3.1	78	NNE	9	4			10			0.016	0.4	Snowing	
Gjæsvær	29.68	753.9	29.71	754.5	14.0	—10.0		Calm			0		10						
Lodingen	29.60	751.7	29.64	752.9	18.1	— 7.7	72	ENE			4		0			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.42	747.2	29.58	751.2	59.0	15.0	82	WSW	19.2	8.6			4			0.768	19.5		Dr. J. A. Sampaio.
Campo Major	28.85	732.8	29.85	758.1	58.6	14.8	79	WSW	11.2	5.0			9			0.961	24.4		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.03	762.7	30.11	764.9	66.2	19.0	78	W	6.9	3.1			8			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.52	749.9	29.88	759.0	59.4	15.2	84	WSW	25.5	11.4			7	W		0.378	9.6		The Staff.
Ponta Delgada, Azores	29.62	752.3	29.69	754.1	60.8	16.0	85	WSW	9.4	4.2			10			0.067	1.7		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.96	735.5	30.17	766.3	— 3.3	—19.6	94	SW	18	8			0						Capt. Lasarew.
Archangel	30.04	763.1	30.06	763.6	13.6	—10.2	90	S	13	6			10					Light snow.	Capt. Sseliwerstow.
Astrakhan	30.33	770.3	30.24	768.2	26.4	— 3.1	72	E	16	7			3s						Capt. Wisganow.
Barnaul	29.63	752.6	30.18	766.5	9.0	—12.8	79	SW	13	6			10						Meteorological Obs'y.
Dorpat	29.48	748.8	29.74	755.3	24.1	— 4.4	91	ESE	4	2			10n					Light snow.	Observatory.
Ekaterinburg	29.52	749.7	30.58	776.8	9.5	—12.5	65	W	9	4			10s						Meteorological Obs'y.
Kasan	30.34	770.6	30.65	778.5	— 4.2	—20.1	74	Calm	0	0			0						Observatory.
Kertch	29.84	757.8	29.85	758.3	34.9	— 1.6	93	ESE	2	1			10					Heavy cl'ds.	Lagorio.
Kieff	29.18	741.2	29.85	758.3	23.5	— 4.7	93	SE	4	2			10ks;n						Observatory.
Krotkowo, N. 58°47', E. 48°34'																			Cand. Fatjanow.
Lugan	29.74	755.3	29.96	760.9	22.1	— 5.5	87	ENE	34	15			10			Bla	nk		Meteorological Obs'y.
Moscow	29.65	753.1	30.25	768.4	11.5	—11.4	71	SE	7.8	3.5			7s						Meteorological Obs'y.
Nertchinsk	27.87	707.9	30.62	777.7	—27.4	—33.0	77						0						Meteorological Obs'y.
Nikolaiev	29.82	757.3	29.89	759.1	29.1	— 1.6	92	NW	9	4			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.91	759.6	29.99	761.8	—26.7	—32.6	67	Calm	0	0			0						Lieut. Iwanow.
Nukuss	30.14	765.6	30.39	771.9	29.8	— 1.2	78	NNE	18	8			2ks						Dr. Dobrochotow.
Pekin, China	30.18	766.5	30.32	770.1	16.7	— 8.5	49	S	4	2			0						Physical Observatory.
St. Petersburg	29.82	757.5	29.84	757.9	23.0	— 5.0	79	SE	15	7			9sn						Central Physical Obs'y.
Tashkend, Laboratory																			Teich, A. M.
Tiflis	28.58	725.9	30.02	762.4	48.9	9.4	41	Calm	0	0			7s					Light clouds	Physical Observatory.
Warsaw	29.17	740.8	29.60	751.8	36.3	2.4	80	SSE	7	3			8cks						Astronomical Obs'y.
Wilna	29.30	744.1	29.74	755.3	26.1	— 3.3	87	SE	2	1			10					Heavy cld's	Berg, Assistant.
Yeniseisk	30.05	763.3	30.39	771.8	—16.4	—26.9	80	Calm	0	0			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.08	738.6	40.0	4.4	92	SE			1		4k			0	0	Fine	Andrew Gibb.
Monach Lt. House, Hebrides			28.87	733.3	45	7.2	92	SSE			4		10			0	0		J. Youngclause.
North Unst, Shetland Isl'ds			29.03	737.3				SE			4		10			Bla	nk		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.54	750.4	29.65	753.1	58.6	14.8	54	W	5.8	2.6			1			0.150	3.80	Clouds	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.60	751.7	29.65	753.1	60.8	16.0	48	NW	4.9	2.17		3	2	NE		0.252	6.4	Cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.75	679.4			42.8	6.0	88	SW	6.6	2.97			10			0.630	16.0	Covered	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.56	700.1	29.81	757.1	49.8	9.9	76	SW	24.2	10.8		0	4			0.280	7.1	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.67	753.6	29.82	757.4	68.7	20.4	65	W	5.4	2.4		3	5	E		0	0	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.71	729.1	29.60	751.7	52.5	11.4	88	SW	6.9	3.1			9			0.976	24.8	Raining	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.16	766.1	30.23	767.8	65.0	18.3	84	E	2.2	1.0		0	0			Inap.	Inap.	Clear	Benito Vines, S. J.
Manilla, Phillippine Islands	30.02	762.5	30.07	763.8	75.2	24.0	82	ESE	2.6	1.2		2s				0.03	1.0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.96	760.9	30.05	763.4	63.0	17.2	85	SW	16.7	7.4		0	8		WSW	0.198	5.0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.10	764.6	30.19	766.9	73.8	23.2	87	SE	1.1	0.50		1k	2k	E	E	0	0	Clear	Enrique Gadea, Chief Engineer.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.76	755.9	29.80	756.9	6.8	—14.0	100	E			2		10			0.079	2.0		
Umea	29.68	753.9	29.73	755.2	11.8	—11.2	93	NE			2		10			0.012	0.3		
Hernosand	29.65	753.0	29.70	754.3	13.5	—10.3	90	NNE			2		10			0.181	4.6		
Stockholm	29.42	747.2	29.60	751.7	28.2	— 2.1	81	NNE			2		10			0.008	0.2		
Wisby	29.47	748.5	29.53	750.0	30.2	— 1.0	92	SE			2		10			0.067	1.7		
Sub-Series.																			
Upsala	29.50	749.2	29.58	751.4	25.9	— 3.4	92	NNW	2.2	1.0			10			0.022	0.57		Nils Ekholm.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.13	714.5	29.60	751.7	41.7	5.4	93	NE			2		10			0.028	0.7	Raining	The Observatory.
Zurich	27.88	708.2	29.56	750.8	42.8	6.0	78	NW			1		10			0.079	2.0	Covered	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —12.7 mm.; Ther. +3°.2 cent.; Hum. +17 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.88	758.9	45.1	7.3	74	NE	3	1.5			7		SE	0	0		The Observatory.
Valona			29.63	752.6	64.8	18.2		S			3		5			0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.87	758.6	67.5	19.7	69	SE			1		10n		SW	0.02	0.5		Prof. C. V. A. van Dyck.

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

UNITED STATES SERIES.

By authority of the Secretary of War.

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

Albany, New York	30.12	765.0	30.22	767.6	8	—13.3	88	NW	2	0.9			10n		Calm	0.06	1.5	Light snow.	
Alpena, Michigan	29.25	742.9	29.94	760.5	16	— 8.9	83	W	6	2.7			8s		Calm	0.35	8.9	Cloudy	
Atton Id., Alaska‡																			
Atlanta, Georgia	30.07	763.8	30.25	768.3	42	5.6	58	SW	7	3.1		5ck	5s	Calm	Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.17	766.3	30.18	766.6	27	— 2.8	82	SE	4	1.8			10n		Calm	Inap.	Inap.	Light snow.	
Augusta, Georgia	30.14	765.5	30.35	770.9	34	1.1	79	SE	2	0.9		2cs	Sm'e	Calm	Calm	0	0	Fair	
Baltimore, Maryland	30.09	764.3	30.14	765.5	30	— 1.1	68	SE	2	0.9			10s		W	0	0	Cloudy	
Barnegat, New Jersey	30.15	765.8	30.17	766.3	23.5	— 4.7	80	Calm	0	0			10n		Calm	Inap.	Inap.	Light snow.	
Benton, Montana	27.43	696.7			—4	—25.6	73	W	10	4.5			10s		Calm	0.02	0.5	Cloudy	
Bismarck, Dakota	28.41	721.6	30.27	768.8	—13	—25.0		NW	6	2.7		0	0			0.02	0.5	Clear	
Boise City, Idaho	26.99	685.5	29.95	760.7	35	1.7	80	NW	2	0.9			10n		Calm	0.19	4.8	Light rain	
Boston, Massachusetts	30.02	762.5	30.20	767.1	6	—14.4	52	N	5	2.2			10s		Calm	0	0	Cloudy	
Brackettville, Texas	28.97	735.8	30.05	763.3	49	9.4	93	NE	9	4.0		0	0			0	0	Clear	
Brownsville, Texas	30.14	765.5	30.19	766.8	60	15.6	94	Calm	0	0		10ck	0	Calm		0	0	Cloudy	
Buffalo, New York	29.15	740.4	29.87	758.7	29	— 1.7	89	SW	7	3.1			10n		Calm	0.06	1.5	Light snow.	
Burlington, Vermont	29.92	760.0	30.25	768.3	0	—17.8	70	E	1	0.4			10s		E	0	0	Cloudy	
Cairo, Illinois	29.72	754.9	30.12	765.0	46	7.8	69	SE	4	1.8			10s		W	0	0	Cloudy	
Campo, California	27.50	698.5	30.07	763.8	42	5.6	66	W	3	1.3			10s		Calm	0	0	Cloudy	
Camp Thomas, Arizona	27.41	696.2			37	2.8	63	Calm			0	5ck	5s	Calm	Calm	0	0	Cloudy	
Cape Henry, Virginia	30.13	765.3	30.15	765.8	36	2.2	61	SW	14	6.3			10ks		Calm	0	0	Cloudy	
Cape May, New Jersey																			
Castroville, Texas	29.37	746.0	30.09	764.3	56	13.3	94	S	1	0.4			10s		Calm	0	0	Cloudy	
Cedar Keys, Florida	30.28	769.1	30.31	769.9	51	10.6	93	NE	4	1.8			1cs	0	Calm	0	0	Clear	
Champaign, Illinois	29.17	740.9	29.99	761.7	38	3.3	71	SW	5	2.2			10s		SW	0.01	0.3	Cloudy	
Charleston, S. Carolina	30.26	768.6	30.32	770.1	44	6.7	68	W	4	1.8		0	0			0	0	Clear	
Charlotte, N. Carolina	29.31	744.5	30.15	765.8	40	4.4	65	SW	6	2.7		10cs	Haze	SW	Calm	0	0	Cloudy	
Chattanooga, Tennessee	29.44	747.8	30.28	769.1	34	1.1	79	SW	5	2.2		5ck	Sm'e	SW	Calm	0	0	Fair	
Cheyenne, Wyoming	23.94	608.1	29.88	758.9	31	— 0.6	58	Calm	0	0		0	0			0	0	Clear	
Chicago, Illinois	29.25	742.9	29.96	761.0	37	2.8	81	N	3	1.3			10s		Calm	Inap.	Inap.	Cloudy	
Chincoteague, Virginia	30.14	765.5	30.16	766.1	34	1.1	90	SE	4	1.8		8 k	2s	W	Calm	0	0	Cloudy	
Cincinnati, Ohio	29.41	747.0	30.07	763.8	44	6.7	60	SW	7	3.1			10ks		Calm	0	0	Cloudy	
Cleveland, Ohio	29.20	741.7	29.94	760.5	38	3.3	63	W	10	4.5			10s		W	0.02	0.5	Cloudy	
Coleman City, Texas	28.32	719.3	30.03	762.7	45	7.2	76	SW	4	1.8		0	0			0	0	Clear	
Columbus, Ohio	29.15	740.4	30.01	762.2	38	3.3	81	SW	7	3.1			10s		Calm	0.02	0.5	Cloudy	
Concho, Texas	28.16	715.3	29.87	758.7	47	8.3	92	SW	3	1.3		0	0			0	0	Clear	
Corsicana, Texas	29.69	754.1	30.16	766.1	59	15.0	82	S	8	3.6			10ks		Calm	0	0	Cloudy	
Davenport, Iowa	29.36	745.7	30.02	762.5	35	1.7	80	NW	4	1.8			10s		Calm	0	0	Cloudy	
Dayton, Washington T'y	28.14	714.7	29.90	759.4	18	— 7.8	100	S	6	2.7			10s		Calm	0	0	Cloudy	
Deadwood, Dakota	25.26	641.6			11	—11.7	60	NE	12	5.4			10s		Calm	0	0	Cloudy	
Decatur, Texas	28.85	732.8	30.03	762.7	49	9.4	93	S	12	5.4		0	0			0	0	Clear	
Delaware Breakwater, Del.	30.12	765.0	30.14	765.5	29	— 1.7	89	SE	13	5.8			10s		SE	0	0	Cloudy	
Denison, Texas	29.22	742.2	30.01	762.2	52	11.1	86	SW	20	8.9		0	8ks		SW	0	0	Fair	
Denver, Colorado	24.66	626.4	29.88	758.9	36	2.2	71	S	3	1.3		0	0			0	0	Clear	
Des Moines, Iowa	29.22	742.2	30.16	766.1	24	— 4.4	74	NE	12	5.4			10s		NE	0	0	Cloudy	
Detroit, Michigan	29.22	742.2	29.90	759.4	34	1.1	90	SW	8	3.6			10s		Calm	0.13	3.3	Cloudy	
Dodge City, Kansas	27.39	695.7	29.77	756.1	32	0.0	69	NE	20	8.9			10s		Calm	0	0	Cloudy	
Dubuque, Iowa	29.37	746.0	30.11	764.8	26	— 3.3	88	NW	10	4.5			10s		Calm	0.01	0.3	Cloudy	
Duluth, Minnesota	29.40	746.7	30.15	765.8	5	—15.0	87	SW	2	0.9		0	0			0.70	17.8	Clear	
Eagle Pass, Texas	29.37	746.0	30.12	765.0	49	9.4	93	SE	4	1.8		0	0			0	0	Clear	
Eagle Rock, Texas	25.02	635.5	29.68	753.9	33	0.6	89	SW	9	4.0			10s		Calm	0.15	3.8	Cloudy	
Eastport, Maine	30.01	762.2	30.08	764.0	5	—15.0	75	N	12	5.4		5k	0	SE		0.02	0.5	Fair	
Edinburg, Texas					52	11.1	86	S			1	0	8ks		S	0	0	Fair	
El Paso, Texas	26.32	668.5			35	1.7	70	Calm	0	0		0	2s		Calm	0	0	Clear	
Erie, Pennsylvania	29.17	740.9	29.90	759.4	36	2.2	100	SW	12	4.5			10n		Calm	0.07	1.8	Light rain	
Escanaba, Michigan	29.33	745.0	30.04	763.0	12	—11.1	80	Calm	0	0			10s		Calm	0.45	11.4	Cloudy	
Florence, Arizona	28.59	726.2	30.19	766.8	49	9.4	71	NW	4	1.8			10ks		NW	0	0	Threatening	
Fort Apache, New Mexico	25.09	637.3	30.54	775.7	35	1.7	45	E	1	0.4		0	5s		Calm	0	0	Fair	
Fort Assinniboine, Montana	27.38	695.4			— 9	—22.8	56	NE	4	1.8			10s		Calm	0.10	2.5	Cloudy	
Fort Bennett, Dakota	28.60	726.4			5	—15.0	75	N	4	1.8			10s		Calm	0	0	Cloudy	
Fort Buford, Dakota	28.24	717.3	30.36	771.1	— 7	—21.7	100	NW	16	7.2			10s		Calm	0.03	0.8	Cloudy	
Fort Custer, Montana	26.96	684.8			— 6	—21.1	100	N	6	2.7			10n		Calm	0.02	0.5	Light snow	
Fort Davis, Texas	25.26	641.6	30.22	767.6	41	5.0	91	SW	9	4.0		0	0			0	0	Clear	
Fort Elliott, Texas	27.27	692.6	29.59	751.6	39	3.9	25	N	8	3.6		10k	0	N		0	0	Cloudy	
Fort Gibson, Indian T'y	29.40	746.7	29.99	761.7	50	10.0	86	S	4	1.8			10s		Calm	0	0	Cloudy	
Fort Grant, Arizona	25.28	642.1	30.08	764.0	50	10.0	28	Calm	0	0		10cs	0	Calm		0	0	Cloudy	
Fort Griffin, Texas	28.67	728.2	29.94	760.5	52	11.1	73	S	12	5.4		0	0			0	0	Clear	
Fort Keogh, Montana	27.69	703.3			— 1	—18.3	68	Calm	0	0			10s		Calm	0.01	0.3	Cloudy	
Fort Macon, North Carolina	30.24	768.1	30.25	768.3	39	3.9	91	W	3	1.3		5ck	2s	W	Calm	0	0	Cloudy	
Fort Missoula, Montana	26.54	674.1			12	—11.1	80	SW	1	0.4		0	5s		Calm	0.09	2.3	Fair	
Fort McKavett, Texas	27.83	706.9	29.78	756.4	48	8.9	93	SW	12	5.4		0	0			0	0	Clear	
Fort Shaw, Montana	26.48	672.6			—23	—30.6	100	W	4	1.8		0	0			0	0	Clear	
Fort Sill, Indian Territory	28.70	729.0	29.84	757.9	40	4.4	82	S	4	1.8		2ck	0	Calm		0	0	Clear	
Fort Stevenson, Dakota	28.35	720.1			— 9	—22.8	78	E	4	1.8			10ks		E	0.05	1.3	Cloudy	
Fort Verde, Arizona					45	7.2	61	S			1		10s		S	0	0	Cloudy	
Fredericksburg, Texas	28.38	720.8	29.95	760.7	65	18.3	87	W	12	5.4			10s		Calm	0	0	Cloudy	
Galveston, Texas	30.16	766.1	30.21	767.3	54	12.2	100	S	6	2.7		0	Fog		Calm	0	0	Clear	
Grand Haven, Michigan	29.28	743.7	29.96	761.0	31	— 0.6	89	NW	10	4.5			10s		NW	0.01	0.3	Cloudy	
Hatteras, North Carolina	30.20	767.1	30.22	767.6	36	2.2	90	SW	4	1.8		0	5s		Calm	0	0	Fair	
Helena, Montana	25.84	656.3			—12	—24.4	100	N	3	1.3		5k	0	Calm		0	0	Fair	
Henrietta, Texas	28.99	736.3	29.93	760.2	49	9.4	93	SW	13	5.8		0	5s		SW	0	0	Fair	
Indianapolis, Indiana	29.18	741.1	29.94	760.5	42	5.6	60	SW	8	3.6			10s		Calm	Inap.	Inap.	Cloudy	
Indianola, Texas	30.19	766.8	30.22	767.6	53	11.7	93	SE	7	3.1		0	0			0	0	Clear	
Jacksboro, Texas	28.86	733.0	29.99	761.7	50	10.0	79	SW	8	3.6		0	0			0	0	Clear	
Jacksonville, Florida	30.30	769.6	30.34	770.6	45	7.2	84	NE	2	0.9		5cs	0	W		0	0	Fair	
Keokuk, Iowa	29.36	745.7	30.02	762.5	37	2.8	81	N	5	2.2			1cs		Calm	0	0	Cloudy	
Key West, Florida	30.24	768.1	30.27	768.8	68	20.0	90	NE	6	2.7		0	2s		Calm	0	0	Fair	
Kittyhawk, North Carolina	30.19	766.8	30.21	767.3	34	1.1	80	Calm	0	0		5c	0	NW		0	0	Fair	
Knoxville, Tennessee	29.20	741.7	30.26	768.6	32	0.0	79	SE	1	0.4			10s		Calm	0	0	Cloudy	
La Crosse, Wisconsin	29.36	745.7	30.13	765.3	17	— 8.3	67	N	7	3.1		0	0			0.10	2.5	Clear	
La Mesilla, New Mexico	26.22	666.0	30.37	771.4	34	1.1	79	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.72	754.9	30.06	763.5	57	13.9	87	S	2	0.9		0	0			0	0	Clear	
Leavenworth, Kansas	29.19	741.4	30.08	764.0	29	— 1.7	78	N	14	6.3			10s			0	0	Cloudy	
Lewiston, Idaho	29.06	738.1	29.72	754.9	28	— 2.2	77	E	4	1.8			10ks		Calm	0	0	Cloudy	
Little Rock, Arkansas	29.76	755.9	30.08	764.0	52	11.1	86	S	8	3.6			10ks		Calm	0	0	Cloudy	
Los Angeles, California	29.72	754.9	30.08	764.0	55	12.8	81	NE	6	2.7		5cs	10n		Calm	0.01	0.3	Light rain	
Louisville, Kentucky	29.48	748.8	30.04	763.0	44	6.7	68	S	5	2.2			5s	Calm	Calm	0	0	Cloudy	
Lynchburg, Virginia	29.39	746.5	30 11	764.8	37	2.8	53	SW	2	0.9		2cs	10s		W	0	0	Cloudy	
Madison, Wisconsin	28.98	736.1	30.02	762.5	22	— 5.6	72	NW	12	5.4			0	NW		0.01	0.3	Fair	
Marquette, Michigan	29.23	742.4	30.00	762.0	9	—12.8	78	W	1	0.4		0	10s		Calm	0.29	7.4	Cloudy	
Mason, Texas	28.52	724.4	30.30	769.6	53	11.7	93	W	4	1.8		8cs	0			0	0	Clear	
Memphis, Tennessee	29.80	756.9	30.15	765.8	47	8.3	62	S	12	5.4				Haze	Calm	Calm	0	0	Fair

STATIONS.	Barometer. Corrected for instru'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.24	742.7	30.01	762.2	27	— 2.8	88	NW	8	3.6	.....	0	2s	.....	NW	0.10	2.5	Fair	
Mobile, Alabama	30.21	767.3	30.28	769.1	44	6.7	84	W	4	1.8	.....	.....	10s	.....	SW	0	0	Cloudy	
Montgomery, Alabama	30.10	764.5	30.34	770.6	39	3.9	81	SE	1	0.4	.....	.....	10ks	.....	SW	0	0	Cloudy	
Morgantown, W. Virginia	29.04	737.6	30.04	763.0	46	7.8	69	SW	16	7.2	.....	.....	10n	.....	W	0.04	1.0	Light rain	
Moorhead, Minnesota	29.25	742.9	30.38	771.6	—17	—27.2	70	NW	10	4.5	.....	0	0	.....	.....	0.16	4.1	Clear	
Mt. Washington, N. H.	23.44	595.4	29.80	756.9	4	—15.6	74	NW	24	10.7	.....	10k	0	NW	.....	0	0	Cloudy	
Nashville, Tennessee	29.59	751.6	30.14	765.5	45	7.2	68	SW	3	1.3	.....	5ck	0	SW	.....	0	0	Fair	
New Haven, Connecticut	30.07	763.8	30.20	767.1	12	—11.1	70	Calm	0	0	.....	.....	10n	.....	Calm	0.01	0.3	Light snow	
New London, Connecticut	30.15	765.8	30.21	767.3	14	—10.0	82	NW	3	1.3	.....	.....	10n	.....	Calm	Inap.	Inap.	Light snow	
New Orleans, Louisiana	30.20	767.1	30.26	768.6	51	10.6	93	E	1	0.4	.....	.....	Fog	.....	.....	0	0	Dense fog	
Newport, Rhode Island	30.13	765.3	30.18	766.6	14	—10.0	73	N	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
New River, N. Carolina	.....	.....	.....	.....	39	3.9	91	SW	.....	.....	4	5ck	5ks	Calm	.....	.....	.....	Cloudy	
New Shoreham, Rhode I'd.	30.18	766.6	30.22	767.6	17	— 8.3	83	NW	2	0.9	.....	.....	10s	.....	NW	0	0	Cloudy	
New York, New York	29.99	761.7	30.19	766.8	17	— 8.3	100	E	5	2.2	.....	.....	10n	.....	Calm	0.05	1.3	Light snow	
Norfolk, Virginia	30.09	764.3	30.15	765.8	36	2.2	71	SW	10	4.5	.....	.....	10s;sm	.....	S;C	0	0	Cloudy	
North Platte, Nebraska	27.10	688.3	29.83	757.7	20	— 6.7	85	NE	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Olympia, Washington T'y	29.78	756.4	29.82	757.4	38.0	3.3	90	NE	6	2.7	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Omaha, Nebraska	28.99	736.3	30.17	766.3	17	— 8.3	83	N	12	5.4	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Oswego, New York	29.65	753.1	29.99	761.7	15	— 9.4	82	SE	7	3.1	.....	.....	10n	.....	Calm	0.10	2.5	Light snow	
Pensacola, Florida	30.27	768.8	30.31	769.9	45	7.2	92	E	3	1.3	.....	.....	10s	.....	SW	0	0	Cloudy	
Philadelphia, Pa	30.12	765.0	30.17	766.3	24	— 4.4	87	S	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
Phœnix, Arizona	28.96	735.6	30.81	782.6	48	8.9	70	E	3	1.3	.....	2ck	8ks	Calm	Calm	0	0	Cloudy	
Pike's Peak, Colorado	17.67	448.8	29.88	758.9	15	— 9.4	65	W	46	20.6	.....	0	8s	.....	W	0	0	Fair	
Pilot Point, Texas	29.31	744.5	30.17	766.3	50	10.0	79	SW	14	6.3	.....	0	0	.....	.....	0	0	Clear	
Ploche, Nevada	23.97	608.8	29.74	755.4	38	3.3	45	S	6	2.7	.....	.....	10n	.....	Calm	0.01	0.3	Sleeting	
Pittsburg, Pennsylvania	29.17	740.9	29.99	761.7	41	5.0	65	SW	8	3.6	.....	.....	10s	.....	SW	0	0	Cloudy	
Port Huron, Michigan	29.21	741.9	29.90	759.4	30	— 1.1	89	W	8	3.6	.....	.....	10s	.....	Calm	0.26	6.6	Cloudy	
Portland, Maine	30.12	765.0	30.18	766.6	6	—14.4	52	NW	4	1.8	.....	2ck	5s	NW	Calm	0	0	Fair	
Portland, Oregon	29.72	754.9	29.80	756.9	35	1.7	95	NW	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	39	3.9	82	SW	7	3.1	.....	10k	0	Calm	.....	0	0	Cloudy	
Prescott, Arizona	24.82	630.4	30.18	766.6	44	6.7	37	SE	6	2.7	.....	.....	10s	.....	SE	0	0	Cloudy	
Punta Rassa, Florida	30.27	768.8	30.29	769.4	59	15.0	88	NE	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Red Bluff, California	29.37	746.0	29.71	754.6	50.0	10.0	96	W	1	0.4	.....	.....	10n	.....	Calm	4.57	146.1	Light rain	
Rio Grande City, Texas	30.00	762.0	30.22	767.6	55	12.8	93	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Rochester, New York	29.24	742.7	29.89	759.2	20	— 6.7	100	SE	6	2.7	.....	.....	10n	.....	Calm	0.29	7.4	Light snow	
Roseburg, Oregon	29.15	740.4	29.72	754.9	41	5.0	91	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Sacramento, California	29.72	754.9	29.80	756.9	56	13.3	87	S	16	7.2	.....	.....	10n	.....	Calm	2.49	63.2	Light rain	
St. Louis, Missouri	29.42	747.3	30.00	762.0	42	5.6	66	S	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
St. Paul, Minnesota	29.26	743.2	30.17	766.3	9	—12.8	78	NW	6	2.7	.....	2cs	0	NW	.....	0.19	4.8	Clear	
Salt Lake City, Utah	25.49	647.4	29.82	757.4	46	7.8	77	SW	7	3.1	.....	.....	10s	.....	Calm	Inap.	Inap.	Threatening	
San Antonio, Texas	29.49	749.0	30.20	767.1	56	13.3	94	S	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
San Diego, California	30.04	763.0	30.12	765.0	54	12.2	87	N	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Sandusky, Ohio	29.25	742.9	29.93	760.2	39	3.9	82	SW	13	5.8	.....	.....	10s	.....	Calm	0.04	1.0	Cloudy	
Sandy Hook, New Jersey	30.14	765.5	30.18	766.6	20	— 6.7	100	E	2	0.9	.....	.....	10n	.....	.....	0.03	0.8	Light snow	
San Francisco, California	29.74	755.4	29.80	756.9	60	15.6	88	S	14	6.3	.....	.....	10n	.....	S	3.27	83.1	Light rain	
Santa Fé, New Mexico	23.32	592.3	29.86	758.4	32	0.0	59	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	30.24	768.1	30.34	770.6	43	6.1	83	S	5	2.2	.....	2cs	Fog	Calm	Calm	0	0	Fair	
Shreveport, Louisiana	29.93	760.2	30.18	766.6	48	8.9	78	S	6	2.7	.....	0	5s	.....	Calm	0	0	Fair	
Silver City, New Mexico	24.39	619.5	30.83	783.1	31	— 0.6	48	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Smithville, North Carolina	30.23	767.8	30.27	768.8	41	5.0	74	Calm	0	0	.....	0	Haze	Calm	.....	0	0	Fair	
Socorro, New Mexico	25.48	647.2	29.55	750.6	40	4.4	65	S	5	2.2	.....	2c	10s	.....	S	0	0	Cloudy	
Springfield, Illinois	29.32	744.7	30.00	762.0	40.5	4.7	69	SW	2	0.9	.....	.....	10s	.....	.....	Inap.	Inap.	Cloudy	
Springfield, Massachusetts	30.06	763.5	30.20	767.1	9	—12.8	78	N	2	0.9	.....	.....	10n	.....	Calm	0.01	0.3	Light snow	
Stockton, Texas	27.04	686.8	30.04	763.0	42	5.6	91	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.41	747.0	30.36	771.1	—22	—30.0	100	W	12	5.4	.....	0	0	.....	.....	0.03	0.8	Clear	
Thatcher's Island, Mass	30.12	765.0	30.18	766.6	9	—12.8	57	W	7	3.1	.....	.....	10n	.....	N	0.02	0.5	Light snow	
Toledo, Ohio	29.25	742.9	29.95	760.7	39	3.9	91	W	9	4.0	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy	
Tucson, Arizona	27.61	701.3	30.16	766.1	50	10.0	32	S	1	0.4	.....	.....	0	Calm	.....	0	0	Cloudy	
Umatilla, Oregon	29.64	752.8	30.17	766.3	22.5	— 5.3	86	W	4	1.8	.....	8cs	10s	.....	Calm	0	0	Cloudy	
Uvalde, Texas	29.22	742.2	30.07	763.8	54	12.2	74	S	1	0.4	.....	.....	0	.....	.....	0	0	Foggy	
Vicksburg, Mississippi	29.99	761.7	30.26	768.6	46	7.8	84	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Visalia, California	29.52	749.8	29.89	759.2	57	13.9	94	E	6	2.7	.....	0	10n	.....	Calm	0.80	20.3	Light rain	
Washington, D. C.	30.01	762.2	30.13	765.3	29	— 1.7	78	E	2	0.9	.....	.....	10s	.....	NW	0	0	Cloudy	
Wickenburg, Arizona	.....	.....	.....	.....	47	8.3	62	SW	.....	.....	1	.....	10s	.....	Calm	0	0	Cloudy	
Wilmington, N. Carolina	30.20	767.1	30.26	768.6	36	2.2	80	S	1	0.4	.....	.....	0	Calm	.....	0	0	Fair	
Winnemucca, Nevada	25.39	644.9	29.75	755.6	43	6.1	92	SW	18	8.0	.....	5c	10n	.....	Calm	0.84	21.3	Light rain	
Wood's Holl, Mass	30.13	765.3	30.17	766.3	12	—11.1	80	NW	9	4.0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Yankton, Dakota	28.88	733.5	30.34	770.6	0	—17.8	70	N	16	7.2	.....	0	0	.....	.....	0	0	Clear	
Yuma, Arizona	29.88	758.9	30.03	762.7	52	11.1	54	E	1	0.4	.....	0	8s	.....	Calm	0	0	Cloudy	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8	.....	.....	53.0	11.7	73	Calm	0	0	.....	8k	0	.....	.....	0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jam ica.‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	30.19	766.8	30.24	768.1	68	20.0	75	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	Charles Hasselbrink.
Jakobshavn, Greenland	30.31	769.8	30.37	771.4	— 1.8	—18.8	.....	NW	.....	.....	7	.....	0	.....	.....	0	0	.....	
Kingston, Jamaica, W. I.	30.09	764.3	30.10	764.5	68.7	20.4	77	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	Maxwell Hall.
Navassa, W. I.	30.01	762.2	30.09	764.3	77	25.0	73	NE	16	7.2	.....	0	2s	.....	NE	0	0	Clear	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	79	26.1	78	E	.....	.....	3	5k	6ks	E	.....	0	0	½ cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.43	747.5	29.99	761.7	79	26.1	85	Calm	.....	.....	0	2c	0	Calm	.....	0	0	Fair	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	72	22	.....	SE	.....	.....	5	0	0	.....	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.13	765.3	30.16	766.1	73	22.8	76	N	12	5.4	.....	0	4ks	.....	.....	0	0	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	30.32	770.3	30.38	771.6	6.4	—14.2	.....	W	.....	.....	4	.....	1	.....	.....	0	0	.....	
York Factory, B. A.	30.19	766.8	30.24	768.1	—30.0	—34.4	.....	NW	13	5.8	.....	1c	0	N	.....	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, N. 35° 53′, E. 14° 31′	29.78	756.4	66.5	19.2	59	NW			2		1							Blue sky	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon N. 23° 52′, E. 60° 37′	30.03	762.7	75	23.9	77	WNW			3		8	WNW				3	WNW	D. clouds	Comm. G. Haud.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. S. Hope.
H. M. S Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 22° 51′, E. 116° 42′	30.08	764.0	64	17.8	83	NNE			4		0					3	NNE	Misty	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. J. F. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.16	766.1	58	14.4	94	NW			6–7		3	NW						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 32′, E. 81° 22′	29.89	759.2	79	26.1		N			3		10	N				2	N	Overcast	Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.92	760.0	80	26.7	66	NW			2		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon, N. 39° 37′, E. 19° 57′	29.70	754.4	60	15.6		SSE			4–6		4					3	SE	Showery	Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Chimbote, Peru	29.87	758.7	71	21.7	85	SSE			1		9	NE						D. clouds	Comm. E. E. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris,																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 40′, E. 122° 30′	30.37	771.4	39.7	4.3	65	E			1		0							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 27° 07′, E. 34° 24′	30.07	763.8	71	21.7	80	N			1		1	N				1	N	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 42° 14′, W. 8° 40′	29.65	753.1	56.5	13.6	87	WSW			5		9	W						Squally	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Barbadoes, W. I.	30.10	764.5	81	27.2	74	ENE			3		3	E						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis, N. 38° 42′, W. 9° 06′	29.88	758.9	58	14.4	?	W			4–5		6	W				2		D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 56′	29.66	753.4	78	25.6	57	ESE			1		0					1	ESE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, Chimbote, Peru	29.95	760.7	70	21.1	90	Calm			0		10								Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane,
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	30.03	762.7	66.5	19.2	47	S			2		2	S						Blue sky	Capt. R. D. Cumming.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, N. 12° 20′, W. 16° 40′	30.00	761 9	82.4	28.0	91	Calm			0		4			0	0			Blue sky	S. C. da Silva Costa, Comd't.
Sado, Cabinda, Lower Guinea	29.97	761.2	83.3	28.5	74	S			3		4			0	0	3	S	D. clouds	G. A. de Brito Capello, Comd t.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

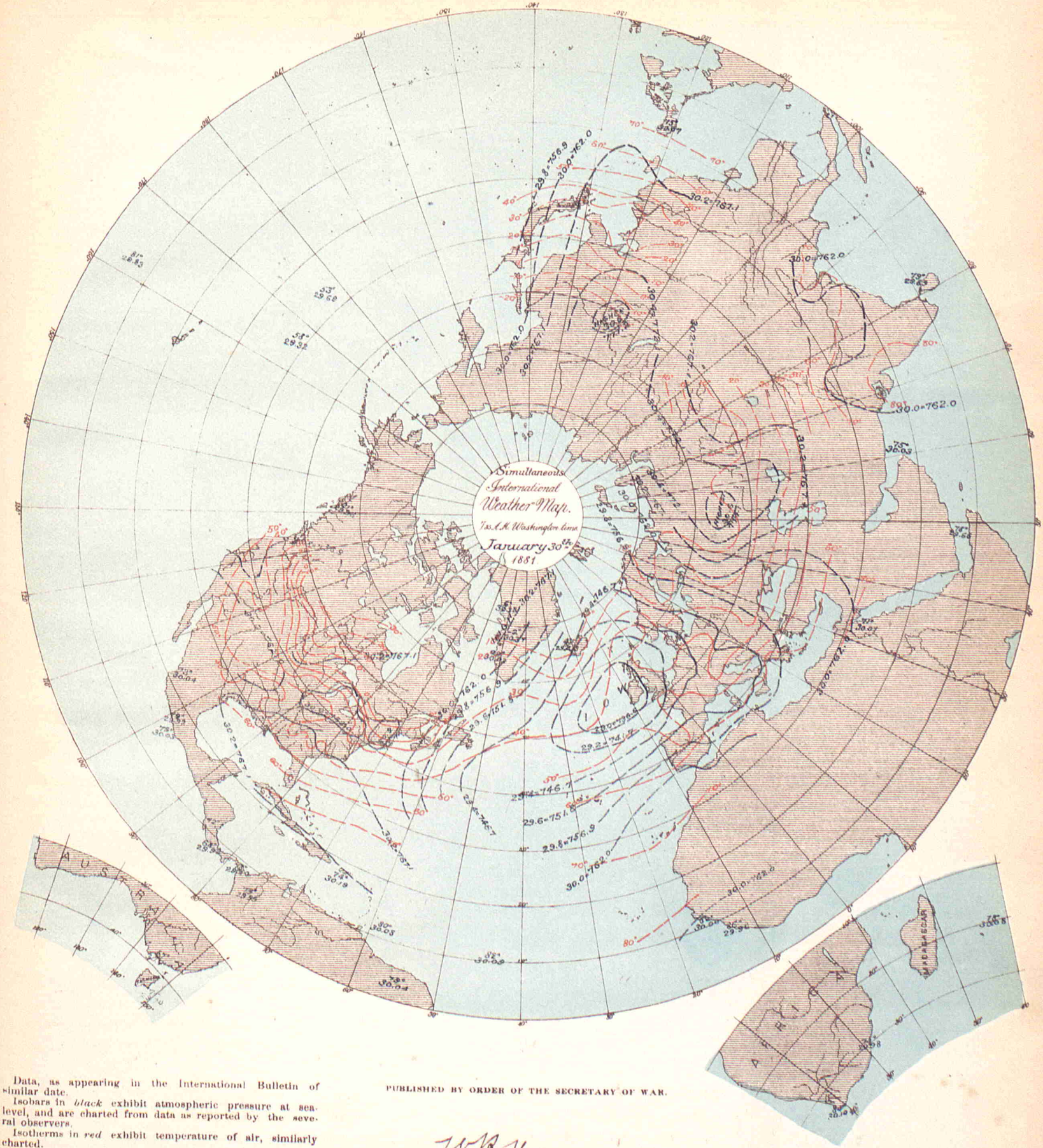
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.40	772.1	48	8.9	85	NE	3	1.3			5		NE	0	0			Fair	
N. Yard, Portsmouth, N. H.	30.16	766.1	4	—15.6	74	NW	2	0.9		10c		W		0	0			Cloudy	
Naval Hospital, Yokohama, Japan	29.59	751.6	30.5	— 0.8	52	N			1		0			Slight				Clear	
Adams, Callao, Peru	29.94	760.5	72	22.2	85	SE			1		5		SE			Long		Fair	
Alaska, N. Yard, Mare I'd, Cal.	29.72	754.9	57	13.9	94	S			5		10			2.25	57.1			Rainy	
Alert, Hong-Kong, China *.	30.01	762.2	67	19.4	64	ENE			1		0			0	0	Sm'h		Hazy	
Alliance, Off Cardenas, Cuba, W. I.	30.26	768.6	73	22.8	81	E			1		2		E	Light		Sm'h		Clear	
Ashuelot, Tientsin, China	30.23	767.8	31	— 0.6	79	SSW			1		0							Clear	
Colorado, New York, N. Y.	30.18	766.6	15	— 9.4	100	WNW	2	0.9			0?			0	0			Overcast?	
Constitution, N. Yard, League I'd., Pa			30	— 1.1		NE	2	0.9			10		NW					Overcast	
Franklin, Off N. Yard, Norfolk, Va	30.13	765.3	35	1.7		S	2	0.9			10			0	0			Cloudy	
Galena, Villafranca, France	29.41	747.0	55	12.8	74	NE			1		10					Mod.	S	Cloudy	
Independence, N. Yard, Mare I'd, Cal.	29.80	756.9	57	13.9	94	S	18.0	8.0			10		S	3.02	76.7			Overcast	
Jamestown, Sitka, Alaska *	29.96	761.0	21	— 6.1		NE			2		2			0	0			Clear	
Kearsarge, N. 17° 50′, W. 79° 20′	30.09	764.3	79	26.1	73	NNE			2		8		NE			Long	E	Fair	
Lackawanna, Chimbote, Peru †	30.04	763.0	72	22.2	90	ESE			0-1		8		SE	0	0			Fair	
Marion, Straits of Magellan	29.38	746.2	47	8.3	77	WSW			2		2		WSW	Light		Sm'h		Fair	
Michigan, Erie, Pennsylvania	29.85	758.2	35	1.7		W			3		10		W					Cloudy	
Minnesota, New York, N. Y.	30.18	766.6	31	— 0.6		SE			0-1		10							Snowing	
Monocacy, Shanghai, China	30.38	771.6	34	1.1	90	E			2		0							Hazy	
New Hampshire, Port Royal, S. C.	30.29	769.4	45	7.2	92	SW	3	1.3			0			0	0			Clear	
Nipsic, Marseilles, France	29.53	750.0	57	13.9	81	NW			2		5					Sm'h		D. clouds	
Onward, Chimbote Bay, Peru †	29.85	758.2	72	22.2	85	SSW			3		0					Long	N;W	Clear	
Palos, Shanghai, China	30.40	772.1	33	0.6	70	E			2		0							Clear	
Passaic, Washington, D. C.	30.21	767.3	29	— 1.7	67	NE			1		10		NE					Cloudy	
Pensacola, Acapulco, Mexico	29.92	760.0	79	26.1	74	WNW			3		10					Sm'h		Cloudy	
Portsmouth, Washington, D. C.	30.12	765.0	28	— 2.2	100	SE			1		10							Overcast	
Powhatan, New York, N. Y.	30.22	767.6	18	— 7.8	84	SW			1		10							Rainy	
Quinnebaug, Naples, Italy	29.44	747.8	60	15.6	82	SW			7		10		SW			Sm'h			
Richmond, Hong-Kong, China	30.15	765.8	58	14.4	100	Calm			0		0			0	0			Hazy	
Saratoga, Baltimore, Md	30.14	765.5	28	— 2.2	100	SSE			1		10			0	0			Cloudy	
Shenandoah, Montevideo, Uruguay *	29.98	761.5	73	22.8	50	W			5		2					Mod.	N	Fair	
St. Louis, League Island, Pa	30.22	767.6	22	— 5.6	86	ENE	1	0.4			10			0	0			Cloudy	
Swatara, Simonosiki, Japan †	30.05	763.3	34	1.1	79	WNW			6		8		W			R'gh	W	Squally	
Tennessee, Kingston, Jamaica, W.I.	30.11	764 8	75	24.4	86	N	1	0.4			2		Calm	0	0	Sm'h		Hazy	
Trenton, Villafranca, France *	29.40	746.7	57	13.9	52	NE			1-2		5			14 h'r s driz		Long	S	Fair	
Vandalia, Bridgetown, Barbadoes, W.I			80	26.7	78	NE			2		5		ENE					Fair	
Wabash, Boston, Massachusetts	30.21	767.3	7	—13.9	77	NNW	2	0.9			8		NW	0	0			Cloudy	
Wachusetts, Panama, Panama *.	29.50	749.3	78	25.6	86	NW			3		5		N	0	0	Sm'h		Misty	
Wyoming, Villafranca, France	29.43	747.5	55	12.8	68	WNW			1		8		NE			Long ground	SSW	Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic, N. 48° 55°, W. 38° 15′	29.38	746.2	42	5.6	83	NNE			4		5					3	N	Squally	Capt. H. Parsell.
Ship Baroda, ‡ S. 18° 05′, W. 2° 45′	30.07	763.8	78	25.6	73	E			3		2							Blue sky	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 28° 59′, W. 19° 29′	30.18	766.6	68	20.0	84	WSW			3		5							D. clouds	Capt. A. J. Brown.
Ship Blychswood																			Capt. E. J. Molony.
British Merchant ‡																			Capt. E. Heggum.
Chin Yang, ‡ N. 23° 15′, W. 25° 00′	30.16	766.1	71.6	22.0	70	NE			4		6							D. clouds	Capt. H. Youlden.
S. S. Cipero																			W. N. Lailey.
City of Agra, ‡ S. 36° 23′, W. 26° 51′	30.06	763.5	69.7	20.9	86	WSW			1		7							D. clouds	Capt. T. Young.
Barque Commewyne, ‡ N. 22° 29′, W. 63° 00′	30.27	768.8	72.9	22.7	72	NNE			4		1							Blue sky	Capt. W. Scott.
Barque Coppename, N. 12° 25′, W. 44° 45′	30.09	764.3	82.1	27.8	58	NE			5		3							D. clouds	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra ‡																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡ N. 41° 27′, W. 65° 58′	29.03?	737.3?	27	— 2.8	88	WNW			4		9					6	WNW	Overcast	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, N. 19° 41′, W. 26°,09′	30.16	766.1	72.3	22.4	88	NE			5		7					4-5	NNW	D. clouds	Capt. H. W. Dyke.
Barque Mertola, N. 48° 16′, W. 12° 08′	29.14	740.1	48.7	9.3	89	WSW			8		5							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
S. S. Scotia																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven ‡																			Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡ N. 48° 16′, W. 5° 35′	29.03	737.3	52	11.1	100	WSW			8		9							Squally	Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, N. 42° 02′, W. 51° 32′	29.28	743.7	41	5.0		NNW			3		2		NW			Con.	SW;SE	Clear	Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, Off Sandy Hook, N. J. †	30.05	763.3	33	0.6		Var.			1		10					Sm'h	E	Cloudy	Capt. J. W. Jennings.
S. S. Baltic, N. 48° 47′, W. 38° 17′	29.39	746.5	44	6.7	68	Var.			3-4		5?		NE				NE	Cloudy?	
S. S. Britanic, N. 40° 30′, W. 69° 54′ †	30.12	765.0	30	— 1.1		NNW			3		10		NW			Sm'h		Snowing	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	29.11	739.4	46	7.8		SE			2		10		SE	Sho	wers				Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, N. 42° 03′, W. 53° 19′	29.40	746.7	44.6	7.0		WNW			3		2		NNW	0	0	Sm'h	NW	Clear	Capt. H. Baur.
S. S. Köln																			Capt. F. Pfeiffer.
S. S. Leipzig																			Capt. G. Meyer.
S. S. Ohio																			
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm ‡																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Philadelphia, Pa.	30.02	762.5	24	— 4.4	87	SE			2		10		SE					Overcast	Capt. J. W. Shackford.
S. S. Indiana, ‡ Liverpool, England †*	29.97	761.2	43	6.1	75	ESE			4		8		ESE	Mod	erate				Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 40° 38′, W. 67° 45′ †*	30.07	763.8	28	— 2.2	88	NNW			3		10		NNW	Snow	squalls	Sm'll	NNW	Cloudy	Wm. Shakford, 1st Off'r
S. S. Pennsylvania, N. 51° 14′, W. 22° 29′ †*	28.95	735.3	39	3.9		W			4		10		W	0.50	12.7	R'gh	W	Overcast	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ Hong Kong, China †*	30.17	766.3	63	17.2	83	NE			1		2		ENE	0	0	Sm'h		Clear	Capt. H. Davison.
S. S. Gaelic, N. 37° 47′, W. 166° 13′ †*	29.32	744.7	58	14.4	70	NE			7		10		NE			Very high	NE	Overcast	Capt. W. H. Kidley.
S. S. Oceanic, San Francisco, Cal.	29.85	758.2	54	12.2	55	S			5		10		SE					Cloudy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder																			Capt. J. M. Lachlan.
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, Columbia river, near w. point, Oreg.	29.80	756.9	32.0	0.0	55	Calm			0		10		Calm					Foggy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal. †	29.78	756.4	60	15.6	88	SE			6		10		SE					Rainy	Capt. J. N. Ingalls.
S. S. Idaho, N. 43° 00′, W. 124° 50′ †*	30.06?	763.5?	53	11.7	100	SW			1		0					Mod.	SW	Fine	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, San Francisco, Cal. †	29.89	759.2	60	15.6	94	SE			4		10		SE					Raining	Thos. Wallace.
S. S. State of California, N. 42° 32′, W. 124° 32′ †*	29.63	752.6	50	10.0	100	N			3		10		SW			Long	SW	Cloudy	Capt. G. Debney.
S. S. Victoria, N. 47° —′, W. 124° 25′ †*	29.76	756.0	37	2.8	90	NE			2		2		Calm			Mod.	SSE	Fair	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 34° 25′, E. 167° 07′	29.85	758.2	68	20.0	84	NE			5		8		NE			Long	NE	Cloudy	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W. †	30.11	764.8	68	20.0	100	W			2		0			0	0			Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 15° 51′, W. 98° 30′ †	30.03	762.7	79	26.1	66	WNW			4		2		W			Mod.	W	Clear	Capt. D. S. Austin.
S. S. City of Peking, N. 33° 49′, E. 142° 08′ †	29.62	752.3	42	5.6	66	WNW			7		10		WNW	0	0	R'gh	WNW	Overcast	Capt. G. G. Berry.
S. S. City of Sidney, San Francisco, Cal. †*	29.89	759.2	62	16.7	77	SSW			6		10		SW	0.125	3.18	Sm'h		Light rain	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 36° 36′, W. 177° 58′ †	29.69	754.1	53	11.7	80	NNE			7		10		NNE	0	0	R'gh	NNE	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima ‡																			Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, Panama, Panama †	29.80	756.9	77	25.0	95	NW			4		10		NW	0	0			Gloomy	
S. S. Zealandia, N. 5° 41′, W. 163° 28′	29.83	757.7	81	27.2	74	ESE			6		0					Sm'h	SSE	Clear	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland, ‡ Flushing, Netherlands †	29.22	742.2	53	11.7	67	SW			5		8		W			Sm'h		Fair	Capt. Sam'l Jackson.
S. S. Nederland, N. 40° 05′, W. 67° 11′ †	30.14	765.5	58	14.4		NW			4		2		NNW	0	0	Mod.	NW	Fine	Capt. S. Stokes.
S. S. Rhynland, ‡ N. 51° 11′, E. 1° 38′	29.16	740.7	45	7.2	100	S			5		8		S	0.1	3.	Sm'h	S	Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 40° 36′, W. 68° 48′	30.20	767.1				W			6		10		WNW	Sn	ow	Mod.	WNW	Squally	Capt. J. C. Jamieson.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Morehead City, N. C. †	30.17	766.3	50	10.0		W			2				NW	0	0			Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 36° 55′, W. 75° 47′	30.19	766.8	37	2.8	71	SW	10	4.5			8k		W	0	0	Sm'h		Cloudy	Capt J. Jorgensen.
Sch'r Annie R. Lewis, N. 30° 08′, W. 65° 45′ †	30.20	767.1	65	18.3		WNW			5		10		NW	0	0	H'vy Cross	NW; N	Cloudy	Capt. S. S. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George ‡																			Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va. †	30.16	766.1	39	3.9	73	SSW	2	0.9			10n			0	0			Cloudy	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Spain †	29.87	758.7	62	16.7	100	SW			6		10		W	Mod	erate			Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 31, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.24	768.1	68.0	20.0	78	NE			1		2			0	0	Fair	Dr. Ollive.
Nemours			30.00	762.1	70.9	21.6	60	N			3		0			0	0	Clear	Raynard.
Algie s			29.95	760.8	68.0	20.0	49	W			7		1			Inap.	Inap.	Very fair	Nicolas.
La Calle			29.87	758.7	64.0	17.8	78	WNW			5		5			0	0	Cloudy	Fonfréde.
Tunis			29.82	757.5															Jacques.
Sfax			29.94	760.5															Gau.
Saida			30.10	764.5	63.9	17.7	33	W			5		2			0	0	Fair	Dumas.
Tebessa			29.98	761.4	60.8	16.0	36	NW			4		7			0	0	Very cloudy	Watrin.
Gerville																			Lonchamp.
Laghouat			30.10	764.6	66.6	19.2	59	W			2		2			0	0	Fair	Herbin.
Biskra			30.02	762.6	73.0	22.8	54	NW			6		0			0	0	Clear	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.92	759.9	30.01	762.2	61.9	16.6	80	E	2	0.9			0			0	0	Very fine	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania			29.70	754.1	76	24.4		NW			3		5kn			0.05	1.3	Squally	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.17	740.8	29.73	755.2	37.8	3.2	88	SE			1		10			0.185	4.7	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.95	735.2	29.73	755.2	38.1	3.4	87	SW	0	0			10			0	0		Dr. Wiersbicki.
Eperies	28.78	731.1	29.69	754.0	37.8	3.2	90	Calm			0		10s			0	0		Julius Mikolik.
Gratz‡	28.49	723.6	29.77	756.2	37.8	3.2	83	W			1		10			0	0		Andreas Rospini.
Hermannstadt	28.22	716.9	29.71	754.5	30.6	— 0.8	79	S			2		1			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.42	721.9	29.81	757.1	34.0	1.1	87	Calm			0		10			0.012	0.3		The Staff.
Lemberg	28.72	729.6	29.76	756.0	27.1	— 2.7	89	SE			1		10			0	0		Dr. T. Stanecki.
Pola	29.50	749.2	29.61	752.0	53.2	11.8	55	NE			3		7			0	0		I. R. Hydrographic Office
Szathmar	29.21	742.0	29.66	753.4	42.6	5.9	85	NE			2		0			0	0		Belcht Peter, S. J.
Szegedin	29.43	747.5	29.72	754.9	35.2	1.8	85						10			0	0		Karl Stancel.
Trieste	29.58	751.4	29.69	754.0	49.3	9.6	81	ENE			2		10			0	0	Cloudy	P. Busin.
Vienna	29.02	737.5	29.78	756.3	34.5	1.4	83	N			1		10			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.45	748.0	29.65	753.1	43.7	6.5	80	SW			1		1	WSW		0	0		Royal Observatory.
Furnes																			M. E. de Cae.
Maseyck	29.52	749.9	29.65	753.1	45.3	7.4	89	WSW			2		3			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 3, 1882.

BRITISH SERIES.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
Aberdeen	29.22	742.2	29.32	744.7	40.7	4.8	82	SW	7	3.1	.....	.....	1	.....	.....	Bla	nk	Misty	W. Boswell.
Armagh, Observatory	29.14	740.1	29.39	746.5	41.2	5.1	80	SW	9	4.0	.....	.....	5	.....	.....	.....	.....	D. clouds	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.42	747.3	43.0	6.1	75	SW	16	7.2	.....	.....	2	.....	.....	.....	.....	Blue sky	John Hartnup.
Bolton, Sharples	28.91	734.3	29.44	747.8	40.9	4.9	90	SW	0.6	0.3	.....	.....	3	.....	.....	.....	.....	D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.03	737.3	29.43	747.5	42.3	5.7	81	SW	.....	.....	2	.....	2	.....	.....	0.01	0.3	D. clouds	J McLandsborough, F.R.S
Bridgetown, Barbadoes	30.01	762.2	30.04	763.0	80	26.7	66	NE	.....	.....	2	.....	3	.....	.....	.....	.....	D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington	.....	.....	29.51	749.5	44.4	6.9	84	SW	.....	.....	0.4	.....	0	.....	.....	.....	.....	Blue sky	John McLaren.
Chatham, School M. E.	29.45	748.0	29.58	751.3	50.1	10.1	71	SW	.....	.....	1	.....	2	.....	.....	.....	.....	D. clouds	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.29	744.0	29.52	749.8	48.6	9.2	83	S	.....	.....	2	.....	7	.....	.....	.....	.....	Overcast	The Staff.
Fort Napier, Natal	27.78	705.6	30.00	762.0	78.4	25.8	65	NE	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.89	759.2	85	29.4	92	W	.....	.....	2	.....	5	.....	.....	.....	.....	D. clouds	C. E. Keane.
Galway, Queen's College	.....	.....	29.34	745.2	44	6.7	92	S	.....	.....	2	.....	8	.....	.....	.....	.....	Showery	J. O'Donaghadue.
Gibraltar, Mediterranean	30.09	764.3	30.14	765.5	62.8	17.1	95	WSW	.....	.....	5	.....	9	.....	.....	.....	.....	Gloomy	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.14	740.1	29.34	745.2	40.6	4.8	90	S	.....	.....	3	.....	10	.....	.....	.....	.....	Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.39	746.5	29.56	750.8	48.3	9.1	75	SW	.....	.....	1	.....	3	.....	.....	.....	.....	Blue sky	The Staff.
Guernsey	29.31	744.5	29.54	750.3	47.5	8.6	84	SSE	.....	.....	2	.....	3	.....	.....	.....	.....	D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.53	750.0	29.56	750.8	46.0	7.8	79	SW	13	5.8	.....	.....	3	.....	.....	.....	.....	Blue sky	The Met'g'l Office.
Leicester, Museum	29.19	741.4	29.44	747.8	49.8	9.9	80	Calm	.....	.....	0	.....	0	.....	.....	.....	.....	Blue sky	A. E. Carryer.
Malta, Mediterranean	29.68	753.9	29.76	755.9	64.0	17.8	65	W	.....	.....	3	.....	0	.....	.....	.....	.....	Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	.....	.....	30.18	766.6	71.0	21.7	63	NE	.....	.....	1	.....	4	.....	.....	.....	.....	D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.98	736.1	29.51	749.5	43.0	6.1	83	S	.....	.....	2	.....	0	.....	.....	.....	.....	Misty	Robert Pate.
Oxford, Radcliffe Obs'y	29.32	744.7	29.57	751.1	48.7	9.3	72	SSW	.....	.....	2	.....	3	.....	.....	.....	.....	Blue sky	The Staff.
Plymouth	29.44	747.8	29.52	749.8	47.2	8.4	91	S	.....	.....	1	.....	2	.....	.....	.....	.....	D. clouds	John Merrifield.
Sandwick Manse, Orkneys	.....	.....	29.27	743.4	40.7	4.8	100	SE	3	1.3	.....	.....	10	.....	.....	.....	.....	Misty	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.55	750.6	29.61	752.1	49.4	9.7	82	NNE	.....	.....	2	.....	8	.....	.....	.....	.....	D. clouds	Serg't W. H. Lyne.
Sheffield	29.20	741.7	29.48	748.8	45.9	7.7	80	SW	.....	.....	.....	.....	.....	.....	.....	0.03	0.8	Blue sky	W. F. Cooper.
Silloth Rectory	29.34	745.2	29.37	746.0	43.2	6.2	83	S	.....	.....	3	.....	4	.....	.....	0	0	D. clouds	Rev. F. Redford, A. M.
Stonyhurst, Observatory	.....	.....	29.45	748.0	42.5	5.8	77	SW	7	3.1	.....	.....	8	.....	.....	.....	.....	D. clouds	Rev. S. J. Perry.
Strathfield Turgiss	29.34	745.2	29.55	750.6	47.3	8.5	94	SW	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	.....	.....	29.51	749.5	52	11.1	79	S	.....	.....	4	.....	4	.....	.....	.....	.....	D. clouds	W. Newcombe.
Valencia, Observatory	29.36	745.7	29.38	746.2	46.8	8.2	77	SSW	19	8.5	.....	.....	4	.....	.....	Bla	nk	D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B.	29.85	758.2	29.89	759.2	9.7	—12.4	.....	Calm	0	0	.....	.....	10n	.....	.....	Inap.	Inap.	Snowing	Hon. J. Ferguson.
Chatham, N. B.*	29.73	755.1	29.80	756.9	9	—12.8	94	Calm	0	0	.....	.....	10n	.....	W	0.01	0.3	Light snow.	G. A. Blair.
Charlottetown, P. E. Island	29.71	754.6	29.76	755.9	17	— 8.3	100	W	1	0.4	.....	.....	10n	.....	.....	0.300	7.62	Light snow.	H. J. Cundall, C. E.
Chicontime, Quebec	.....	.....	.....	.....	—12.7	—24.8	.....	N	.....	.....	1	0	8ks	.....	.....	0.03	0.8	Clearing	Rev. V. A. Huart.
Cornwall, Ontario	29.98	761.5	30.20	767.1	— 6.5	—21.4	100	W	.....	.....	1	0	0	.....	.....	0.05	1.3	Clear	James Smith, M. A.
Dalhousie, N. B.	29.80	756.9	29.83	757.7	7.0	—13.9	.....	W	.....	.....	1	.....	10n	.....	.....	Inap.	Inap.	Snowing	H. A. Johnson.
Father Point, Quebec*	29.89	759.2	29.91	759.7	— 3	—19.4	80	SW	19	8.5	.....	.....	10n	.....	.....	0.10	2.5	Heavy snow.	J. McWilliams.
Fredericton, N. B.	29.81	757.2	29.88	758.9	3.1	—16.1	81	NW	14	6.3	.....	2cs	0	.....	.....	0.050	1.27	Fair	Prof. Harrison
Fort Garry, Manitoba*	29.65	753.1	30.67	779.0	—34	—36.7	100	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	James Stewart.
Granton, Ontario	29.11	739.4	30.31	769.9	11.6	—11.3	88	N	.....	.....	1	.....	10n	.....	.....	0	0	Cloudy	James Grant.
Halifax, N. S.*	29.67	753.6	29.81	757.2	19	— 7.2	92	W	4	1.8	.....	5ck	0	.....	.....	0.120	3.05	Fair	A. Allison.
Hamilton, Ontario	29.88	758.9	30.31	769.9	12.3	—10.9	90	SW	.....	.....	1	10cs	0	.....	.....	0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.85	758.2	30.23	767.8	— 2	—18.9	81	W	4	1.8	.....	0	0	.....	.....	0.08	2.0	Clear	S. Woods, M. A.
Little Glace Bay, N. S.	29.68	753.9	29.72	754.9	30.0	— 1.1	91	SE	3	1.3	.....	.....	10n	.....	.....	0.15	3.8	Snowing	C. H. Rigby.
Montreal, Quebec*	29.94	760.5	30.17	766.3	— 2	—18.9	93	W	10	4.5	.....	0	Sm'e	.....	.....	0.08	2.0	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. R. Nason.
Norwood, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	29.51	749.5	30.31	769.9	— 8	—22.2	58	Calm	0	0	.....	2k	5ks	NW	NW	0.16	4.1	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.47	748.5	30.33	770.4	— 5.9	—21.1	62	NW	.....	.....	1	0	0	.....	.....	0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.52	749.8	30.27	768.8	18	— 7.8	83	N	3	1.3	.....	10ck	0	NW	.....	0	0	Cloudy	H. Morgan.
Port Stanley, Ontario	29.60	751.8	30.30	769.6	16	— 8.9	79	N	2	0.9	.....	.....	10n	.....	NW	0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.75	755.6	30.12	765.0	— 9	—22.8	57	W	.....	.....	5	0	5s	.....	W	0.02	0.5	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.73	755.1	30.27	768.8	—16	—21.7	66	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	W. H. McIntyre.
St. Andrews	29.84	757.9	29.89	759.2	3	—16.1	78	NW	3	1.3	.....	0	0	.....	.....	0.05	1.3	Clear	
St. John's, N. B.	29.68	753.9	29.85	758.4	6.0	—14.4	100	NW	8	3.6	.....	0	7k	.....	.....	0	0	Fair	G. Murdock, C. E.
Saugeen, Ontario*	29.52	749.8	30.30	769.6	14	—10.0	87	NW	24	10.7	.....	.....	10ks	.....	.....	0.01	0.3	Cloudy	K. Stewart.
Stratford, Ontario	28.90	734.0	30.31	769.9	11.1	—11.6	90	Calm	0	0	.....	.....	10s	.....	.....	0	0	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.71	754.6	29.75	755.6	31	— 0.6	94	E	3	1.3	.....	.....	10n	.....	.....	0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.89	759.2	30.31	769.9	11	—11.7	92	W	2	0.9	.....	.....	10ks	.....	NW	0.01	0.3	Cloudy	Magnetic Observatory.
Windsor, N. S.	29.67	753.6	29.77	756.1	17.0	— 8.3	92	W	5	2.2	.....	6k	3n	S	.....	0.04	1.0	Overcast	
Woodstock, Ontario	29.14	740.1	30.30	769.6	13.6	—10.2	89	NW	2	0.9	.....	.....	10s	.....	.....	0	0	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*	29.81	757.2	29.87	758.7	16	— 8.9	67	NW	15	6.7	.....	.....	8s	.....	NW	0.13	3.3	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.94	760.5	30.12	765 0	31	— 0.6	100	N	1	0.4	.....	0	0	.....	.....	0	0	Fair	John Delany.
St. Pierre, N. F.	.....	.....	29.73	755.1	26.6	— 3.0	.....	NE	.....	.....	4	.....	.....	.....	.....	0	0	.....	N. F. Land, Cemd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Cape Town, C. G. H. Obs'y	29.82	757.4	29.85	758.2	79.0	26.1	50	SE	12.3	5.5	.....	4ck	6ks	.....	.....	0	0	.....	The Staff, for D. Gill.
Cape St. Francis Lt. House	29.95	760.7	.....	.....	69.0	20.6	88	E	22.8	10.2	.....	.....	2s	.....	.....	0	0	Fine	John Duthie.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.08	764.1	30.11	764.7	48.9	9.4	83	SE	6.5	2.9	.....	.....	5	.....	.....	0	0	Cloudy	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Tempera-ture of the Air.		Rel. Hum.	Wind. Direc-tion.	Wind. Velocity.		Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.18	665.0	29.90	759 4	67.6	19.8	84	NE			3		3d		NE	0	0	Fair	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.55	750.5	29.60	751.7	34.7	1.5	100	Calm	0	0			10					Foggy	
Fanöe	29.48	748.9	29.50	749.4	34.3	1.3	100	SE			2		10						
Godthaab, Greenland	29.93	760.2	29.97	761.3	12.9	—10.6	73	ENE			4		0						
Stykkisholm, Iceland	29.95	760.6	29.99	761.7	3.2	—16.0	90	NE			9.		10					Snowing	
Thorshavn	29.34	745.2	29.37	746.1	39.6	4.2	79	ENE	36	16			10						
Vestervig	29.42	747.2	29.51	749.6	33.8	1.0	100	E			2		10					Foggy	
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.05	738.1	29.70	754.4	54.3	12.4	74	SSE			1		10nk		E	0.028	0.7	Raining	M. Labroue, Director.
Alençon	29.12	739.6	29.67	753.6	42.1	5.6	94	NE			1		10			0.049	1.2	Misty	M. Nicot, Director.
Arras, Engineer School	30.10	764.6	29.66	753.3	44.2	6.8	82	SW	4.3	1.9			ck						M. Klein, Commandant.
Avignon, Normal School	29.65	753 0	29.72	755.0	54.3	12.4	54	N			1		0			0.16	4.	Very clear	M. Giraud, Director.
Bar-sur-Seine	29.17	740.9	29.73	755.2	45.1	7.3	80	S			1		8k			0.059	1.5	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.41	747.0	29.68	753.9	44.4	6.9	81	SSE			1		8		SW	0.030	0.75	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	28.88	733.5	29.78	756.5	45.1	7.3	83	E			1	5c			SW	0.63	16.	Cloudy	M. Gobin, Director.
Bordeaux, Observatory	29.40	746.7	29.65	753 2	56.3	13.5	75	W			1		10		W	0.091	2.3	Covered	M. Rayet, Director.
Bourges, Normal School	29.08	738.5	29.63	752.6	46.4	8	69	SSE			1		10n		SE	0.130	3.3	Raining	M. Postel, Director.
Brest, Naval Observatory	29.35	745.5	29.59	751.7	47.1	8.4	91	SE			1		4		SE	0.138	3.50		M. de Rermaree, Dir.
Caen, Normal School	29.48	748.9	29.60	751.8	48.4	9.1	92	S			1		8			0.126	3.2	Very cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.43	747.4	29.74	755.5	46.4	8.0	89				1		5			0.020	0.5	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.19	741.4	29.71	754.6	42.4	5.8	85	S			1		2		SW	0	0	¼ covered	M. Baumler, Director.
Clermont-Ferrand Obs'y	28.31	719.1	29.67	753.5	49.6	9.8	72	SE			1		5		SW	0.039	1.0		M. Alluard, Director.
Cluny, Normal School	28.95	735 4	29.85	758.2	49.6	9.8	73	N			1		10		E	0.055	1.4	Covered	M. de Villemontée, Dir.
Commercy, Normal School	28.88	733.6	29.78	755.8	42.6	5.9	88	W			4		kn	W	W	0.102	2.6		Dr. Coulet, Director.
Gap, Normal School	27.12	688.9	29.70	754.3	43.7	6.5	53	SW			1	c				0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.67	728.1	29.81	757.1	54.1	12.3	50	N			2		2		W	0	0		M. Kina, Director.
Grenoble, Normal School	28.81	731.7	29.58	751.3	46.4	8	77	NE			1	ck			NE	0.047	1.20		M. Ablard, Director.
Guéret, Normal School	28.10	713.7	29.68	753.8	48.6	9.2	91	SW			3		5n		NE	0	0	Cloudy	M. Rivoir, Director.
Lamballe, Normal School	29.28	743.7	29.54	750.2	47.8	8.8	89	SSE			1		5		SSE	0	0	Foggy	M. Ollitrault, Director.
Lescar, Normal School	29.11	739.4	29.78	756.3	57.2	14		W			1		10			0	0	Covered	M. Chauvin, Director.
Lorient, Naval Observatory	29.51	749.6	29.61	752.2	50.0	10.0	86	SE			1		10		Calm	0	0	Covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.69	728.6	29.72	754.9	44.6	7.0	76	ESE			1			sn	S	0.012	0.3		M. André, Director.
Mans, Normal School	29.33	744.9	29.63	752.7	45.1	7.3	90	SE			4		5		SW	0.020	0.5	Cloudy	M. Piboen, Director.
Marseille, Observatory	29.47	748.6	29.74	755.4	59.2	15.1	63	NW			1		2		NW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.58	624.3	29.82	757.3	41.0	5.0	74	W	15.0	6.7			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.61	752.2	29.72	755.0	55.8	13.2	62	ENE			2		2		S	0	0	Slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	28.97	735.8	29.74	755.5	44.6	7.0	83	WNW			1		8kn		WSW	0	0	Foggy	M. Hasse.
Nantes, Observatory	29.49	749.0	29.65	753.1	47.1	8.4	92	SE			2		10			0.071	1.8	Light rain	M. Larocque, Dir.
Nice	29.63	752.6	29.66	753.4	55.8	13.2	77	S			3		5	S	S	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.63	752.7	29.74	755.4	53.2	11.8	68	SE	1.8	0.8			1			0.004	0.1		Dr. Fines.
Pic-du-Midi, Plantade	22.25	565.1			28.4	—2.0							10		W	0.035	0.9	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.71	729.1	29.78	756 4	47.5	8.6	76	N			1		2	NW	NW	0	0	Slightly cld'y	M. Tallien.
Puy de Dôme Obs'y, Summit	24.78	629.5			32.5	0.3	98	SW			6		10			0.134	3.4	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.56	750.7	29.59	751.5	50.5	10.3	97	S			2		10			1.06	27.	Raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.39	746.4	29.60	751.8	49.5	9.7	89	SSW			1		5		SW	0.614	15.6	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.60	701.1	29.74	755.3	48.9	9.4	76	E			1		10			0.110	2.8	Raining	M. Richard, Director.
Rouen, Normal School	29.62	752.3	29.71	754.5	52.2	11.2	28	S			1		2		NE	0	0	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	29.47	748.5	29.63	752.5	49.3	9.6	71	WSW			1		5		SW	0.181	4.6	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.51	749.6	29.68	753.8	45.3	7.4	83	SE			1		5	WSW	WSW				M. Renou, Director.
Toulouse, Observatory	29.02	737.1	29.73	755.2	56.5	13.6	62	SSE			1		5			0.126	3.2	Cloudy	M. Baillard, Director.
Tours	29.44	747.7	29.63	752.7	46.4	8.0	83	SE			1		10			0.071	1.8	Covered	M. de Tastes.
Versailles, Observatory	29.18	741.1	29.67	753.6	43.5	6.4	91	SW			1		10			0.016	0.41	Lightly cov'd	Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

‖ Observation taken 25 minutes late.

GERMAN SERIES.

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

Bamberg	28.86	733.1	29.72	754.8	42.4	5.8	84	SW			2		4ks	SSW		0.016	0.4	Light rain	Prof. Dr. Hoh.
Berlin	29.47	748.6	29.65	753.0	43.2	6.2	76	SW			1		9			0	0		Prof. Dr. Arndt.
Breslau	29.20	741.6	29.72	754.9	37.6	3.1	88	Calm			0		9			0	0		Royal University Obs'y.
Carlsruhe	29.33	745.0	29.76	755.9	45.3	7.4	71	S			1		10	SW		0	0		Albert Senz.
Cassel	29.07	738.4	29.67	753.7	44.6	7.0	82	S			2		5	SW		0	0		Dr. H. Möhl.
Frankfort on the Main	29.41	747.0	29.78	756.4	43.9	6.6	87	SSW			2		10			0.138	3.5		Physical Society.
Friedrichshafen	28.34	719.9	29.79	756.7	44.6	7.0	82	SSW			1		8	SW		0	0		Chief Telegrapher Wilhelm.
Hamburg	29.52	749.9	29.60	751.7	40.3	4.6	90	SSW			4		10			0.012	0.3		Dr. R. Kleeman.
Kiel	29.53	750.0	29.54	750.4	39.6	4.2	93	SSW			2		9			0.025	0.62		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.27	743.5	29.69	754.2	44.2	6.8	81	SSW			2		8			0	0		Prof. Dr. Bruhns.
Magdeburg	29.42	747.2	29.65	753.0	42.8	6.0	90	Calm			0		7k	SW		0.051	1.3		Dr. Assmams.
Memel	29.71	754.7	29.75	755.9	29.5	—1.4	91	SE			2		10n					Foggy	Reinbrecht & Issermann.
Munich	27.95	709.8	29.79	756.7	42.8	6.0	74	W			2		7	W		0.059	1.5		Central Station.
Neufahrwasser	29.69	754.0	29.70	754.4	35.6	2.0	91	S			2		8			0	0	Hazy	A Lothes.
Neustadt, Palatinate	29.12	739.6	29.64	752.8	45.0	7.2		Calm			0		8			0	0		Dicknether.
Stuttgart	28.81	731.8	29.72	754.8	45.0	7.2	60	W			1		8	W		0.016	0.4		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.26	717.7	29.77	756.2	44.1	6.7	77	W			2		8	W		0.016	0.4		Prof. Kemlein.
Wustrow	29.60	751.7	29.62	754.3	36.3	2.4	95	SE			2		10s			0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.15	740.5	29.54	750.4	62.1	16.7		W			1.5		5					Sprinkling...	Alexander Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.00	761.9	30.05	763.2	76.7	24.8	65	SSW	5.0	2.2			0			0	0	Blue sky	
Deesa	29.51	749.6	29.99	761.7	82.3	27.9	16	NNW	6.5	2.9			4	WSW		0	0	D. clouds	
Bombay	29.98	761.5	30.02	762.5	79.4	26.3	64	NW	15.0	6.7			0			0	0	Blue sky	
Poona, Yarrowda	28.11	714.0	29.95	760.8	83.0	28.3	15	NNE	4.0	1.8			0			0	0	Blue sky	
Belgaum	27.43	696.8	29.96	761.0	80.3	26.8	12	E	2.0	0.9			0			0	0	Blue sky	
Lahore	29.27	743.4	30.03	762.8	69.7	20.9	32	Calm	1.1	0.5			0			0	0	Blue sky	
Roorkee	29.10	739.1	30.02	762.5	70.2	21.2	35	NW	2.1	0.9			1			0	0		
Agra	29.44	747.7	30.01	762.2	79.8	26.6	24	Calm	2.6	1.2			0			0	0		
Nagpur	28.96	735.7	30.01	762.3	80.5	26.8	24	Calm	2.3	1.0			0			0	0	Blue sky	
Jubbulpore	28.68	728.5	30.06	763.5	78.3	25.7	12	S	2.0	0.9			0			0	0	Blue sky	
Lucknow	29.59	751.6	29.98	761.4	72.2	22.3	22	Calm	0.8	0.4			0			0	0	Blue sky	
Allahabad	29.72	754.8	30.04	763.0	71.3	21.8	43	Calm	1.3	0.6			0			0	0	Blue sky	
Patna	29.85	758.1	30.04	762.9	66.2	19.0	65	Calm	0.6	0.3			0			0	0	Blue sky	
Hazaribagh	27.98	710.7	30.06	763.4	65.3	18.5	27	NW	5.3	2.4			0			0	0	Blue sky	
Cuttack	29.95	760.7	30.03	762.8	74.9	23.8	45	Calm	0.3	0.1			0			0	0	Blue sky	
Calcutta, Alipore	30.00	762.1	30.03	762.6	70.9	21.6	49	W	0.5	0.2			0			0	0	Blue sky	
Goalpara	29.60	751.9	30.02	762.5	69.9	21.1	49	Calm	1.8	0.8			0			0	0	Blue sky	
Chittagong	29.93	760.3	30.02	762.6	70.8	21.6	71	W	2.3	1.0			0			0	0	Misty	
Sibsagar	29.73	755.0	30.08	764.0	62.3	16.8	86	SE	2.7	1.2			2			0.48	12.2	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.27	743.5	29.70	754.4	46.6	8.1	70	Calm	0	0			9			0.425	10.8		Prof. Giovanni Clodig
Milan	29.16	740.7	29.71	754.6	41.4	5.2	87	W	1.3	0.6			3			0	0		Prof. Schiaparelli.
Padua	29.56	750.9	29.68	753.8	46.8	8.2	87	WNW	9.4	4.2			10			0.142	3.6		Prof. Dott. Lorenzoni.
Moncalieri	28.78	731.0	29.73	755.1	36.1	2.3	80	NNW	1.8	0.8			0			0	0		Prof. P. F. Denza.
Genoa	29.48	748.9	29.68	753.9	57.2	14.0	65	S	1.8	0.8			0			0.146	3.7		Prof. G. M. Garibaldi.
Mondovi	27.77	705.3	29.78	756.4	43.0	6.1	49	W			4		0			0	0		Prof. D. C. Bruno.
Pesaro	29.61	752.1	29.66	753.4	46.4	8.0	90	NW	5.6	2.5			10			0.197	5.0		Prof. Luigi Guidi.
Florence	29.42	747.2	29.72	754.9	50.5	10.3	87	S			2		10			0.051	1.3		Cav. F. Meucci.
Leghorn	29.61	752.0	29.69	754.2	54.5	12.5	83	NW	1.3	0.6			4			0.315	8.0		Prof. P. Monte.
Rome	29.46	748.3	29.64	752.8	54.5	12.5	70	Calm	0	0			9			0.898	22.8		Prof. P. S. Ferrari.
Lecce	29.28	743.6	29.53	750.1	53.6	12.0	72	NW	13.6	6.1			8			0.028	0.7		Prof. C. de Giorgi.
Cosenza	28.72	729.5	29.03	752.5	50.4	10.2	77	SE	0.7	0.3			10	SSE		2.409	61.2		Prof. D. Conti.
Cagliari	29.55	750.6	29.74	755.5	61.5	16.4	58	NW			4		1			0.020	0.5		Prof. A. Pacinotti.
Palermo	29.48	748.8	29.73	755.1	61.5	16.4	38	NW	21.7	9.7			0			0.012	0.3		Prof. G. Cincciatore.
Syracuse	29.66	753.4	29.71	754.5	64.4	18.0	49	WNW	9.8	4.4			3	WSW		0	0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.05	737.9	29.57	751.1	52.5	11.4	80	W	18.1	8.1			9ks	W		0.276	7.0		Prof. F. Brioschi.
Stelvio	21.92	558.5			21.6	— 5.8	85	E					0			0	0		P. F. Denza.
Valdobbia	21.86	555.2			20.1	— 6.6	76	SE					2			0	0		
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.35	770.9	30.36	771.1	27.6	— 2.4	61	NNE	7.8	3.5			0			0	0	Clear	K. Sasaki.
Kioto	30.16	766.0	30.35	770.9	25.4	— 3.7	90						0			0	0	Clear	
Nagasaki, I. M. Obs'y	30.11	764.8	30.32	770.1	31.8	— 0.1	83	SSE	1.0	0.4			0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	30.09	764.3	30.17	766.3	32.5	0.3	46	NNW	4.4	2.0		0	0			0	0	Clear	The Staff.
Wakayama	30.30	769.6	30.35	770.9	30.7	— 0.7	75	NW	1.9	0.8			10cks			0	0	Cloudy	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.88	758.9	30.07	763.7	79.4	26.3	47	ESE	21.5	9.6		0	2		ESE	0.01	0.3	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.74	755.3	30.00	762.0	70.0	21.1	87	SE			1		9n		S	Inap.	Inap.	Threatening	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barreeta, M. D.
Tlacotalpam																			Prof. M. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. C. Castrillon.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing																			
Groningen	29.45	747.9	29.50	749.3	40.1	4.5		SW			4					0	0		
Helder	29.51	749.6	29.51	749.6	39.2	4.0		SW			4					0.028	0.7		
Hellevoetsluis	29.58	751.2	29.58	751.2	41.5	5.3	91	WSW			3					0	0		
Utrecht	29.56	750.8	29 61	752.0	45.1	7.3	83	SW			4		5			0.012	0.3	Cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.41	747.1	29.48	748.7	35.7	2.6	82	Calm	0	0	.....	.....	8	.....	.....	0.004	0.1	Light fog	
Christiania	29.48	748.8	29.63	752.7	29.1	— 1.6	76	NNE	2	1	.....	.....	10	.....	.....	0.039	1.0	.....	
Gjæsvær	29.64	752.8	29.66	753.4	18.7	— 7.4	.....	Calm	.....	.....	0	.....	10	.....	.....	.....	.....	Light snow.	
Lodingen	29.63	752.7	29.68	753.9	17.8	— 7.9	83	N	.....	.....	2	.....	2	.....	.....	0.024	0.6	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.59	751.5	29.74	755.5	59.4	15.2	93	WSW	11.2	5.0	.....	.....	5	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	28.97	735.7	29.96	761.0	60.8	16.0	77	WSW	17.4	7.8	.....	.....	9	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.14	765.6	30.22	767.7	68.4	20.2	70	WSW	7.4	3.3	.....	.....	3	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.64	752.8	30.00	762.0	60.3	15.7	94	SW	26.2	11.7	.....	.....	10	.....	.....	0.024	0.6	.....	The Staff.
Ponta Delgada, Azores	29.82	757.3	29.89	759.1	62.6	17.0	80	SW	17.4	7.8	.....	.....	3	.....	.....	0.345	8.8	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.48	748.9	30.71	780.0	— 2.6	—19.2	88	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.91	759.7	29.93	760.2	13.3	—10.4	90	SE	4	2	.....	.....	10	.....	.....	.....	.....	Light snow.	Capt. Sselliwerstow.
Astrakhan	30.21	767.2	30.12	765.1	28.9	— 1.7	74	ESE	7	3	.....	.....	10cp	.....	.....	.....	.....	Heavy clouds	Capt. Wisganow.
Barnaul	30.15	765.9	30.73	780.5	— 6.7	—21.5	73	SW	4	2	.....	.....	9	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.56	750.7	29.81	757.1	30.0	— 1.1	84	Calm	0	0	.....	.....	10n	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	29.58	751.3	30.64	778.2	12.7	—10.7	55	W	4	2	.....	2c	.....	.....	.....	.....	.....	Light clouds	Meteorological Obs'y.
Kasan	30.21	767.2	30.52	775.1	— 4.2	—20.1	85	SE	2	1	.....	.....	9	.....	.....	.....	.....	.....	Observatory.
Kertch	29.83	757.7	29.85	758.2	34.7	1.5	94	NE	2	1	.....	.....	10	.....	.....	.....	.....	Foggy	Lagorio.
Kieff	29.21	742.0	29.89	759.2	22.8	— 5.1	98	SE	4	2	.....	.....	10n	.....	.....	.....	.....	Foggy	Observatory.
Krotkowo, N. 58°47', E. 48°34'	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.69	754.0	29.90	759.4	33.4	0.8	87	SSE	22	10	.....	.....	10	.....	.....	Blank		.....	Meteorological Obs'y.
Moscow	29.50	749.3	30.10	764.5	12.6	—10.8	76	S	4	2	.....	.....	7s	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.91	708.8	30.56	776.3	—17.0	—27.2	74	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	Light clouds	Meteorological Obs'y.
Nikolaiev	29.89	759.1	29.96	760.9	24.8	— 4.0	98	E	4	2	.....	.....	10n	.....	.....	.....	.....	.....	1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	30.00	762.0	30.09	764.2	—11.2	—24.0	62	W	9	4	.....	.....	0	.....	.....	.....	.....	.....	Lieut. Iwanow.
Nukuss	30.13	765.3	30.37	771.5	37.0	2.8	53	NE	13	6	.....	.....	0	.....	.....	.....	.....	.....	Dr. Dobrochotow.
Pekin, China	30.13	765.4	30.28	769.0	19.9	— 6.7	60	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.82	757.5	29.84	757.9	26.1	— 3.3	80	SSE	11	5	.....	.....	10n	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.52	724.4	29.95	760.7	49.1	9.5	52	Calm	0	0	.....	.....	7cs	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	30.31	744.4	29.74	755.5	33.4	0.8	77	SSE	4	2	.....	.....	9	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.39	746.6	29.83	757.7	32.7	0.4	87	Calm	0	0	.....	.....	9	.....	.....	.....	.....	Heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.10	764.6	30.43	773.0	—11.2	—24.0	82	SSE	2	1	.....	.....	6	.....	.....	.....	.....	.....	M. O. Marks.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.36	745.7	41.0	5.0	85	W	.....	.....	1	.....	10k	.....	.....	0	0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.18	741.2	46	7.8	92	SW	.....	.....	4	5	3	W	.....	0	0	.....	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.24	742.7	.....	.....	.....	SE	.....	.....	6	.....	10	.....	.....	Blank		.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y ‡	29.69	754.0	29.79	756.7	59.7	15.4	67	SSW	1.3	0.6	.....	.....	7	.....	.....	0	0	Clouds	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.67	753.5	29.72	754.9	57.4	14.1	86	NW	4.0	1.77	.....	2	6	SE	.....	0.154	3.9	Rainy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.84	681.8	.....	.....	49.5	9.7	71	W	7.8	3.52	.....	.....	3	.....	.....	0.039	1.0	Light clouds	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.65	702.4	29.90	759.4	51.3	10.7	95	W	19.2	8.6	.....	.....	10	.....	.....	0.417	10.6	Raining	The Staff.
Murcia, Met. Obs'y. ‡	29.78	756.3	29.93	760.1	74.5	23.6	63	W	1.6	0.7	.....	2	3	SE	.....	0.008	0.2	Misty	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.85	732.8	29.71	754.5	54.0	12.2	80	SW	19.9	8.9	.....	.....	8	.....	.....	1.543	39.2	Almost cov'd	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.09	764.3	30.16	766.0	66.8	19.3	90	E	2.7	1.2	.....	0	18	.....	.....	0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	30.00	761.9	30.05	763.2	77.0	25.0	67	SE	6.6	3.0	.....	.....	.....	.....	.....	0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.07	763.8	30.17	766.3	63.0	17.2	90	SW	13.4	6.0	.....	.....	10	.....	SW	0.034	0.9	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.02	762.6	30.11	764.9	73.8	23.2	94	SE	17.2	7.69	.....	3k	3kn	SE	SE	0.059	1.75	Cloudy	Enrique Gadea, Chief Engineer.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.76	755.8	29.80	756.8	7.5	—13.6	100	Calm	.....	.....	0	.....	10	.....	.....	0	0	.....	
Umea	29.75	755.6	29.80	756.9	11.1	—11.6	100	NW	.....	.....	2	.....	10	.....	.....	0.110	2.8	.....	
Hernosand	29.78	756.4	29.83	757.7	15.3	— 9.3	91	Calm	.....	.....	0	.....	10	.....	.....	0.028	0.7	.....	
Stockholm	29.48	748.8	29.66	753.3	30.2	— 1.0	94	E	.....	.....	2	.....	10	.....	.....	0.004	0.1	.....	
Wisby	29.56	750.8	29.62	752.3	36.0	2.2	95	SE	.....	.....	2	.....	10	.....	.....	0.079	2.0	.....	
Sub-Series.																			
Upsala	29.57	751.1	29.66	753.3	26.4	— 3.1	94	ENE	6.5	2.9	.....	.....	10	.....	.....	0.064	1.63	Snowing	Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.34	719.9	29.81	757.1	41.9	5.5	81	NE	.....	.....	1	.....	8	.....	.....	0.181	4.6	Covered	The Observatory.
Zurich	28.14	714.7	29.81	757.1	44.1	6.7	80	SW	.....	.....	1	.....	3	.....	.....	0	0	Clear	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —7.2 mm.; Ther. +3°.3 cent.; Hum. +5 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.68	753.9	48.9	9.4	76	NE	4	2.0	.....	.....	9	.....	SW	0.055	1.4	.....	The Observatory.
Valona	.....	.....	29.54	750.4	58.8	14.9	.....	SW	.....	.....	2	.....	5	.....	.....	1.66	27.	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.80	756.9	65.1	18.4	73	NE	.....	.....	1	10ck	.....	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force o—10	CLOUDS. Amount and kind. Up'er o—10	Lo'er o—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.15	765.8	30.24	768.1	19	— 7.2	69	W	2	0.9	.....	0	8ks	.....	NW	0.06	1.5	Fair	
Alpena, Michigan	29.68	753.9	30.40	772.1	5	—15.0	75	NW	7	3.1	.....	.....	10s	.....	Calm	0.10	2.5	Cloudy	
Atton Id., Alaska‡	30.29	769.4	.....	.....	34	1.1	100	S	7	3.1	.....	.....	10s	.....	E	0	0	Cloudy	
Atlanta, Georgia	28.91	734.3	30.07	763.8	50	10.0	86	SW	8	3.6	.....	.....	10s;sm	.....	Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.21	767.3	30.22	767.6	27	— 2.8	88	N	3	1.3	.....	10k	Haze	NW	Calm	Inap.	Inap.	Cloudy	
Augusta, Georgia	29.98	761.5	30.19	766.8	41	5.0	91	Calm	0	0	.....	0	5s;fg	.....	W;C	0	0	Fair	
Baltimore, Maryland	30.18	766.6	30.23	767.8	35	1.7	80	Calm	0	0	.....	5ck	Fog	NW	Calm	0	0	Dense fog	
Barnegat, New Jersey	30.18	766.6	30.20	767.1	27	— 2.8	88	NW	10	4.5	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Benton, Montana	27.18	690.4	.....	.....	—19	—28.3	66	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Bismarck, Dakota	28.41	721.6	30.27	768.8	—13	—25.0	.....	E	8	3.6	.....	Haze	0	Calm	.....	Inap.	Inap.	Dense haze	
Boise City, Idaho	27.12	688.8	30.08	764.0	30	— 1.1	89	W	2	0.9	.....	.....	10s	.....	W	0.56	14.2	Cloudy	
Boston, Massachusetts	29.96	761.0	30.13	765.3	15	— 9.4	82	NW	11	4.9	.....	.....	10s	.....	NW	0.10	2.5	Cloudy	
Brackettville, Texas	28.78	731.0	29.82	757.4	61	16.1	100	S	5	2.2	.....	.....	10s	.....	S	0	0	Cloudy	
Brownsville, Texas	29.98	761.5	30.03	762.7	66	18.9	95	SE	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Buffalo, New York	29.51	749.5	30.27	768.8	18	— 7.8	84	NW	4	1.8	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy	
Burlington, Vermont	29.95	760.7	30.28	769.1	4	—15.6	74	E	6	2.7	.....	.....	10s	.....	N	0.07	1.8	Cloudy	
Cairo, Illinois	29.56	750.8	29.95	760.7	48	8.9	85	SE	1	0.4	.....	.....	10s	.....	Calm	0	0	Threatening	
Campo, California	27.51	698.7	30.08	764.0	40	4.4	91	W	1	0.4	.....	.....	Fog	.....	W	0	0	Dense fog	
Camp Thomas, Arizona	27.27	692.6	.....	.....	43	6.1	75	Calm	.....	.....	0	5c	0	Calm	.....	0	0	Fair	
Cape Henry, Virginia	30.17	766.3	30.19	766.8	36	2.2	71	N	1	0.4	.....	5ck	0	NW	.....	0	0	Fair	
Cape May, New Jersey	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Castroville, Texas	29.18	741.1	29.88	758.9	61	16.1	100	Calm	0	0	.....	.....	10n	.....	Calm	0.02	0.5	Light rain	
Cedar Keys, Florida	30.18	766.6	30.20	767.1	54	12.2	93	SE	6	2.7	.....	.....	Fog	.....	Calm	0	0	Dense fog	
Champaign, Illinois	29.17	740.9	30.00	762.0	32	0.0	79	E	7	3.1	.....	.....	10n	.....	E	0.01	0.3	Light rain	
Charleston, S. Carolina	30.11	764.8	30.17	766.3	52	11.1	79	SW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Charlotte, N. Carolina	29.25	742.9	30.08	764.0	42	5.6	83	E	4	1.8	.....	10cs	Fog	Calm	Calm	0	0	Cloudy	
Chattanooga, Tennessee	29.26	743.2	30.10	764.5	37	2.8	81	W	1	0.4	.....	5k	Fog	W	Calm	0	0	Dense fog	
Cheyenne, Wyoming	23.78	606.5	29.72	754.9	40	4.4	48	W	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Chicago, Illinois	29.37	746.0	30.10	764.5	26	— 3.3	88	E	20	8.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Chincoteague, Virginia	30.19	766.8	30.21	767.3	30	— 1.1	89	NW	7	3.1	.....	5ck	2s	NW	Calm	Inap.	Inap.	Cloudy	
Cincinnati, Ohio	29.44	747.8	30.12	765.0	39	3.9	77	E	5	2.2	.....	.....	10n;fg	.....	Calm	Inap.	Inap.	Light rain	
Cleveland, Ohio	29.50	749.3	30.27	768.8	26	— 3.3	88	NE	5	2.2	.....	.....	10s;fg	.....	Calm	0	0	Cloudy	
Coleman City, Texas	28.12	714.2	29.76	755.9	57	13.9	69	SW	12	5.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Columbus, Ohio	29.28	743.7	30.16	766.1	33	0.6	79	E	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Concho, Texas	27.99	710.9	29.63	752.6	61	16.1	88	SW	12	5.4	.....	0	5s	.....	Calm	0	0	Fair	
Corsicana, Texas	29.51	749.5	29.97	761.2	64	17.8	83	S	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Davenport, Iowa	29.39	746.5	30.07	763.8	25	— 3.9	87	E	14	6.3	.....	.....	10n	.....	Calm	Inap.	Inap.	Light rain	
Dayton, Washington T'y	28.33	719.6	30.11	764 8	21	— 6.1	85	Calm	0	0	.....	.....	10s	.....	Calm	0.04	1.0	Cloudy	
Deadwood, Dakota	25.10	637.5	.....	.....	1	—17.2	71	NE	6	2.7	.....	.....	10s	.....	Calm	0.06	1.5	Cloudy	
Decatur, Texas	28.69	728.7	29.83	757.7	60	15.6	88	S	14	6.3	.....	10k	0	W	.....	0	0	Cloudy	
Delaware Breakwater, Del.	30.18	766.6	30.21	767.3	30	— 1.1	89	NW	10	4.5	.....	2ck	0	W	.....	0	0	Clear	
Denison, Texas	29.06	738.1	29.83	757.7	62	16.7	83	SW	16	7.2	.....	0	8ks	.....	SW	0	0	Fair	
Denver, Colorado	24.57	624.1	29.79	756.7	30	— 1.1	100	NW	4	1.8	.....	0	Fog	.....	.....	0	0	Dense fog	
Des Moines, Iowa	29.13	739.9	30.06	763.5	23	— 5.0	86	NE	8	3.6	.....	.....	10n	.....	Calm	Inap.	Inap.	Light snow	
Detroit, Michigan	29.58	751.3	30.31	769.9	19	— 7.2	85	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Dodge City, Kansas	27.30	693.4	29.72	754.9	18	— 7.8	68	NW	15	6.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Dubuque, Iowa	29.40	746.7	30.14	765.5	23	— 5.0	86	N	9	4.0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Duluth, Minnesota	29.71	754.6	30.50	774.7	— 3	—19.4	83	N	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Eagle Pass, Texas	29.20	741.7	29.93	760.2	59	15.0	94	SE	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
Eagle Rock, Texas	25.03	635.8	29.68	753.9	34	1.1	90	SW	20	8.9	.....	.....	10s	.....	Calm	0.98	24.9	Cloudy	
Eastport, Maine	29.84	757.9	29.91	759.7	3	—16.1	73	Calm	0	0	.....	0	1s	.....	Calm	0.03	0.8	Clear	
Edinburg, Texas	.....	.....	.....	.....	67	19.4	64	S	.....	.....	4	0	5ks	.....	S	0	0	Fair	
El Paso, Texas	26.20	665.5	.....	.....	50	10.0	20	NW	6	2.7	.....	0	1s	.....	W	0	0	Clear	
Erie, Pennsylvania	29.48	748.8	30.24	768.1	24	— 4.4	87	NE	6	2.7	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Escanaba, Michigan	29.71	754.6	30.45	773.4	4	—15.6	74	N	12	5.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Florence, Arizona	28.62	726.9	30.22	767.6	45	7.2	61	Calm	0	0	.....	5cs	0	Calm	.....	0	0	Fair	
Fort Apache, New Mexico	25.02	635.5	30.47	773.9	44	6.7	60	E	1	0.4	.....	.....	10s	.....	Calm	Inap	Inap.	Cloudy	
Fort Assinniboine, Montana	27.14	689.3	.....	.....	—19	—28.3	30	SW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Fort Bennett, Dakota	28.61	726.7	.....	.....	0	—17.8	70	NE	4	1.8	.....	.....	10s	.....	Calm	0.30	7.6	Cloudy	
Fort Buford, Dakota	28.12	714.2	30.23	767.8	—10	—23.3	100	E	12	5.4	.....	10cs	0	Calm	.....	0	0	Cloudy	
Fort Custer, Montana	26.75	679.7	.....	.....	4	—15.6	74	NW	4	1.8	.....	.....	10s	.....	Calm	0.14	3.6	Cloudy	
Fort Davis, Texas	25.16	639.0	30.12	765.0	57	13.9	63	SW	8	3.6	.....	.....	10ks	.....	Calm	0	0	Cloudy	
Fort Elliott, Texas	27.10	688.3	29.44	747.8	30	— 1.1	78	NE	20	8.9	.....	.....	Fog	.....	.....	0	0	Dense fog	
Fort Gibson, Indian T'y	29.27	743.4	29.82	757.4	38	3.3	91	W	8	3.6	.....	.....	Fog	.....	.....	0	0	Dense fog	
Fort Grant, Arizona	25.20	640.1	30.00	762.0	53	11.7	15	N	11	4.9	.....	2k	0	Calm	.....	0	0	Clear	
Fort Griffin, Texas	28.52	724.4	29.75	755.6	62	16.7	77	S	21	9.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Keogh, Montana	27.48	698.0	.....	.....	6	—14.4	76	E	11	4.9	.....	.....	10s	.....	Calm	0	0	Cloud	
Fort Macon, North Carolina	30.12	765.0	30.13	765.3	43	6.1	83	NW	4	1.8	.....	5k	Haze	NW	Calm	0	0	Fair	
Fort Missoula, Montana	25.12	663.4	.....	.....	18	— 7.8	100	SW	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort McKavett, Texas	27.68	703.1	29.56	750.8	60	15.6	94	S	11	4.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Shaw, Montana	25.23	666.2	.....	.....	—20	—28.9	100	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Sill, Indian Territory	28.59	726.2	29.74	755.4	29	— 1.7	78	N	14	6.3	.....	0	0	.....	.....	0	0	Clear	
Fort Stevenson, Dakota	28.27	718.0	.....	.....	—21	—29.4	100	NW	3	1.3	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Fort Verde, Arizona	.....	.....	.....	.....	34	1.1	79	W	.....	.....	1	0	0	.....	.....	0.02	0.5	Clear	
Fredericksburg, Texas	28.22	716.8	29.75	755.6	60	15.6	100	W	13	5.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Galveston, Texas	30.00	762.0	30.04	763.0	60	15.6	100	SW	9	4.0	.....	.....	Fog	.....	Calm	0.01	0.3	Dense fog	
Grand Haven, Michigan	29.58	751.3	30.28	769.1	20	— 6.7	85	NE	8	3.6	.....	.....	10n	.....	Calm	0.01	0.3	Light snow	
Hatteras, North Carolina	30.13	765.3	30.15	765.8	41	5.0	91	NE	1	0.4	.....	2c	0	Calm	.....	0	0	Fair	
Helena, Montana	25.70	652 8	.....	.....	— 5	—20.6	100	N	1	0.4	.....	0	2ks	.....	Calm	0	0	Fair	
Henrietta, Texas	28.81	731.8	29.71	754.6	58	14.4	82	SW	12	5.4	.....	.....	10s	.....	SW	0	0	Cloudy	
Indianapolis, Indiana	29.25	742.9	30.00	762.0	35	1.7	80	E	7	3.1	.....	.....	9s;fg	.....	Calm	0	0	Cloudy	
Indianola, Texas	30.01	762.2	30.04	763.0	58	14.4	100	S	2	0.9	.....	.....	Fog	.....	Calm	0.02	0.5	Dense fog	
Jacksboro, Texas	28.68	728.5	29.78	756.4	62	16.7	83	SW	12	5.4	.....	.....	10s	.....	SW	0	0	Threatening	
Jacksonville, Florida	30.14	765.5	30.19	766.8	52	11.1	86	SW	2	0.9	.....	5cs	Fog	Calm	.....	0	0	Fair	
Keokuk, Iowa	29.29	744.0	29.97	761.2	29	— 1.7	89	E	11	4.9	.....	.....	10n	.....	Calm	Inap.	Inap.	Light rain	
Key West, Florida	30.16	766.1	30.19	766.8	69	20.6	90	E	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Kittyhawk, North Carolina	30.15	765.8	30.18	766.6	37	2.8	90	N	10	4.5	.....	2c	0	Calm	.....	0	0	Clear	
Knoxville, Tennessee	29.07	738.4	30.09	764.3	42	5.6	83	E	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
La Crosse, Wisconsin	29.41	747.0	30.20	767.1	18	— 7.8	84	NE	4	1.8	.....	.....	10n	.....	Calm	0.22	5.6	Light snow	
La Mesilla, New Mexico	26.07	662.2	30.22	767.6	44	6.7	37	S	1	0.4	.....	0	8s	.....	Calm	0	0	Cloudy	
Laredo, Texas	29.53	750.0	29.87	758.7	64	17.8	94	SE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Leavenworth, Kansas	29.04	737.6	29.92	760.0	27	— 2.8	88	N	11	4.9	.....	.....	10s	.....	.....	0.05	1.3	Cloudy	
Lewiston, Idaho	29.35	745.5	30.04	763.0	27	— 2.8	88	E	12	5.4	.....	.....	10s	.....	W	0.19	4.8	Cloudy	
Little Rock, Arkansas	29.61	752.1	29.92	760.0	53	11.7	93	S	8	3.6	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Los Angeles, California	29.78	756.4	30.15	765.8	53	11.7	80	N	5	2.2	.....	0	4s	.....	Calm	0.13	3.3	Fair	
Louisville, Kentucky	29.44	747.8	30.01	762.2	39	3.9	82	NE	6	2.7	.....	.....	10n	.....	Calm	Inap.	Inap.	Light rain	
Lynchburg, Virginia	29.46	748.3	30.18	766.6	34	1.1	79	Calm	0	0	.....	0	Fog	.....	Calm	0	0	Clear	
Madison, Wisconsin	29.12	739.6	30.18	766.6	18	— 7.8	84	NE	15	6.7	.....	.....	10n	.....	Calm	0.10	2.5	Light snow	
Marquette, Michigan	29.70	754.4	30.50	774.7	1	—17.2	71	N	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Mason, Texas	28.33	719.6	30.06	763.4	62	16.7	88	Calm	0	0	.....	0	2ks	.....	Calm	0	0	Fair	
Memphis, Tennessee	29.65	753.1	29.97	761.2	51	10.6	86	SE	6	2.7	.....	8cs	Fog	SW	Calm	0	0	Fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.45	748.0	30.23	767.8	22	— 5.6	86	NE	25	11.2	.....	.....	10s	.....	NE	0.05	1.3	Cloudy	
Mobile, Alabama	30.07	763.8	30.14	765.5	56	13.3	94	S	4	1.8	.....	.....	Fog	.....	.....	0	0	Dense fog	
Montgomery, Alabama	29.91	759.7	30.15	765.8	53	11.7	93	SW	6	2.7	.....	.....	Fog	.....	Calm	0	0	Dense fog	
Morgantown, W. Virginia	29.17	740.9	30.20	767.1	37	2.8	63	N	5	2.2	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Moorhead, Minnesota	29.37	746.0	30.52	775.2	—25	—31.7	53	N	9	4.0	.....	0	0	.....	.....	0	0	Clear.	
Mt. Washington, N. H.	23.20	589.3	29.56	750.8	—15	—26.1	100	NW	74	33.1	.....	.....	Fog	.....	NW	0.12	3.0	Dense fog	
Nashville, Tennessee	29.46	748.3	30.00	762.0	46	7.8	77	Calm	0	0	.....	5ck	Sm'e	W	Calm	0	0	Fair	
New Haven, Connecticut	30.07	763.8	30.20	767.1	17	— 8.3	67	NW	1	0.4	.....	5cs	5s	NW	Calm	0.06	1.5	Cloudy	
New London, Connecticut	30.10	764.5	30.16	766.1	20	— 6.7	70	NW	14	6.3	.....	1cs	2s	N	NW	0.05	1.3	Fair	
New Orleans, Louisiana	30.07	763.8	30.13	765.3	59	15.0	94	S	6	2.7	.....	.....	10s	.....	S	0	0	Cloudy	
Newport, Rhode Island	30.06	763.5	30.11	764.8	22	— 5.6	72	W	19	8.5	.....	4ck	1s	W	Calm	0.03	0.8	Fair	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	30.13	765.3	30.16	766.1	23	— 5.0	73	NW	34	15.2	.....	8cs	0	NW	.....	0.07	1.8	Fair	
New York, New York	30.01	762.2	30.20	767.1	24	— 4.4	74	NW	15	6.7	.....	5cs	5s	Calm	Calm	0.08	2.0	Cloudy	
Norfolk, Virginia	30.13	765.3	30.19	766.8	37	2.8	71	NE	2	0.9	.....	5ck	Sm'e	NW	Calm	0	0	Fair	
North Platte, Nebraska	27.04	686.8	29.86	758.4	3	—16.1	86	NE	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Olympia, Washington T'y	30.01	762.2	30.06	763.5	27.0	— 2.8	94	NE	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Omaha, Nebraska	28.91	734.3	30.12	765.0	8	—13.3	100	N	18	8.0	.....	.....	10n	.....	Calm	0.01	0.3	Light snow.	
Oswego, New York	29.90	759.4	30.25	768.3	16	— 8.9	74	N	12	5.4	.....	5k	0	NW	.....	0.21	5.3	Fair	
Pensacola, Florida	30.15	765.8	30.18	766.6	58	14.4	94	SE	1	0.4	.....	.....	Fog	.....	Calm	0	0	Dense fog	
Philadelphia, Pa	30.16	766.1	30.22	767.6	30	— 1.1	89	NE	10	4.5	.....	.....	10s	.....	W	0	0	Cloudy	
Phœnix, Arizona	28.97	735.8	30.85	782.6	42	5.6	74	E	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Pike's Peak, Colorado	17.59	446.8	29.80	756.9	12	—11.1	100	NW	24	10.7	.....	.....	10n	.....	Calm	0.07	1.8	Light snow.	
Pilot Point, Texas	29.08	738.6	29.91	759.7	60	15.6	82	S	16	7.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Ploche, Nevada	24.02	610.1	29.79	756.7	36	2.2	100	SE	3	1.3	.....	.....	10s	.....	Calm	0.15	3.8	Cloudy	
Pittsburg, Pennsylvania	29.39	746.5	30.24	768.1	33	0.6	79	NE	3	1.3	.....	.....	10s	.....	NE	0	0	Cloudy	
Port Huron, Michigan	29.59	751.6	30.32	770.1	16	— 8.9	83	N	12	5.4	.....	.....	10n	.....	Calm	Inap.	Inap.	Light snow.	
Portland, Maine	30.01	762.2	30.07	763.8	6	—14.4	76	NW	5	2.2	.....	2k	5s	NW	Calm	0.07	1.8	Fair	
Portland, Oregon	30.01	762.2	30.09	764.3	34.5	1.4	70	NE	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	45	7.2	84	NE	8	3.6	.....	.....	10s	.....	NE	0	0	Cloudy	
Prescott, Arizona	24.77	629.2	30.13	765.3	33	0.6	70	W	1	0.4	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Punta Rassa, Florida	30.18	766.6	30.20	767.1	62	16.7	94	N	6	2.7	.....	.....	Fog	.....	.....	0	0	Dense fog	
Red Bluff, California	29.69	754.1	30.04	763.0	55.5	13.1	93	S	7	3.1	.....	.....	10s	.....	Calm	0.65	16.5	Cloudy	
Rio Grande City, Texas	29.80	756.9	30.01	762.2	65	18.3	94	SE	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Rochester, New York	29.60	751.8	30.26	768.6	18	— 7.8	84	N	8	3.6	.....	.....	10n	.....	Calm	0.08	2.0	Cloudy	
Roseburg, Oregon	29.52	749.8	30.11	764.8	42	5.6	96	W	1	0.4	.....	.....	10s	.....	Calm	0.16	4.1	Cloudy	
Sacramento, California	30.02	762.5	30.10	764.5	55	12.8	93	S	6	2.7	.....	.....	10s	.....	Calm	0.91	23.1	Cloudy	
St. Louis, Missouri	29.34	745.2	29.92	760.0	36	2.2	90	E	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
St. Paul, Minnesota	29.34	745.2	30.25	768.3	11	—11.7	90	N	11	4.9	.....	.....	10n	.....	N	0.67	17.0	Light snow	
Salt Lake City, Utah	25.51	647.9	29.84	757.9	47	8.3	77	S	11	4.9	.....	.....	10n	.....	Calm	0.09	2.3	Light rain	
San Antonio, Texas	29.30	744.2	29.99	761.7	63	17.2	100	S	2	0.9	.....	.....	10n	.....	Calm	0.03	0.8	Light rain	
San Diego, California	30.06	763.5	30.14	765.5	54	12.2	80	Calm	0	0	.....	0	5ks	.....	Calm	Inap.	Inap.	Fair	
Sandusky, Ohio	29.52	749.8	30.23	767.8	32	0.0	69	NE	11	4.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Sandy Hook, New Jersey	30.14	765.5	30.18	766.6	26	— 3.3	75	NW	24	10.7	.....	5ck	5s	W	Calm	Inap.	Inap.	Cloudy	
San Francisco, California	30.02	762.5	30.08	764.0	56	13.3	84	SW	5	2.2	.....	.....	9s	.....	SW	0.31	7.9	Cloudy	
Santa Fé, New Mexico	23.29	591.6	29.83	757.7	34	1.1	70	N	.....	.....	3	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	30.08	764.0	30.17	766.3	54	12.2	80	SW	5	2.2	.....	0	Fog	.....	Calm	0	0	Clear	
Shreveport, Louisiana	29.73	755.1	29.97	761.2	62	16.7	91	S	5	2.2	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Silver City, New Mexico	24.28	616.7	30.48	774.2	44	6.7	37	N	6	2.7	.....	Haze	5s	.....	N	0	0	Fair	
Smithville, North Carolina	30.15	765.8	30.19	766.8	48	8.9	93	W	5	2.2	.....	8k	1s	Calm	Calm	0	0	Cloudy	
Socorro, New Mexico	25.43	645.9	29.49	749.0	40	4.4	65	NW	3	1.3	.....	0	5s	.....	Calm	0	0	Fair	
Springfield, Illinois	29.28	743.7	29.98	761.5	35	1.7	100	E	9	4.0	.....	.....	10n;fog	.....	Calm	0.03	0.8	Light rain	
Springfield, Massachusetts	30.03	762.7	30.17	766.3	18	— 7.8	53	NW	9	4.0	.....	0	5s	.....	Calm	0.04	1.0	Fair	
Stockton, Texas	26.88	682.7	29.88	758.9	57	13.9	63	S	4	1.8	.....	.....	10s	.....	S	0.01	0.3	Cloudy	
St. Vincent, Minnesota	29.58	751.3	30.59	777.0	—39	—39.4	100	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Thatcher's Island, Mass	30.02	762.5	30.08	764.0	14	—10.0	64	N	24	10.7	.....	0	0	.....	.....	0.09	2.3	Clear	
Toledo, Ohio	29.52	749.8	30.25	768.3	26	— 3.3	88	N	15	6.7	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Tucson, Arizona	27.57	700.3	30.12	765.0	46	7.8	47	S	1	0.4	.....	5cs	0	Calm	.....	0	0	Fair	
Umatilla, Oregon	29.84	757.9	30.37	771.4	25	— 3.9	87	SE	1	0.4	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Uvalde, Texas	29.08	738.6	29.89	759.2	60	15.6	71	S	1	0.4	.....	0	0	.....	.....	0	0	Foggy	
Vicksburg, Mississippi	29.81	757.2	30.07	763.8	63	17.2	83	S	9	4.0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Visalia, California	29.72	754.9	30.08	764.0	57	13.9	94	SE	3	1.3	.....	0	5s	.....	Calm	0.17	4.3	Fair	
Washington, D. C.	30.08	764.0	30.20	767.1	31	— 0.6	89	NW	2	0.9	.....	5cs	Fog	NW	Calm	0	0	Clear	
Wickenburg, Arizona	.....	.....	.....	.....	35	1.7	90	W	.....	.....	1	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	30.10	764.5	30.15	765.8	49	9.4	71	Calm	0	0	.....	10ck	0	SW	.....	0	0	Cloudy	
Winnemucca, Nevada	25.57	649.5	29.93	760.2	46	7.8	69	SW	18	8.0	.....	.....	10n	.....	SW	1.02	25.9	Light rain	
Wood's Holl, Mass	30.06	763.5	30.10	764.5	20	— 6.7	85	NW	7	3.1	.....	0	5s	.....	NW	0.11	2.8	Fair	
Yankton, Dakota	28.85	732.8	30.29	769.4	5	—15.0	75	N	5	2.2	.....	.....	10s	.....	Calm	0.04	1.0	Cloudy	
Yuma, Arizona	29.80	758.4	30.01	762.2	49	9.4	64	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.04	559.8	.....	.....	52.5	11.4	79	Calm	0	0	.....	2k	0	.....	.....	0	0	Fair	Thomas Herran.
Buff Bay Town, Jam ica.†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	30.12	765.0	30.17	766.3	70	21.1	79	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	Charles Hasselbrink.
Jakobshavn, Greenland	30.14	765.6	30.20	767.1	0.8	—14	.....	W	.....	.....	4	.....	0	.....	.....	0	0	.....	
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	68.8	20.4	79	Calm	0.	0	.....	0	0	.....	.....	0	0	Fine	Maxwell Hall.
Nassau, W. I.	29.95	761.0	30.04	763.0	76.5	24.7	73	NE	10	4.5	.....	2k	5s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	77	25.0	89	E	.....	.....	2	0	4k	.....	.....	0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Columbia	29.41	747.0	29.96	761.0	79	26.1	85	Calm	.....	.....	0	5c	2s	S	Calm	0	0	Hazy	Francesco J. Cisneros
Rivas, Nicaragua	.....	.....	.....	.....	73	23	.....	E	.....	.....	4	0	2ks	.....	E	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.07	763.8	30.10	764.5	74	23.3	76	NNE	6	2.7	.....	0	1s	.....	.....	0	0	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	30.19	766.7	30.25	768.3	5.0	—15.	.....	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	
York Factory, B. A.	30.48	774.2	30.54	775.7	—26.0	—32.2	.....	N	14	6.3	.....	2c	2s	NW	N	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
M.H. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, N. 35° 53′, E. 14° 31′	29.79	756.7	63.2	17.3	67	WNW			6		4	NW						Squally	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 38′, E. 58° 36′	30.07	763.8	77	25.0	69	Calm			0		8	NW				0		D. clouds	Comm. G. W. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea																			Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 22° 53′, E. 118° 07′	30.01	762.2	60	15.6	88	NE			2		10					2	NE	Raining	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Elliott
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.99	761.7	64	17.8	80	WNW			5		5	NW						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 32′, E. 81° 22′	29.91	759.7	80	26.7		N			2		3	NE				1	NE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.97	761.2	79	26.1	70	NW			4		0							Squally	Capt. R. D. King.
H. M. S. Falcon, N. 39° 37′, E. 19° 57′	29.51	749.5	60	15.6		Calm			0		3							Showery	Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Chimbote, Peru	29.88	758.9	69	20.6	92	SE			1		9							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 37′, E. 122° 22′	30.12	765.3	49.5	9.7	92	SSE			3		10							Misty	Capt. R. H. Napier.
H. M. S. Malabar, Suez Bay	29.83	757.7	71	21.7	85	SSE			5–6		6	SSE				4	S	Squally	Capt. J. F. G. Grant.
H. M. S. Minatour, N. 42° 14′, W. 8° 40′	29.78	756.4	57.5	14.2	84	WSW			4		8	W						Misty	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Barbadoes, W. I.	30.04	763.0	77	25.0	86	ENE			3		2	E						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis, N. 38° 42′, W. 9° 05′	29.89	759.2	63	17.2	89	SW			4-5		8	SW						Showery	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 45° 56′	29.68	753.9	76	24.4	52	Calm			0		3							Showery	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 9° 05′, W. 78° 32′	29.93	760.2	69	20.6	92	SE			1		7	S				1	SSE		Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph																			Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, India	29.97	761.2	68.5	20.3	56	S			3-4		2	S						Blue sky	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, N. 12° 20′, W. 16° 46′	29.99	751.8	82.9	28.3	85	S			1		7			0	0			D. clouds	S. C. da Silva Costa, Comd't.
Sado, S. 5° 31′, E. 12° 40′	29.95	760.7	82.4	28.0	79	S			3		4			0	0	2	S	D. clouds	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			

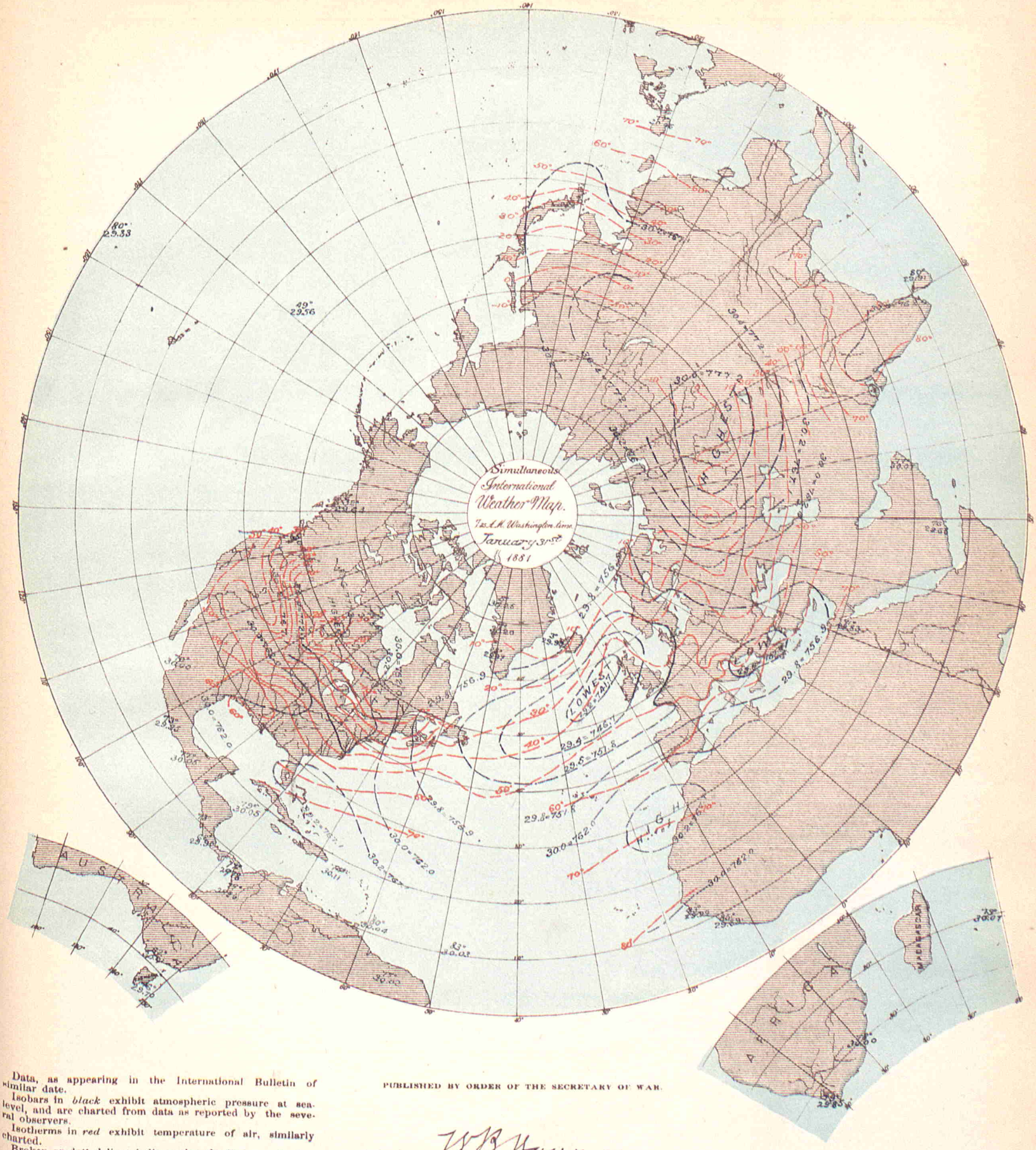
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla.	30.22	767.6	58	14.4	94	NW	1	0.4			10		NW	0	0			Cloudy	
N. Yard, Portsmouth, N. H.	30.11	764.8	10	—12.2	79	NW	5	2.2		2c		WSW		0	0			Clear	
Naval Hospital, Yokohama, Japan	29.95	760.7	34.5	1.4	43	Calm			0		0			Slight				Clear.	
Adams, Callao, Peru	29.89	759.2	69	20.6	95	Calm			0		10					Sm'h		Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	29.99	761.7	54	12.2	100	Calm			0		8		ESE	1.25	31.7			Cloudy	
Alert, Hong-Kong, China	29.98	761.5	64	17.8	83	ESE			1		0			0	0	Sm'h		Hazy	
Alliance, N. 23° 12′, W. 82° 15′	30.16	756.1	74	23.3	90	E			1		5			0	0	Sm'h		Fair	
Ashuelot, Tientsin, China	30.26	768.6	25	— 3.9	100	ESE			1		0							Clear	
Colorado, New York, N. Y.	29.90?	759.4?	25	— 3.9	100	NW	7	3.1			10		Calm	0	0			Hazy	
Constitution, N. Yard, League I'd., Pa			31	— 0.6		NNE	2	0.9			0?							Cloudy?	
Franklin, Off N. Yard, Norfolk, Va	30.14	765.5	36	2.2	71	Calm	0	0			10			0	0			Cloudy	
Galena, Villafranca, France	29.63	752.6	60	15.6	76	Calm			0		2					Mod.	S	Clear	
Independence, N. Yard, Mare I'd, Cal.	30.07	763.8	55	12.8	93	SSW	2.4	1.1			10		SSW	0.59	15.0			Overcast	
Jamestown, Sitka, Alaska	29.64	752.8	32	0.0	90	E			4		0?			0	0			Cloudy?	
Kearsarge, N. 18° 25′, W. 80° 02′	30.05	763.3	79	26.1	73	ENE			4		5		NE			Long	NE	Fair	
Lackawanna, Chimbote, Peru	30.04?	763.0?	70	21.1	95	S			1		8		S	0	0			Cloudy	
Marion, Straits of Magellan	29.79	756.7	48	8.9	78	SSW			4–5		2		Calm			R'gh	S	Fair	
Michigan, Erie, Pennsylvania	30.22	767.6	23	— 5.0		N			3		10		W					Cloudy.	
Minnesota, New York, N. Y.	30.22	767.6	27	— 2.8	64	NW			3–4		10							Overcast	
Monocacy, Shanghai, China	30.14	765.5	49	9.4	85	SE			3		2?		Calm					Cloudy?	
New Hampshire, Port Royal, S. C.	30.15	765.8	51	10.6	93	W	2	0.9			1		Calm	0	0			Clear	
Nipsic, Marseilles, France	29.80	756.9	60	15.6	60	NNW			1		2					Sm'h		D. clouds	
Onward, Chimbote Bay, Peru	29.86	758.4	72	22.2	90	S			4		2		N			Long	N;W	Clear	
Palos, Shanghai, China	30.15	765.8	49	9.4	85	SSE			3		10							Cloudy	
Passaic, Washington, D. C.	30.23	767.8	29	— 1.7	89	SW			1		0							Clear.	
Pensacola, Acapulco, Mexico	29.95	760.7	73	22.8	90	Calm			0		0							Clear.	
Portsmouth, Washington, D. C.	30.20	767.1	28	— 2.2	100	NE			1		8		NE					Foggy	
Powhatan, New York, N. Y.	30.20	767.1	24	— 4.4	100	W			3		8		NW					Cloudy	
Quinnebaug, Naples, Italy	29.56	750.8	55	12.8	74	NW			3		8		W			Sm'h			
Richmond, Hong-Kong, China	30.08	764.0	63	17.2	89	ENE			2		2		ENE	0	0			Hazy	
Saratoga, Baltimore, Md	30.16	766.1	30	— 1.1	100	NE			1		10			0	0			Foggy	
Shenandoah, Montevideo, Uruguay	29.79	756.7	71	21.7	85	NNW			3		8					Sm'h		Fair	
St. Louis, League Island, Pa	30.27	768.8	29	— 1.7	89	N	5	2.2			8			0	0			Cloudy	
Tennessee, Kingston, Jamaica, W.I.	30.06	763.5	75	23.9	90	N	3	1.3			0			0	0	Sm'h		Hazy	
Trenton, Villafranca, France	29.63	752.6	61	16.1	66	SE			0–1		0			0	0	Sm'h	S	Clear.	
Vandalia, Bridgetown, Barbadoes, W.I			78	25.6	65	ENE			1		2		NNE					Fair	
Wabash, Boston, Massachusetts	30.16	766.1	13	—10.6	100	NW	4	1.8			8		NW	0	0			Cloudy	
Wachusetts, Panama, Panama	29.49	749.0	77	25.0	91	NNW			3		5		N	0	0	Sm'h		Fair	
Wyoming, Villafranca, France	29.65	753.1	61	16.1	61	Calm			0		5		W			Long ground	SSW	Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
S. S. Baltic, N. 46° 25′, W. 46° 50′	29.47	748.5	37	2.8	90	NNE			4		3					4	N	D. clouds	Capt. H. Parsell.
Ship Baroda, ‡ S. 16° 45′, W. 4° 20′	30.05	763.3	79	26.1	70	ESE			3		4							D. clouds	Capt. C. J Russell.
S. S. Bateshire,																			Capt. John Arbuckle
Barque Belleisle, N. 28° 34′, W. 19° 27′	30.24	768.1	70	21.1	66	Calm			0		1							Blue sky.	Capt. A. J. Brown.
Ship Blychswood.																			Capt. E. Heggum.
British Merchant, ‡																			Capt. E. J. Molony.
Chin Yang, ‡ N. 21° 06′, W. 26° 26′	30.14	765.5	73.2	22.9	69	NE			4		4							D. clouds	Capt. H. Youlden.
S. S. Cipero.																			Capt. W. N. Lailey.
City of Agra, ‡ S. 35° 28′, W. 26° 40′	30.17	766.3	70.5	21.4	81	ENE			3		4							D. clouds	Capt. T. Young.
Barque Commewyne, ‡ N. 23° 16′, W. 64° 21′	30.23	767.8	74.6	23.7	67	NE			2		2							Blue sky	Capt. W. Scott.
Barque Copponame, N. 10° 54′, W. 47° 07′	30.03	762.7	83.3	28.5	57	ENE			5		0							Blue sky	Capt. A. Buchan.
Denbigshire.																			Capt. H. Y. Murdock.
Barque Dochra. ‡																			Capt. H. Spalding.
Ship Ellen Stuart.																			Capt. J. E. C. Patterson.
Barque Elissa.																			Capt. A. Watson.
S. S. Ethiopia, ‡ off Fire Island, N. Y.	29.14?	740.1?	30	— 1.1	89	NNW			5		10					5	NW	Overcast	Capt. A. Campbell.
S. S. Fleurs Castle.																			Capt J. Kidder.
Barque Gem.																			Capt. H. Park.
S. S. Gordon Castle,																			Capt. W. Waring.
Barque Harvest Home.																			Capt. H. H. Williams.
Ship Iron Cross.																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith.																			Capt. Alex. Wilson.
S. S. Lamperts.																			Capt. G. H. Jones.
Laomene,																			Capt. W. P. Hughes.
Ship Lochee. ‡																			Capt. J. Raeburn, R.N.F.
S. S. Lusitania.																			Capt. C. A. F. Powell.
Majastic.																			Capt. W. Ellery.
Barque Markland, ‡ N. 19° 26′, W. 29° 24′	30.16	766.1	72.5	22.5	91	NE			5		5					4	NNW	D. clouds	Capt. H. W. Dyke.
Barque Mertola, N. 47° 44′, W. 11° 42′	29.41	747.0	51.3	10.7	97	ESE			3		10							Overcast	Capt. E. W. Turner.
Nairnshire.																			Capt. W. Niven.
S. S. Nizam.																			Capt. G. W. Brady.
Queen of Cambria.																			Capt. M. Parry.
S. S. Richmond.																			Capt. W. H. Stuart.
S. S. Scotia.																			Capt. R. Cato.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine.																			Capt. H. Manning.
S. S. Strathleven. ‡																			Capt. C. W. Pearson.
Schr. Traveller.																			Capt. A. Simpson.
S. S. Wyberton, ‡ N. 45° 33′, W. 7° 50′	29.51	749.5	57	13.9	75	WSW			5		9							Raining	Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian.																			Capt. F. Archer.
S. S. Nova Scotian, N. 43° 33′, W. 45° 51′	29.08	738.6	46	7.8		NE			3		8		ENE			High long	NE	Clearing	Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria.																			Capt. W. Watson.
S. S. Bothnia.																			
S. S. Scythia.																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 40° 17′, W. 64° 43′ †	29.77	756.1	39	3.9		NW			6		10					R'gh	NW	Cloudy	Capt. J. W. Jennings.
S. S. Baltic, N. 46° 25′, W. 46° 53′	29.51	749.5	38	3.3	81	NE			5		4		NE;NW				NE	Fine	
S. S. Britanic.																			Capt. H. Perry.
S. S. Celtic.																			Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	29.47	748.5	47	8.3		SW			3		0			0	0				Capt. Ch. W. Kennedy.
S. S. Republic.																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, N. 40° 39′, W. 58° 51′	29.68	753.9	44.6	7.0		NW			6		8		NW	0	0	Cross	NW	Squally	Capt. H. Baur.
S. S. Köln.																			
S. S. Leipzig, ‡ N. 37° 18′, W. 74° 30′	30.21	767.3	46.0	7.8	80	N			4		5		NNW			Mod.	NNW	Fair	Capt. F. Pfeiffer. Capt. G. Meyer.
S. S. Ohio.																			
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			Capt. Albert Fredholm.
Ship Peru. ‡																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 38° 53′, W. 71° 07′	30.03	762.7	43	6.1	92	NNW			5		2?		N			Mod.	NNW	Overcast?...	Capt. J. W. Shackford.
S. S. Indiana, ‡ Liverpool, England...†	29.39	746.5	40	4.4	?	WSW			4		8		S	Mode	rate			Cloudy.....	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 38° 56′, W. 74° 00′...*†	30.18	766.6	35	1.7	90	NNE			2		10		NNE	0	0	Sm'h		Cloudy.....	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, N. 50° 17′, W. 29° 25′...†	29.23	742.4	40	4.4		W			2		10		W	0.50	12.7	Mod.	W	Cloudy..	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern.....																			Capt W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ Hong Kong, China.....†	30.08	764.0	63	17.2	83	E			1		2		ENE	0	0	Sm'h		Clear.	Capt. H. Davison.
S. S. Gaelic.....																			Capt. W. H. Kidley.
S. S. Oceanic, San Francisco, Cal.....	30.01	762.2	57	13.9	58	SW			5		10		S					Cloudy.....	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Geo. W. Elder.....																			Capt. J. M. Lachlan.
S. S. Columbia.....																			Capt. Fred. Bolles
S. S. Oregon, Portland, Oregon.....†	29.99	761.7	34.5	1.4	90	Calm			0		10		Calm					Fair.....	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, N. 37° 16′, W. 122° 29′.....†	30.06	763.5	54	12.2	93	S			6		10		S			H'vy	SE	Rainy...	Capt. J. N. Ingalls.
S. S. Idaho, N. 38° 30′, W. 123° 05′...†	30.12	765.0	54	12.2	80	NW			2		10		SW			Mod.	SW	Cloudy.....	C. E. Lyons, 1st Officer.
S. S. Orizaba..																			
S. S. Senator, San Francisco, Cal..... †	30.19	766.8	55	12.8	93	SW			2		10		SW					Cloudy.....	Thos. Wallace.
S. S. State of California, N. 38° 00′, W. 123° 10′.....†	30.11	764.8	50	10.0	?	SW			3		10		SW			Short	SE	Raining.....	Capt. G. Debney.
S. S. Victoria, N. 43° 30′, W. 124° 50′..*†	30.00	762.0	45	7.2	100	SE			1		2		Calm			Mod.	SE	Fair.....	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J B. Houston, President.*																			
S. S. Australia, S. 34° 16′, E. 172° 30′.....	29.88	758.9	64	17.8	78	ENE			4		8		E			Long	ENE	Cloudy.....	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.....†	30.11	764.8	68	20.0	100	W			2		0			0	0	...		Clear.....	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 16° 02′, W. 94° 19′.....†	30.05	763.3	77	25.0	82	N			4		2		SW			Long	S	Clear.....	Capt. D. S. Austin.
S. S. City of Peking, N. 34° 08′, E. 139° 41′..... †	30.07	763.8	42	5.6	58	NW			5		2		WNW	0	0	Sm'h		Clear.....	Capt. G. G. Berry.
S. S. City of Sidney.....																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 36° 18′, W. 173° 47′....†	29.56	750.8	49	9.4	78	N			7		10		N	0	0	R'gh	NE	Cloudy.....	A. L. Ritchie, 2d Officer.
S. S. Colima.....‡																			Capt. R. R. Searle.
S. S. Dakota.....																			Capt. D. E. Griffiths.
S. S. Granada, Panama, Panama.....†	29.78	756.4	78	25.6	86	NW			3		5		NW	0	0			Hazy.....	
S. S. Zealandia, N. 1° 28′, W. 164° 59′.....	29.83	757.7	80	26.7	78	E			6		0					Sm'h	ESE	Clear.....	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland.....‡																			Capt. Sam'l Jackson.
S. S. Nederland, N. 40° 32′, W. 61° 19′.....†	29.94	766.5	58	14.4		NNW			4		10		N	Sn	ow	Mod.	N	Fine.....	Capt. S. Stokes.
S. S. Rhynland, ‡ Flushing, Netherlands..	29.53	750.0	43	6.1	92	WSW			3		2		WSW	0	0			Clear.....	Capt. W. Geo. Randle.
S. S. Vaderland.....‡																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Morehead City, N. C....†	30.11	764.8	60	15.6		NNE			2		0			0	0			Fine.....	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va.....	30.16	766.1	36	2.2	90	NE	3	1.3		5ck				0	0			Fair.....	Capt. J. Jorgenson.
Sch'r Annie R. Lewis, N. 28° 38′, W. 63° 13′.....†	30.09	764.3	70	21.1		W			5		2		NW	0	0	H'vy Cross	NW; NNE	Clear.....	Capt. S. S. Lewis.
Bark Carrie Heckle.....																			Capt B. F. Woodbury.
Brigantine George.....‡																			Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va†	30.17	766.3	37	2.8	81	Calm	0	0		0	28			0	0			Clear.....	
Ship Jumna.....																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Portugal.....†	30.02	762.5	63	17.2	100	SW			6		10		W	0	0			Cloudy.....	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON

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

INTERNATIONAL

SIMULTANEOUS METEOROLOGICAL OBSERVATIONS

INCLUDING A MONTHLY SUMMARY WITH DAILY BULLETINS AND ACCOMPANYING CHARTS.

FOR THE MONTH OF JANUARY, 1881.

PRINTED FOR EXCHANGE WITH CO-OPERATING OBSERVERS.

WASHINGTON, D. C.:
FEBRUARY, 1882.

MONTHLY SUMMARY

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

JANUARY, 1881.

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for January, 1881.																				Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.															
						Actual.		Reduced.					Directions.									Total Movement.						
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
Algerian Series.	° ′	° ′																										
Mogador	N. 31 30	W. 9 44	11.29 a.m.	56	17	.....	.....	30.03	762.8	65.8	18.8	76.6	.....	.....	1	18	2	2	2	4	2	.....	.....	5	0.73	18.5
Nemours	N. 35 06	W. 1 51	12.01 p.m.	20	6	.....	.....	29.96	761.0	64.4	18.0	75.0	5	.....	8	.....	6	.....	9	3	.....	.....	.....	2	0.94	23.9
Algiers	N. 36 47	E. 3 04	0.20 p.m.	99	325	.....	.....	29.95	760.6	61.3	16.3	64.0	2	1	12	7	2	3	1	2	1	.....	.....	6	5.58	141.8
La Calle	N. 36 54	E. 8 26	0.42 p.m.	36	11	.....	.....	29.98	761.4	64.0	17.8	67.2	.....	5	15	6	2	1	2	.....	.....	.....	.....	6	0	0
Tunis	N. 36 47	E. 10 11	0.49 p.m.	46	14	.....	.....	29.94	760.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sfax	N. 34 45	E. 10 36	0.50 p.m.	?	?	.....	.....	30.06	763.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saida	N. 34 51	E. 0 10	0.09 p.m.	2844	867	.....	.....	30.03	762.8	60.3	15.7	61.3	1	.....	10	4	4	3	6	3	.....	.....	.....	2	0	0
Tebessa	N. 35 24	E. 8 06	0.40 p.m.	2890	881	.....	.....	30.03	762.7	57.6	14.2	38.6	.....	4	17	2	5	.....	.....	3	.....	.....	.....	5	0	0
Geriville	N. 33 45	E. 1 10	0.13 p.m.	4285	1306	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Laghouat	N. 33 48	E. 2 51	0.19 p.m.	2556	770	.....	.....	30.12	765.1	64.2	17.9	51.5	.....	3	4	8	7	3	5	1	.....	.....	.....	2	0	0
Biskra	N. 34 51	E. 5 40	0.31 p.m.	410	125	.....	.....	30.08	764.0	64.0	17.8	65.6	1	19	1	.....	.....	.....	9	1	.....	.....	.....	5	0	0
Australian Series.																												
Melbourne	S. 37 49	E. 144 58	9.47 p.m.	91	28	29.85	758.2	29.94	760.5	64.0	17.8	70.4	.....	1	4	.....	7	10	8	1	.....	.....	.....	5	0.74	18.8
Sub-Series.																												
Hobart Town	S. 42 52	E. 147 22	9.58 p.m.	105	32	.....	.....	29.99	761.7	73.2	22.9	.....	1	7	2	6	2	11	1	1	.....	.....	.....	5	0.52	13.2
Austro-Hungarian Series.																												
Agram	N. 45 47	E. 15 53	1.12 p.m.	512	156	29.43	747.4	29.99	761.8	28.6	--1.9	85.2	3	4	1	2	2	2	.....	6	11	.....	.....	8	3.72	94.6
Cracow	N. 50 04	E. 20 00	1.28 p.m.	722	220	29.17	741.0	29.98	761.5	22.5	—5.3	88.5	1	5	16	6	.....	1	2	.....	.....	.....	.....	6	0.30	7.6
Eperies	N. 48 58	E. 21 15	1.33 p.m.	820	250	29.03	737.3	29.95	760.6	23.9	—4.5	75.0	4	4	.....	.....	4	1	.....	.....	18	.....	.....	7	0.53	13.4
Gratz	N. 47 04	E. 15 28	1.10 p.m.	1171	357	28.68	728.5	30.00	762.0	27.5	—2.5	73.5	2	1	3	3	16	4	1	1	.....	.....	.....	4	0.19	4.9
Hermannstadt	N. 45 47	E. 24 13	1.45 p.m.	1355	412	28.47	723.2	29.99	761.7	25.3	—3.7	89.5	.....	7	8	1	7	6	2	.....	.....	.....	.....	6	2.23	56.6
Kremsmünster	N. 48 04	E. 14 08	1.04 p.m.	1260	384	28.52	724.5	29.97	761.3	23.5	—4.7	88.4	1	1	4	1	.....	6	.....	2	16	.....	.....	5	0.38	9.6
Lemberg	N. 49 50	E. 24 00	1.44 p.m.	978	298	28.88	733.5	29.92	759.9	24.1	—4.4	77.7	.....	15	.....	4	3	6	.....	3	.....	.....	.....	7	0.34	8.7
Pola	N. 44 52	E. 13 51	1.03 p.m.	105	32	29.76	755.9	29.87	758.8	41.7	5.4	74.7	3	3	1	.....	1	3	10	10	.....	.....	.....	8	5.30	134.7
Szathmar	N. 47 49	E. 22 51	1.39 p.m.	430	131	29.52	749.7	29.97	761.3	28.2	—2.1	85.9	2	1	2	5	6	7	5	2	1	.....	.....	7	2.34	59.5
Szegedin	N. 46 15	E. 20 07	1.28 p.m.	256	78	29.65	753.0	29.95	760.7	28.6	—1.9	85.1	2	4	1	1	4	1	2	.....	10	.....	.....	6	1.34	34.0
Trieste	N. 45 39	E. 13 46	1.04 p.m.	85	26	29.83	757.7	29.93	760.1	39.0	3.9	72.9	13	.....	.....	1	.....	.....	2	.....	15	.....	.....	7	3.12	79.2
Vienna	N. 48 12	E. 16 22	1.14 p.m.	663	202	29.24	742.8	29.99	761.7	25.9	—3.4	76.4	4	2	10	.....	.....	10	.....	.....	5	.....	.....	6	0.86	21.9
Belgian Series.																												
Brussels	N. 50 51	E. 4 22	0.26 p.m.	187	57	29.68	753.9	29.89	759 2	30.0	—1.1	89.8	.....	3	2	8	6	.....	4	3	5	.....	.....	6	1.52	38.6
Furnes	N. 51 04	E. 2 40	0.19 p.m.	20	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maeseyck	N. 51 06	E. 5 48	0.32 p.m.	118	35	29.77	756.1	29.89	759.3	30.9	—0.6	85.8	4	1	5	7	2	.....	8	4	.....	.....	.....	7	1.02	25.9
British Series.																												
Aberdeen	N. 57 10	W. 2 06	0.00 m.	86	26	29.82	757.4	29.92	760.0	31.1	—0.5	79.3	2	7	12	2	6	1	1	.....	.....	.....	.....	7	1.84	46.7
Armagh	N. 54 21	W. 6 39	11.42 a.m.	206	63	29.68	753.9	29.93	760.2	32.8	0.4	86.5	2	.....	.....	13	3	4	3	6	..	.....	.....	7c	.....	.....
Bidston	N. 53 24	W. 3 04	11.58 a.m.	180	85	.....	.....	29.91	759.7	33.1	0.6	84.1	1	.....	3	7	.....	9	5	6	.....	.....	.....	6	.....	.....
Bolton	N. 53 35	W. 2 28	11.58 a.m.	481	145	29.39	746.5	29.95	760.7	31.6	—0.2	93.0	6	2	1	4	4	6	4	4	.....	.....	.....	6	.....	.....
Bradford e.	N. 53 48	W. 1 47	0.01 p.m.	362	110	29.49	749.0	29.89	759.2	32.1	0.1	81.9	.....	3	1	4	1	10	2	5	.....	.....	.....	7	0.22	5.6
Bridgetown	N. 13 04	W. 59 37	8.10 a.m.	28	9	30.00	762.0	30.03	762.7	80.3	26.8	71.7	.....	.....	.....	.....	.....	.....	.....	.....	31	.....	.....	4	.....	.....
Cardington	N. 52 08	W. 0 27	0.06 p.m.	109	33	.....	.....	29.88	758.9	32.5	0.3	87.4	4	7	7	1	4	.....	4	4	.....	.....	.....	6	.....	.....
Chatham	N. 51 25	E. 0 33	0.10 p.m.	120	37	29.77	756.1	29.91	759.7	33.9	1.1	85.9	.....	4	1	3	1	.....	2	7	5	.....	.....	4	.....	.....
Falmouth	N. 50 09	W. 5 04	11.48 a.m.	200	61	29.63	752.6	29.86	758.4	38.9	3.8	79.5	4	1	2	1	4	4	2	9	.....	.....	.....	8	.....	.....
Fort Napier	S. 30 00	E. 31 00	2.12 p.m.	2200	671	27.59	700.8	29.80	756.9	78.0	25.6	83.9	.....	3	.....	.....	.....	4	2	22	.....	.....	.....	4	.....	.....
Free Town	N. 8 30	W. 13 14	11.15 a.m.	224	68	29.64	752.8	29.87	758.7	85.1	29.5	80.8	.....	5	1	10	2	7	.....	2	4	.....	.....	5	.....	.....
Galway	N. 53 15	W. 9 03	11.32 a.m.	25	8	.....	.....	29.83	757.7	35.3	1.8	86.9	12	.....	1	4	4	3	3	4	.....	.....	.....	7	.....	.....
Gibraltar	N. 36 06	W. 5 21	11.47 a.m.	50	15	29.94	760.5	29.99	761.7	61.0	16.1	93.3	.....	3	7	11	1	2	6	1	.....	.....	.....	4	.....	.....
Glasgow	N. 55 53	W. 4 17	11.51 a.m.	90	27	29.72	754.9	29.92	760.0	31.1	—0.5	88.4	10	1	2	3	1	1	4	9	.....	.....	.....	4	.....	.....
Greenwich	N. 51 29	0 00	0.08 p.m.	159	48	29.72	754.9	29.90	759.4	33.6	0.9	84.8	3	2	2	6	4	1	3	10	.....	.....	.....	6	.....	.....
Guernsey	N. 49 27	W. 2 41	11.58 a.m.	204	62	29.60	751.8	29.82	757.4	40.0	4.4	78.1	1	5	1	2	2	4	2	14	.....	.....	.....	5	.....	.....
Kew	N. 51 28	W. 0 19	0.07 p.m.	34	10	29.88	758.9	29.92	760.0	33.9	1.1	80.8	1	6	4	3	2	4	1	10	.....	.....	.....	6	.....	.....
Leicester	N. 52 39	W. 1 08	0.04 p.m.	245	75	29.67	753.6	29.94	760.5	32.5	0.3	90.0	3	.....	.....	10	2	.....	1	14	1	.....	.....	8	.....	.....
Malta	N. 36 00	E. 14 30	1.06 p.m.	111	34	29.84	757.9	29.91	759.7	65.1	18.4	70.0	.....	11	4	10	.....	3	2	1	.....	.....	.....	4	.....	.....
Nassau	N. 25 04	W. 77 22	6.58 a.m.	44	13	.....	.....	30.11	764.8	71.9	22.2	86.7	1	2	.....	8	4	5	1	10	.....	.....	.....	5	.....	.....
Oscott	N. 52 28	W. 1 55	0.00 m.	483	147	29.38	746.2	29.93	760.2	31.6	—0.2	89.3	5	3	3	4	2	4	1	9	.....	.....	.....	8	.....	.....
Oxford	N. 51 46	W. 1 17	0.03 p.m.	232	70	29.66	753.4	29.92	760.0	32.5	0.3	89.9d	3	4	4	2	1	2	4	6	5	.....	.....	6	.....	.....
Plymouth	N. 50 22	W. 4 10	11.51 a.m.	69	21	29.78	756.4	29.85	758.2	36.8	2.7	85.4	4	4	.....	1	3	4	1	10	4	.....	.....	6	.....	.....
Sandwick Manse	N. 59 05	W. 3 20	11.54 a.m.	94	29	.....	.....	29.89	759.2	34.0	1.1	96.0	5	2	5	4	2	1	6	3	2	1	.....	6	.....	.....
Scutari Cemet'y	N 41 00	E. 29 03	2.04 p.m.	60	18	29.87	758.7	29.94	760.5	45.3	7.4	78.0	4	2	.....	7	2	4	3	8	1	.....	.....	9	.....	.....
Sheffield	N. 53 23	W. 1 28	0.02 p.m.	260	79	29.62	752.3	29.92	760.0	34.3	1.3	90.3	3	4	1	3	6	1	1	8	4	.....	.....	7	0.22	5.6
Silloth Rectory	N. 54 52	W. 3 22	11.54 a.m.	28	9	29.90	759.4	29.93	760.2	31.4	—0.3	67.0	1	.....	2	1	1	1	7	5	13	.....	.....	5	0.46	11.7
Stonyhurst	N. 53 51	W. 2 28	11.58 a.m.	363	110	.....	.....	29.92	760.0	32.0	0.0	81.5	8	.....	4	3	.....	1	3	11	1	.....	.....	6	.....	.....
StrathfieldTurgiss	N. 51 17	W. 0 53	0.04 p.m.	197	60	29.709	754.49	29.939	760 27	33.5	0.8	88.6	4	2	5	2	2	1	3	12	.....	.....	.....	6	.....	.....
Truro	N. 50 16	W. 5 04	11.53 a.m.	43	13	.....	.....	.....	.....	40.7	4.8	79.3	1	2	1	3	1	6	3	14	.....	.....	.....	7	.....	.....
Valencia	N. 51 55	W. 10 18	11.27 a.m.	20	6	29.84	757.9	29.87	758.7	40.6	4.8	77.1	5	.....	3	1	2	4	12	4	.....	.....	.....	6	.....	.....

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for January, 1881.																			Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.														
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
Canadian Series	o /	o /																									
Bathurst *e*	N. 47 39	W. 65 43	7.45 a.m.	4	1	29.96	761.0	30.00	762.0	– 6.3	–21.3	.....	4	9	1	.....	.....	.....	.....	.....	12	.....	.....	6	1.90	48.3
Charlottetown	N. 46 14	W. 63 10	7.55 a.m.	38	12	29.84	757.9	29.89	759.2	12.3	–10.9	96.4	2	5	16	1	1	.....	.....	2	3	4661	7509	6	7.05	179.1
Chatham	N. 47 03	W. 65 29	7.45 a.m.	50	15	29.88	758.9	29.95	760.7	3.3	–15.9	92.2	1	5	7	.....	.....	.....	.....	.....	18	2427	3906	6	2.26	57.4
Chicontimi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cornwall	N. 45 01	W. 74 43	7.09 a.m.	175	53	29.89	759.2	30.11	764.8	3.4	–15.9	96.4	.....	5	12	4	.....	.....	6	6	.....	.....	.....	7	1.98	50.3
Dalhousie	N. 48 04	W. 66 21	7.32 a.m.	30	9	29.91	759.7	29.95	760.7	5.8	–14.6	.....	.....	1	21	1	.....	.....	2	.....	4	.....	.....	8	2.70	68.6
Father Point	N. 48 31	W. 68 28	7.34 a.m.	20	6	30.00	762.0	30.03	762.7	4.8	–15.1	74.4	6	8	.....	11	2	1	.....	2	1	.....	.....	8	2.50	63.5
Fort Garry	N. 49 51	W. 97 07	5.39 a.m.	758	231	29.31	744.5	30.27	768.8	–15.4	–26.3	98.7	6	5	4	9	2	1	1	.....	3	5299	8528	2	0.12	3.0
Fredericton	N. 45 57	W. 66 39	7.41 a.m.	59	18	29.95	760.7	30.02	762.5	3.8	–15.7	89.7	2	17	4	.....	.....	.....	2	.....	6	.....	.....	5	2.48	63.0
Granton	N. 43 12	W. 81 21	6.43 a.m.	1015	309	28.97	735.8	30.18	766.6	10.3	–12.1	87.3	2	3	7	1	2	1	.....	4	11	.....	.....	7	1.60	40.6
Halifax	N. 44 39	W. 63 36	7.53 a.m.	122	37	29.79	756.7	29.93	760.2	17.5	– 8.1	91.3	4	14	10	.....	.....	1	.....	1	1	.....	.....	3	3.60	91.4
Hamilton	N. 43 16	W. 79 53	6.49 a.m.	332	101	29.73	755.1	30.16	766.1	1.4	–17.0	87.5	.....	4	1	22	.....	.....	.....	.....	4	.....	.....	8	2.08	52.8
Kingston	N. 44 14	W. 76 30	7.02 a.m.	335	102	29.75	755.6	30.12	765.0	7.8	–13.4	85.7	5	1	5	4	2	1	1	8	4	4105	6606	6	2.19	55.6
Little Glace Bay	N. 46 11	W. 59 58	8.08 a.m.	34	10	29.70*b*	754.4*b*	29.74*b*	755.4*b*	21.4*a*	– 5.9	94.1*a*	8	5	5	.....	5	3	1	2	2	.....	.....	7	3.65	92.7
Montreal	N. 45 31	W. 73 33	7.13 a.m.	187	57	29.90	759.4	30.12	765.0	6.2	–14.3	83.4	1	1	10	7	3	2	3	3	1	.....	.....	6	2.73	69.3
Moose Factory	N. 51 16	W. 80 56	6.44 a.m.	30	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Parry Sound	N. 45 19	W. 80 01	6.48 a.m.	641	195	29.37	746.0	30.13	765.3	7.1	–13.8	78.8	3	1	2	2	1	5	14	1	2	5574	8970	9	2.70	68.6
Peterborough *c*	N. 44 17	W. 78 20	6.54 a.m.	688	210	29.32	744.7	30.13	765.3	6.1	–14.4	68.8	5	4	7	3	.....	.....	1	3	5	.....	.....	6	2.70	68.6
Port Dover	N. 42 47	W. 80 13	6.47 a.m.	635	194	29.40	746.7	30.16	766.1	12.7	–10.7	94.4	6	4	2	10	.....	.....	.....	2	7	5144	8278	8	2.74	69.6
Port Stanley	N. 42 40	W. 81 13	6.43 a.m.	592	180	29.46	748.3	30.17	766.3	12.3	–10.9	90.8	3	3	15	3	.....	2	5	.....	.....	.....	.....	8	2.00	50.8
Quebec	N. 46 48	W. 71 12	7.23 a.m.	293	89	29.74	755.4	30.10	764.5	3.3	–15.9	82.0	.....	8	13	1	.....	.....	5	3	.....	.....	.....	6	1.99	50.6
Rockliffe	N. 46 10	W. 77 48	6.57 a.m.	418	127	29.63	752.6	30.15	765.8	– 1.8	–18.8	81.2	.....	4	5	.....	.....	5	1	.....	16	3795	6107	6	1.75	44.4
Saugeen	N. 44 30	W. 80 21	6.42 a.m.	641	208	29.35	745.5	30.12	765.0	1.6	–16.9	89.7	1	2	2	7	7	2	4	5	1	8691	13986	9	3.49	88.6
St. Andrews	.....	.....	.....	.....	.....	29.94	760.5	30.00	762.0	12.0	–11.1	82.1	6	17	2	.....	1	2	1	1	1	.....	.....	4	2.52	64.0
St. John, N.B.	N. 45 17	W. 66 03	7.44 a.m.	150	46	29.80	756.9	29.99	761.7	12.9	–10.6	95.4	5	17	4	.....	1	1	.....	3	.....	.....	.....	6	3.83	97.3
Stratford	N. 43 23	W. 81 00	6.44 a.m.	1182	360	28.71	729.2	30.15	765.8	8.5	–13.1	93.5	.....	2	4	5	.....	2	1	.....	17	.....	.....	8	2.37	60.2
Sydney	N. 46 08	W. 60 10	8.07 a.m.	27	8	29.79	756.7	29.84	757.9	20.7	– 6.3	91.5	2	5	8	5	2	3	2	2	2	6956	11194	7	4.06	103.1
Toronto	N. 43 39	W. 79 23	6.50 a.m.	350	150	29.74	785.4	30.16	766.1	14.1	– 9.9	88.9	8	7	7	4	1	.....	.....	4	.....	7034	11320	8	2.13	54.1
Windsor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Woodstock	N. 43 08	W. 80 47	6.48 a.m.	980	299	28.96	735.6	30.15	765.8	10.4	–12.0	94.4	3	3	7	10	1	2	1	3	1	.....	.....	8	3.78	96.0
Yarmouth *f*	N. 43 50	W. 66 02	7.44 a.m.	61	19	29.91	759.7	29.98	761.5	2.4	–16.4	78.5	6	9	.....	.....	.....	1	1	6	2	.....	.....	7	2.84	72.1
Sub-Series.																											
St. Johns, N. F.	N. 47 34	W. 52 42	8.37 a.m.	150	46	29.80	756.9	29.94	760.5	26.6	– 3.0	100.0	2	7	3	.....	5	7	.....	8	.....	.....	.....	4	3.91	99.3
St. Pierre	N. 46 47	W. 56 08	8.24 a.m.	?	?	.....	.....	29.69	754.1	25.2	– 3.8	.....	1	11	5	1	1	5	3	4	.....	.....	.....	.....	0.85	21.6
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape Colony Series.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape St. Francis *a*	S. 34 10	E. 24 53	1.48 p.m.	25	7	29.90	759.4	.....	.....	70.8	21.6	80.0	.....	.....	2	12	1	6	9	.....	.....	.....	.....	4	1.27	32.3
Cape Town *a*	S. 34 02	E. 18 29	1.22 p.m.	27	8	29.89	759.2	29.93	760.2	81.4	27.4	53.9	.....	8	.....	2	9	10	1	.....	.....	.....	.....	4	0.36	9.1
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chinese Series.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Zi-Ka-Wei	N. 31 12	E. 121 26	8.14 p.m.	23	7	30.28	769.2	30.30	769.7	34.2	1.2	72.3	6	3	6	3	.....	8	.....	5	.....	.....	.....	2	0.03	0.7
Costa Rica Series.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San José	N. 9 56	W. 84 00	6.15 a.m.	3757	1145	26.21	665.7	29.93	760.2	62.4	16.9	87.0	.....	.....	.....	.....	.....	7	.....	24	.....	.....	.....	3	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Danish Series.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Copenhagen	N. 55 41	E. 12 36	0.58 p.m.	46	13	29.84	758.0	29.89	759.2	26.6	– 3.0	83.4	4	6	3	6	1	5	2	2	2	.....	.....	6	.....	.....
Fanöe	N. 55 27	E. 8 24	0.42 p.m.	20	6	29.88	759.0	29.90	759.5	28.2	– 2.1	85.7	1	2	.....	4	1	6	3	5	1	.....	.....	6	.....	.....
Godthaab	N. 64 11	W. 51 46	8.41 a.m.	36	11	29.98	761.4	30.02	762.4	27.5	– 2.5	77.9	4	2	.....	1	8	1	1	11	3	.....	.....	7	.....	.....
Stykkisholm	N. 65 05	W. 22 46	10.37 a.m.	36	11	30.09	764.3	30.13	765.3	17.2	– 8.2	90.5	.....	.....	2	2	2	13	6	5	.....	.....	.....	6	.....	.....
Thorshavn	N. 62 02	W. 6 44	11.41 a.m.	29	9	29.84	757.9	29.87	758.8	34.3	1.3	78.9	11	.....	4	3	.....	1	1	8	3	.....	.....	8	.....	.....
Vestervig	N. 56 47	E. 8 20	0.41 p.m.	82	25	29.79	756.6	29.88	759.0	27.9	– 2.3	92.5	.....	4	3	5	2	1	4	7	5	.....	.....	4	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
French Series.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Agen	N. 44 12	E. 0 38	0.11 p.m.	604	184	29.19	741.5	30.25	768.3	38.7	3.7	83.6	3	7	2	1	4	11	1	2	.....	.....	.....	.....	1.26	31.9
Alençon	N. 48 25	E. 0 06	0.09 p.m.	476	145	29.37	746.1	29.93	760.1	31.8	– 0.1	92.6	6	1	1	5	5	.....	1	12	.....	.....	.....	7	2.83	72.0
Arras *a*	N. 50 17	E. 2 47	0.19 p.m.	239	73	29.03	752.6	29.88	758.9	30.0	– 1.1	90.0	3*e*	4	1	6	1	4	3	4	.....	.....	.....	.....	.....	.....	.....
Avignon	N. 43 57	E. 4 48	0.26 p.m.	65	20	29.79	756.6	29.87	758.6	40.3	4.6	75.3	26	2	.....	.....	.....	2	.....	1	.....	.....	.....	5	4.62	117.3
Bar-sur-Seine	N. 48 06	E. 4 22	0.25 p.m.	517	157	29.33	744.9	29.91	759.7	33.1	0.6	78.4	.....	2	.....	.....	9	5	11	4	.....	.....	.....	7	2.27	57.7
Beauvais	N. 49 26	E. 2 04	0.16 p.m.	246	75	29.63	752.6	29.91	759.7	32.4	0.2	85.1	2	1	5	2	5	5	4	7	.....	.....	.....	7	2.56	65.0
Besançon	N. 47 14	E. 6 01	0.32 p.m.	829	250	28.98	736.1	29.91	759.7	33.6	0.9	90.4	8	1	.....	1	8	.....	2	11	.....	.....	.....	5	3.82	97.0
Bordeaux	N. 44 50	E. 0 32	0.06 p.m.	243	74	29.56	750.9	29.83	757.7	39.2	4.0	78.2	3	3	3	3	3	9	2	5	.....	.....	.....	7	2.40	60.9
Bourges	N. 47 10	E. 2 24	0.17 p.m.	510	156	29.28	743.6	29.85	758.2	35.2	1.8	84.6	12	1	1	1	8	3	.....	5	.....	.....	.....	5	3.38	85.9
Brest	N. 48 23	W. 4 29	11.50 a.m.	213	65	29.62	752.3	29.86	758.4	40.5	4.7	72.8	8	2	1	5	.....	5	1	8	1	.....	.....	5	2.84	72.2
Caen	N. 49 11	W. 0 21	0.07 p.m.	69	21	29.72	755.0	29.82	757.3	39.2	4.0	92.0	1	.....	4	6	10	1	3	5	1	.....	.....	6	2.24	56.9
Châlons-sur-Marne	N. 48 57	E. 4 23	0.25 p.m.	294	90	29.58	751.2	29.92	760.0	32.7	0.4	.....	10	2	1	2	4	3	2	5	6	.....	.....	6	0.60	15.3
Charleville *c*	N. 49 46	E. 4 42	0.27 p.m.	476	145	29.32	744.8	29.85	758.2	32.2	0.1	85.4	.....	.....	.....	5	9	6	6	2	.....	.....	.....	6	1.63	41.5
Clermont-Fd	N. 45 45	E. 3 04	0.20 p.m.	1273	388	28.46	722.8	29.86	758.5	35.1	1.7	69.7	5	6	.....	5	6	3	.....	6	.....	.....	.....	6	1.61	40.8
Cluny	N. 46 26	E. 4 39	0.27 p.m.	787	240	29.02	737.1	29.89	759.2	35.2	1.8	73.6	12	.....	2	1	8	.....	.....	8	.....	.....	.....	5	0.11	2.7
Commercy	N. 48 45	E. 5 35	0.30 p.m.	817	249	29.03	737.3	29.93	760.1	29.5	– 1.4	87.0	3	.....	6	6	2	2	8	4	.....	.....	.....	.....	2.47	62.8
Gap	N. 44 34	E. 6 04	0.32 p.m.	2427	740	27.28	692.9	29.89	759.1	35.1	1.7	79.1	10	1	4	4	1	3	1	7	.....	.....	.....	.....	2.81	71.4
Gréasque	N. 43 24	E. 5 37	0.31 p.m.	1056	322	28.73	729.7	29.87	758.7	42.4	5.8	71.7	5	8	1	1	.....	2	9	5	.....	.....	.....	7	3.20	81.4
Grenoble	N. 45 11	E. 5 43	0.31 p.m.	715	218	29.04	737.6	29.90	759.4	33.4	0.8	.....	3	.....	6	.....	3	1	7	11	.....	.....	.....	.....	2.82	71.7
Guéret	N. 46 10	E. 1 52	0.16 p.m.	1486	453	28.22	716.8	29.86	758.5	34.5	1.4	80.6	.....	1	1	12	.....	10	6	1	.....	.....	.....	5	1.50	38.2
Lamballe	N. 48 28	W. 2 31	11.59 a.m.	252	77	29.54	750.3	29.82	757.4	37.0	2.8	85.5	6	5	3	1	5	3	6	2	.....	.....	.....	4	2.36	59.9
Lescar	N. 43 21	W. 0 26	0.06 p.m.	525	160	29.24	742.7	29.92	760.0	41.9	5.5	78.5	13	2	5	.....	4	.....	6	1	.....	.....	.....	6	4.76	120.9
Lorient	N. 47 44	W. 3 21	11.55 a.m.	86	26	29.78	756.4	29.88	758.9	39.9	4.4	71.0	5	2	2	3	2	2	2	13	.....	.....	.....	4	3.46	88.0
Lyons	N. 45 45	E. 4 49	0.27 p.m.	574	175	28.82	732.0	29.88	759.0	33.3	0.7	75.0	10	5	.....	1	7	4	1	3	.....	.....	.....	.....	1.10	27.8
Mans	N. 48 01	E. 0 12	0.09 p.m.	285	87	29.57	751.1	29.89	759.3	33.6	0.9	91.8	3	2	1	5	1	3	12	4	.....	.....	.....	6	3.20	81.2
Marseilles	N. 43 18	E. 5 23	0.29 p.m.	246	75	29.54	750.3	29.81	757.2	47.1	8.4	69.1	.....	11	4	1	.....	3	11	1	.....	.....	.....	6	2.70	68.6
Mont-Louis	N. 42 30	E. 2 07	0.16 p.m.	5203	1586	24.55	623.6	29.78	756.4	31.6	– 0.2	72.7	4	3	7	14	2	.....	.....	1	.....	.....	.....	6	2.41	61.1
Montpelier	N. 43 36	E. 3 54	0.24 p.m.	102	31	29.74	755.3	29.85	758.2	41.9	5.5	75.5	19	5	2	1	.....	.....	1	3	.....	.....	.....	6	7.20	182.8
Nancy	N. 48 41	E. 6 11	0.33 p.m.	712	217	29.13	739.9	29.93	760.3	30.4	– 0.9	81.4	2	12	3	3	3	1	1	6	.....	.....	.....	6	1.25	31.7
Nantes	N. 47 13	W. 1 33	0.02 p.m.	134	41	29.76	755.8	29.92	760.0	36.7	2.6	83.4	4	2	6	1	4	4	1	9	.....	.....	.....	7	3.28	83.4
Nice	N. 43 41	E. 7 16	0.37 p.m.	29	9	29.77	756.2	29.81	757.1	49.3	9.6	66.6	5	3	7	2	1	3	8	2	.....	.....	.....	6	5.76	146.2
Perpignan	N. 42 42	E. 2 53	0.19 p.m.	98	30	29.72	754.9	29.83	757.8	44.8	7.1	67.8	3	5	2	7	2	5	1	6	.....	.....	.....	6	1.60	40.7
Pic du Midi (Pitde)	N. 42 15	E. 0 08	0.08 p.m.	7763	2366	22.20	563.8	.....	.....	24.3	– 4.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	11.20	284.4
Privas	N. 44 44	E. 4 35	0.26 p.m.	997	304	28.83	732.2	29.93	760.1	36.5	2.5	77.2*d*	6*b*	1	1	.....	3	.....	.....	1	17	.....	.....	7	0.24	6.0
Puy de Dome	N. 45 46	E. 2 58	0.20 p.m.	4813	1467	24.77	629.2	.....	.....	23.0	– 5.0	84.5	3	2	4	9	1	3	5	4	.....	.....	.....	7	3.35	85.0
Rochefort	N. 45 56	W. 0 58	0.04 p.m.	29	9	29.82	757.3	29.84	758.0	39.2	4.0	89.1	.....	1	.....	4	4	4	9	9	.....	.....	.....	5	9.25	235.0
Roche-sur-Yon	N. 46 40	W. 1 26	0.14 p.m.	198	60	29.63	752.5	29.82	757.5	37.8	3.2	80.0	13	1	4	2	5	1	2	3	.....	.....	.....	6	2 20	55.9
Rodez	N. 44 21	E. 2 35	0.18 p.m.	2050	625	27.66	702.5	29.89	759.1	35.1	1.7	75.9	10	4	5	.....	.....	4	10	4	.....	.....	.....	8	1.52	38.7
Rouen	N. 49 26	E. 1 14	0.13 p.m.	80	24	29.80	756.8	29.88	759.0	35.4	1.9	74.5	5	2	.....	2	6	11	3	2	.....	.....	.....	5	0.47	12.0
Saint Lô *b*	N. 49 06	W. 1 05	0.04 p.m.	134	41	29.67	753.7	29.83	757.7	35.2	1.8	83.5	10	2	2	7	2	.....	9	5	.....	.....	.....	6	2.01	51.1
Saint Maur	N. 48 48	E. 2 21	0.18 p.m.	162	49	29.72	754.9	29.89	759.2	32.5	0.3	82.0	4	2	.....	2	8	2	3	10	.....	.....	.....	8	.....	.....
Toulouse	N. 43 37	E. 1 27	0.14 p.m.	636	194	29.16	740.6	29.88	758.9	38.3	3.5	88.6	1	11	3	.....	1	14	.....	1	.....	.....	.....	7	3.63	92.1
Tours	N. 47 24	E. 0 41	0.11 p.m.	171	52	29.66	753.3	29.85	758.3	.....	.....	.....	3	1	.....	5	1	5	2	14	.....	.....	.....	7	3.10	78.8
Versailles	N. 48 48	E. 2 07	0.16 p.m.	445	136	29.38	746.3	29.87	758.7	31.5	– 0.3	83.5*e*	1	3	4	6	1	4	3	9	.....	.....	.....	7	2.26	57.3
Sub-Series.																											
Paris, Montsouris	N. 48 50	E. 2 20	0.18 p.m.	213	66	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for January, 1881.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	O	Miles	Kil.	0–10	Inch.	Mill.
German Series.	° ′	° ′																								
Bamberg	N. 49 54	E. 10 53	1.51 p.m.	774	236	29.07	738.4	29.91	759.8	26.2	—3.2	83.8	5	8	2	2	1	5	6	2	.....	.....	.....	4	0.76	19.4
Berlin	N. 52 30	E. 13 23	1.02 p.m.	157	48	29.75	755.6	29.93	760.3	26.6	—3.0	76.4	3	5	2	8	1	6	2	4	.....	.....	.....	4	0.97	24.7
Breslau	N. 51 07	E. 17 02	1.17 p.m.	482	147	29.43	747.5	29.97	761.2	24.8	—4.0	77.9	3	5	4	4	5	8	.....	1	1	.....	.....	6	0.08	2.0
Carlsruhe	N. 49 01	E. 8 25	0.42 p.m.	404	123	29.53	750.1	29.97	761.3	30.2	—1.0	79.3	2	.....	.....	7	7	1	4	10	.....	.....	.....	6	1.79	45.4
Cassel	N. 51 19	E. 9 28	0.46 p.m.	561	171	29.29	744.0	29.90	759.4	25.9	—3.4	82.9	5	1	.....	3	10	3	6	3	.....	.....	.....	6	1.19	30.3
Frankfort on M.	N. 50 08	E. 8 41	0.43 p.m.	338	103	29.65	753.2	30.04	763.0	28.0	—2.2	73.0	11	1	2	4	12	.....	.....	1	.....	.....	.....	6	1.22	30.9
Friedrichshafen	N. 47 39	E. 9 29	0.45 p.m.	1355	413	28.43	722.2	29.94	760.5	29.1	—1.6	64.8	3	1	3	4	1	2	4	13	.....	.....	.....	6	0.97	24.6
Hamburg	N. 53 33	E. 9 58	0.48 p.m.	66	20	29.86	758.4	29.93	760.2	25.5	—3.6	82.4	2	3	2	8	1	7	5	2	1	.....	.....	6	0.82	20.7
Kiel	N. 54 20	E. 10 04	0.49 p.m.	26	8	29.89	759.2	29.91	759.6	27.0	—2.8	81.8	2	2	3	7	3	2	4	2	6	.....	.....	6	0.52	13.3
Leipsic	N. 51 20	E. 12 24	0.58 p.m.	390	119	29.52	749.9	29.97	761.2	24.4	—4.2	84.0	2	1	1	9	4	9	2	3	.....	.....	.....	7	0.74	18.9
Magdeburg	N. 52 09	E. 11 37	0.54 p.m.	210	64	29.70	754.4	29.94	760.5	24.1	—4.4	86.8	1	1	7	1	2	1	6	4	8	.....	.....	6	0.94	23.9
Memel	N. 55 43	E. 21 07	1.32 p.m.	39	12	29.83	757.6	29.87	758.8	21.4	—5.9	85.7	2	4	9	2	2	8	1	3	.....	.....	.....	7	.....	.....
Munich	N. 48 09	E. 11 34	0.55 p.m.	1732	528	28.04	712.3	29.90	759.4	26.2	—3.2	72.9	4	3	6	1	1	1	6	6	3	.....	.....	7	0.79	20.1
Neufahrwasser	N. 54 24	E. 18 40	1.25 p.m.	16	5	29.90	759.5	29.91	759.6	25.0	—3.9	76.5	2	4	5	3	9	5	1	1	1	.....	.....	7	0.99	25.1
Neustadt	N. 49 21	E. 8 08	0.41 p.m.	479	146	29.34	745.1	29.86	758.5	30.6	—0.8	.....	3	2	5	3	4	2	1	7	4	.....	.....	5	3.04	77.2
Stuttgart	N. 48 47	E. 9 11	0.45 p.m.	879	268	28 94	735.0	29.88	758.9	29.3	—1.5	68.6	11	1	2	5	3	6	4	5	.....	.....	.....	5	0.68	17.2
Thorn	N. 53 01	E. 18 36	1.24 p.m.	171	52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Weissenburg	N. 49 02	E. 10 58	0.52 p.m.	1414	431	28.37	720.6	29.90	759.4	27.0	—2.8	84.7	.....	2	5	1	1	5	2	4	11	.....	.....	6	0.46	11.8
Wustrow	N. 54 21	E. 12 24	0.58 p.m.	23	7	29.90	759.5	29.93	760.1	26.6	—3.0	92.7	4	1	3	6	.....	6	4	7	.....	.....	.....	7	0.65	16.5
Greek Series.																										
Athens	N. 37 58	E. 23 43	1.43 p.m	266	81	29.56	750.8	29.96	781.0	56.5	13.6	.....	.....	2	3	10	6	1	1	8	.....	.....	.....	6	.....	.....
Indian Series.																										
Kurachee	N. 24 47	E. 67 04	4.36 p.m.	49	15	30.22	762.5	30.07	763.8	75.6	24.2	45.0	1	.....	1	18	6	.....	1	4	.....	.....	.....	1	0	0
Deesa	N. 24 16	E. 72 14	4.57 p.m.	474	144	29.52	749.3	30.00	762.0	78.8	26.0	26.2	4	11	2	5	1	2	1	3	2	.....	.....	2	0	0
Bombay	N. 18 54	E. 72 49	4.59 p.m.	37	11	29.93	760.2	29.97	761.2	78.3	25.7	61.3	.....	25	6	.....	.....	.....	.....	.....	.....	.....	.....	1	0	0
Poona	N. 18 28	E. 74 10	5.05 p.m.	2000	610	28.10	713.7	29.94	760.5	82.8	28.2	21.4	3	1	4	5	1	4	8	5	.....	.....	.....	2	0	0
Belgaum	N. 15 52	E. 74 42	5.07 p.m.	2550	777	27.41	696.2	29.94	760.5	78.9	26.1	27.6	3	.....	.....	.....	1	2	10	15	.....	.....	.....	2	0	0
Lahore *a*	N. 31 34	E. 74 20	5.41 p.m.	732	223	29.31	744.5	30.08	764.0	64.8	18.2	40.3	.....	.....	5	.....	.....	.....	2	3	21	.....	.....	2	0.03	0.8
Roorkee	N. 29 52	E. 77 56	5.20 p.m.	887	270	29.14	740.1	30.07	763.8	63.8	17.7	49.1	.....	15	5	.....	1	.....	1	9	.....	.....	.....	2	0.25	6.3
Agra	N. 27 10	E. 78 05	5.20 p.m.	555	175	29.49	749.0	30.08	764.0	70.4	21.3	37.8	4	4	14	1	.....	1	3	2	.....	.....	.....	1	0	0
Nagpur	N. 21 09	E. 71 11	4.52 p.m.	1025	312	28.97	735.8	30.02	762.5	78.8	26.0	31.8	.....	.....	.....	1	3	4	5	4	14	.....	.....	1	0.03	0.8
Jubulpore	N. 23 09	E. 79 59	5.28 p.m.	1351	412	28.68	728.5	30.06	763.5	70.5	21.4	39.9	4	1	1	.....	1	.....	3	4	17	.....	.....	1	0.01	0.3
Lucknow	N. 26 50	E. 81 00	5.32 p.m.	369	112	29.68	753.9	30.07	763.8	65.6	18.7	37.9	6	6	.....	.....	.....	.....	.....	19	.....	.....	.....	1	0.03	0.8
Allahabad *a*	N. 25 26	E. 81 52	5.36 p.m.	307	94	29.74	755.4	30.07	763.8	64.2	17.9	56.9	.....	.....	.....	.....	.....	.....	1	.....	30	.....	.....	0	0.18	4.6
Patna	N. 25 37	E. 85 08	5.48 p.m.	179	55	29.86	758.4	30.05	763.3	64.3	17.9	61.0	1	.....	27	.....	.....	.....	.....	3	.....	.....	.....	1	0.08	2.0
Hazaribagh	N. 24 00	E. 85 24	5.49 p.m.	2010	613	27.99	710.9	30.07	763.8	63.2	17.3	40.8	6	22	1	.....	.....	.....	.....	1	1	.....	.....	0	0.25	6.3
Cuttack	N. 20 29	E. 85 54	5.52 p.m.	80	24	29.95	760.7	30.04	763.0	74.0	23.3	54.4	5	3	3	1	.....	1	1	6	11	.....	.....	1	0	0
Calcutta	N. 22 33	E. 88 21	6.01 p.m.	18	5	30.01	762.2	30.03	762.7	67.4	19.7	59.6	8	9	4	.....	.....	.....	.....	1	9	.....	.....	0	0	0
Goalpara	N. 26 11	E. 90 40	6.11 p.m.	386	118	29.61	752.1	30 03	762.7	67.9	19.9	58.3	.....	1	.....	2	.....	1	5	4	18	.....	.....	0	0	0
Chittagong	N. 22 21	E. 91 50	6.15 p.m.	90	25	29.92	760.0	30.02	762.5	69.3	20.7	62.0	3	3	22	1	.....	.....	.....	2	.....	.....	.....	0	0	0
Sibsagar	N. 26 59	E. 94 40	6.27 p.m	332	101	29.72	754.9	30.07	763.8	60.6	15.9	84.1	.....	.....	.....	2	4	2	3	19	1	.....	.....	2	0.18	4.6
Italian Series.																										
Udine	N. 46 04	E. 13 14	1.01 p.m.	381	116	29.50	749.2	29.93	760.1	36.7	2.6	66.5	3	.....	.....	.....	.....	.....	10	3	15	.....	.....	7	5.32	135.1
Milan	N. 45 28	E. 9 11	0.45 p.m.	482	147	29.39	746.6	29.93	760.2	32.9	0.5	84.1	3	.....	6	9	3	5	3	2	.....	.....	.....	4	4.14	105.2
Padua	N. 45 24	E. 11 53	0.56 p.m.	102	31	29.81	757.1	29.92	759.9	36.9	2.7	78.3	14	6	.....	.....	.....	.....	1	7	.....	.....	.....	7	3.43	87.1
Moncalleri	N. 44 59	E. 7 41	0.39 p.m.	853	260	28.99	736.4	29.93	760.2	33.4	0.8	74.5	5	5	1	1	2	1	8	8	.....	.....	.....	5	4.95	125.7
Genoa	N. 44 25	E. 8 30	0.42 p.m.	157	48	29.65	753.2	29.85	758.1	41.0	5.0	57.1	19	3	1	.....	1	.....	1	6	.....	.....	.....	6	5.18	131.7
Mondovi	N. 44 22	E. 7 48	0.39 p.m.	1824	556	27.95	709.9	29.96	760.9	31.5	—0.3	67.8	1	.....	26	.....	2	.....	2	.....	.....	.....	.....	5	2.13	54.1
Pesaro	N. 43 55	E. 12 53	1.00 p.m.	46	14	29.84	758.0	29.89	759.2	37.6	3.1	80.4	2	5	18	1	.....	1	1	2	1	.....	.....	9	4.92	124.9
Florence	N. 43 46	E. 11 14	0.53 p.m.	240	73	29.57	751.1	29.83	757.8	42.4	5.8	68.0	6	.....	1	4	1	.....	4	13	.....	.....	.....	8	6.10	154.8
Leghorn *a*	N. 43 32	E. 10 18	0.49 p.m.	79	24	29.74	755.3	29.82	757.5	44.1	6.7	70.6	1	3	1	2	1	.....	2	20	.....	.....	.....	7	12.15	308.7
Rome	N. 41 54	E. 12 29	0.58 p.m.	164	50	29.64	752.8	29.82	757.3	51.8	11.0	68.5	7	2	4	6	4	2	2	1	3	.....	.....	7	7.87	199.9
Lecce	N. 40 21	E. 18 12	1.21 p.m.	236	72	29.63	752.5	29.88	759.0	54.0	12.2	73.2	3	4	.....	6	7	7	.....	4	.....	.....	.....	8	3.83	97.3
Cosenza	N. 39 18	E. 16 15	1.13 p.m.	840	256	29.00	736.7	29.91	759.6	54.5	12.5	68.5	1	8	2	8	.....	6	.....	.....	6	.....	.....	9	18.89	479.7
Cagliari	N. 39 13	E. 9 10	0.45 p.m.	180	55	29.62	752.3	29.82	757.3	57.7	14.3	62.1	2	15	3	.....	1	4	1	.....	5	.....	.....	8	0.93	23.6
Palermo	N. 38 07	E. 13 22	1.02 p.m.	236	72	29.64	752.8	29.89	759.1	62.1	16.7	54.0	.....	4	8	14	.....	2	2	.....	1	.....	.....	8	2.44	61.9
Syracuse	N. 37 03	E. 15 18	1.09 p.m.	43	13	29.86	758.4	29.90	759.5	61.3	16.3	68.1	.....	2	4	8	6	5	6	.....	.....	.....	.....	8	1.38	35.0
Sub-Series.																										
Naples	N. 40 52	E. 14 18	1.05 p.m.	489	149	29.32	744.7	29.83	757.7	52.5	11.4	73.4	3	1	3	10	5	2	2	5	.....	.....	.....	8	5.60	142.2
Stelvio	N. 46 37	E. 10 32	0.50 p.m.	8343	2543	22.00	558.8	.....	.....	13.1	—10.6	68.7	1	.....	1	7	4	2	9	7	.....	.....	.....	4	32.68	830.0
Valdobbia	N. 45 47	E. 12 00	0.56 p.m.	8360	2548	21.82	554.2	.....	.....	15.4	—9.2	80.7	4	.....	2	1	3	3	12	6	.....	.....	.....	6	104.33	2650.0
Japanese Series.																										
Hiroshima	N. 34 20	E. 132 27	8.58 p.m.	14	4	30.07	763.7	30.09	764.2	33.8	1.0	76.4	8	1	.....	.....	.....	.....	9	13	.....	.....	.....	3	1.55	39.3
Kioto	N. 35 01	E. 135 46	9.14 p.m.	162	49	29.83	757.7	30.02	762.4	32.0	0.0	80.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	1.18	30.0
Nagasaki	N. 32 44	E. 129 51	8.47 p.m.	189	58	29.93	760.1	30.14	765.6	38.5	3.6	76.8	5	6	5	3	.....	3	.....	.....	9	.....	.....	8	4.77	121.1
Tokei	N. 35 40	E. 139 45	9.27 p.m.	63	19	29.81	757.1	29.88	759.0	33.6	0.9	66.7	7	11	4	3	1	2	.....	2	.....	.....	.....	3	1.74	44.2
Wakayama	N. 34 14	E. 135 09	9.09 p.m.	48	15	29.98	761 .6	30.04	763.0	36.5	2.5	71.2	7	11	6	.....	2	.....	3	1	1	.....	.....	4	1.16	29.5
Mauritius Ser's.																										
Mauritius	S. 20 06	E. 57 33	3.58 p.m.	181	55	29.74	755.4	29.93	760.2	79.8	26.6	68.9	7	3	.....	1	3	1	8	8	.....	.....	.....	7	4.55	115.6
Mexican Series.																										
Colima	N. 19 00	W. 103 07	5.13 a.m.	1663	507	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Guadalajara	N. 20 41	W. 103 14	5.15 a.m.	5148	1569	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Guanaxuato	N. 21 01	W. 100 48	4.50 a.m.	6683	2037	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Leon	N. 21 07	W. 101 35	5.22 a.m.	5902	1799	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mazatlan	N. 23 11	W. 106 17	5.03 a.m.	249	76	29.75	755.6	30.01	762.3	64.0	17.8	67.5	9	6	.....	.....	.....	1	4	11	.....	.....	.....	4	0.52	13.2
Mexico	N. 19 26	W. 99 00	5.32 a.m.	7490	2283	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Morelia	N. 19 42	W. 100 59	5.24 a.m.	6365	1940	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pabellon	N. 22 04	W. 102 04	5.20 a.m.	6312	1924	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Puebla	N. 19 02	W. 98 03	5.36 a.m.	7113	2168	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Luis Potosi	N. 22 10	W. 100 51	5.25 a.m.	6211	1893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tlacotalpam	N. 18 37	W. 95 32	5.46 a.m.	13	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vera-Cruz	N. 19 12	W. 96 00	5.44 a.m.	26	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Zacatecas	N. 22 44	W. 102 26	5.18 a.m.	8189	2496	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for January, 1881.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
Netherland Series.	° ′	° ′																								
Flushing *a*	N. 51 24	E. 3 35	0.22 p.m.	0	0	29.83	757.6	29.83	757.6	32.2	0.1	.....	3	3	3	1	8	1	3	8	.....	.....	.....	.....	1.49	37.8
Groningen	N. 53 12	E. 6 34	0.34 p.m.	0	0	29.83*d*	757.7*d*	29.89*d*	759.2*d*	29.1c	—1.6	.....	4	.....	1	6	8	1	6	5	.....	.....	.....	.....	1.40	35.5
Helder	N. 52 58	E. 4 45	0.27 p.m.	0	0	29.89	759.2	29.89	759.2	30.9	—0.6	.....	3	2	.....	4	4	5	5	8	.....	.....	.....	.....	1.40	35.5
Hellevoetsluis	N. 51 49	E. 4 80	0.25 p.m.	0	0	29.79	756.7	29.79	756.7	30.7	—0.7	.....	1	.....	4	3	6	2	4	8	3	.....	.....	.....	0.81	20.5
Utrecht	N. 52 05	E. 5 07	0.29 p.m.	43	13	29.86	758.5	29.91	759.7	33.6	0.9	85.5	2	3	3	4	6	2	5	6	.....	.....	.....	5	1.21	30.8
Norwegian Series.																										
Bergen	N. 60 24	E. 5 20	0.29 p.m.	49	15	29.79	756.7	29.84	757.8	29.8	—1.2	76.1	2	4	.....	2	2	6	3	.....	12	.....	.....	6	2.41	61.3
Christiania	N. 59 55	E. 10 45	0.51 p.m.	134	41	29.70	754.3	29.85	758.3	19.6	—6.9	75.9	9	1	1	3	2	1	4	7	3	.....	.....	6	0.18	4.7
Gjæsvær	N. 71 07	E. 25 22	1.49 p.m.	23	7	29.49	749.0	29.51	749.5	19.4	—7.0	.....	1	5	3	3	.....	1	.....	11	7	.....	.....	6	.....	.....
Lodingen	N. 68 24	E. 16 01	1.12 p.m.	43	13	29.57	751.0	29.61	752.2	21.0	—6.1	76.9	9	2	6	4	.....	3	1	5	1	.....	.....	6	4.87	123.6
Portuguese Series.																										
Angra	N. 38 39	W. 27 14	10.19 a.m.	144	44	29.40	746.8	29.56	750.9	55.9	13.3	84.0	2	4	5	5	2	4	8	1	.....	.....	.....	5	14.65	372.0
Campo Major	N. 39 02	W. 6 59	11.40 a.m.	945	288	28.86	733.1	29.87	758.8	52.5	11.4	75.7	5	.....	6	5	7	1	2	5	.....	.....	.....	8	10.27	260.9
Funchal	N. 32 38	W. 16 55	11.00 a.m.	82	25	29.84	758.0	29.93	760.2	65.5	18.6	76.2	.....	.....	11	11	4	1	2	1	1	.....	.....	7	9.27	235.4
Lisbon	N. 38 42	W. 9 08	11.31 a.m.	335	102	29.52	749.9	29.89	759.1	51.4	10.8	81.7	2	1	2	11	3	1	2	9	.....	.....	.....	7	10.83	275.1
Ponta Delgada	N. 37 45	W. 25 41	10.25 a.m.	66	20	29.52	749.9	29.61	752.1	59.0	15.0	75.5	1	1	4	9	7	2	2	3	2	.....	.....	6	13.04	331.2
Russian Series.																										
Akmolinski	N. 51 03	E. 71 22	4.54 p.m.	?	?	28.93	734.7	30.10	764.5	11.3	—11.5	96.3	2	.....	.....	11	5	1	3	1	8	.....	.....	3	.....	.....
Archangel	N. 64 33	E. 40 32	2.50 p.m.	16	5	29.47	748.6	29.49	749.1	0.1	—17.7	84.1	3	5	3	5	6	2	3	2	2	.....	.....	7	.....	.....
Astrakhan	N. 46 21	E. 48 02	3.20 p.m.	‖ 72	‖ 22	30.14	765.5	30.06	763.5	28.2	—2.1	77.8	2	3	6	4	3	2	7	3	1	.....	.....	8	.....	.....
Barnaul	N. 53 20	E. 83 47	5.45 p.m.	482	147	29.68	753.9	30.22	767.7	14.5	—9.7	79.2	.....	1	1	15	1	1	.....	2	10	.....	.....	7	.....	.....
Dorpat	N. 58 23	E. 26 43	1.55 p.m.	223	68	29.50	749.3	29.76	755.9	13.5	—10.3	84.2	1	4	5	13	2	1	4	.....	1	.....	.....	6	.....	.....
Ekaterinburg	N. 56 49	E. 60 35	4.11 p.m.	876	267	28.83	732.2	29.87	758.6	5.5	—14.7	74.1	.....	1	6	12	1	7	1	.....	3	.....	.....	7	.....	.....
Kasan	N. 55 47	E. 49 08	3.25 p.m.	249	76	29.53	750.0	29.82	757.5	6.1	—14.4	81.4	2	.....	2	12	6	7	.....	.....	2	.....	.....	7	.....	.....
Kertch	N. 45 21	E. 36 29	2.34 p.m.	20	6	29.95	760.8	29.97	761.3	31.5	—0.3	87.0	3	9	3	2	4	1	5	3	1	.....	.....	9	.....	.....
Kieff	N. 50 26	E. 30 31	2.10 p.m.	600	183	29.24	742.7	29.91	759.7	18.1	—7.7	79.3	2	6	8	2	5	5	3	.....	.....	.....	.....	7	.....	.....
Krotkowo	N. 53 47	E. 48 34	3.22 p.m.	436	133	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lugan	N. 48 35	E. 39 20	2.46 p.m.	187	57	29.73	755.2	29.94	760.4	22.1	—5.5	75.8	1	5	6	5	2	5	1	3	3	.....	.....	7	.....	.....
Moscow	N. 55 46	E. 37 40	2.39 p.m.	512	156	29.18	741.1	29.78	756.5	12.0	—11.1	75.5	3	2	.....	1	18	4	.....	.....	3	.....	.....	6	.....	.....
Nertchinsk	N. 51 19	E. 119 37	8.07 p.m.	1942	592	27.86	707.7	30.55	775.9	-20.4	-29.1	79.2	.....	4	.....	.....	.....	.....	.....	.....	27	.....	.....	3	.....	.....
Nikolaiev	N. 46 58	E. 31 58	2.16 p.m.	62	19	29.94	760.5	30.01	762.2	26.8	—2.9	81.2	6	5	1	4	5	2	4	3	1	.....	.....	2	.....	.....
Nikolaievsk *d*	N. 53 08	E. 140 45	9.31 p.m.	59	18	29.83	757.6	29.91	759.8	-12.6	-24.8	73.6	.....	.....	11	.....	.....	.....	.....	.....	16	.....	.....	7	.....	.....
Nukuss *a*	N. 42 27	E. 59 37	4.07 p.m.	216	66	30.01	762.2	30.25	768.3	39.2	4.0	77.0	3	5	1	4	5	4	2	5	1	.....	.....	4	.....	.....
Pekin	N. 39 57	E. 116 29	7.54 p.m.	125	38	30.13	765.2	30.27	768.8	23.5	—4.7	49.3	.....	7	.....	1	1	.....	.....	1	21	.....	.....	6	.....	.....
St. Petersburg	N. 59 56	E. 30 16	2.09 p.m.	16	5	29.65	753.2	29.67	753.5	11.8	—11.2	82.5	3	3	10	6	1	6	.....	1	1	.....	.....	1	.....	.....
Tashkend	N. 41 19	E. 69 16	4.45 p.m.	1621	494	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	.....
Tiflis	N. 41 43	E. 44 47	3.07 p.m.	1342	409	28.63	727.2	30.08	763.9	43.3	6.3	56.8	4	11	1	.....	1	1	1	.....	12	.....	.....	5	.....	.....
Warsaw	N. 52 13	E. 21 02	1.32 p.m.	394	120	29.49	749.0	29.93	760.2	20.5	—6.4	79.5	3	2	10	5	2	8	1	.....	.....	.....	.....	6	.....	.....
Wilna	N. 54 51	E. 25 18	1.49 p.m.	387	118	29.44	747.8	29.88	759.0	18.0	—7.8	82.3	1	4	7	10	.....	4	1	2	2	.....	.....	7	.....	.....
Yeniseisk	N. 58 27	E. 92 09	6.16 p.m.	128	39	29.95	760.7	30.29	769.2	0.7	-17.4	82.4	.....	.....	3	2	2	10	.....	3	11	.....	.....	5	.....	.....
Scottish Series.																										
Leith	N. 55 58	W. 3 10	11.55 a.m.	83	25	.....	.....	29.95	760.7	32.4	0.2	89.8	.....	1	15	2	.....	2	7	4	.....	.....	.....	6	1.09	27.7
Monach Lt. House	N. 57 31	W. 7 42	11.37 a.m.	150	46	.....	.....	29.98	761.5	39.7	4.3	90.5	2	2	1	4	7	7	1	7	.....	.....	.....	8	2.20	55.9
North Unst	N. 60 51	W. 0 53	0.04 a.m.	230	70	.....	.....	29.83	757.7	.....	.....	.....	8	3	8	1	2	3	2	4	.....	.....	.....	9	.....	.....
Spanish Series.																										
Barcelona	N. 41 23	E. 2 11	0.16 p.m.	98	30	29.72	755.0	29.84	757.8	51.4	10.8	66.5	4	3	9	4	2	.....	1	8	.....	.....	.....	5	3.64	92.5
Bilbao	N. 43 15	W. 2 59	11.56 a.m.	56	17	29.82	757.4	29.88	759.0	48.2	9.0	73.9	1	5	4	2	3	10	6	.....	.....	.....	.....	8	6.16	156.6
Burgos	N. 42 20	W. 3 46	11.53 a.m.	2821	860	26.85	681.9	.....	.....	38.7	3.7	80.6	2	.....	5	6	7	1	2	8	.....	.....	.....	8	7.89	200.5
Madrid	N. 40 25	W. 3 42	11.53 a.m.	2152	656	27.62	701.5	29.89	759.2	45.5	7.5	76.1	4	2	3	9	6	1	.....	6	.....	.....	.....	7	5.15	130.7
Murcia ‡	N. 37 59	W. 1 10	0.03 p.m.	141	43	29.76	755.8	29.90	759.5	59.7	15.4	68.0	.....	7	7	6	.....	5	1	5	.....	.....	.....	7	1.03	26.2
Santiago	N. 42 53	W. 8 28	11.34 a.m.	863	263	28.82	732.1	29.72	755.0	47.1	8.4	79.7	1	1	1	8	2	6	2	10	.....	.....	.....	8	19.57	497.0
Sub-Series.																										
Havana	N. 23 08	W. 82 28	7.39 a.m.	62	19	30.01	762.3	30.08	764.1	69.6	20 9	89.3	3	.....	.....	1	.....	6	14	3	4	.....	.....	4	6.85	174.0
Manilla	N. 14 36	E. 121 00	8.12 p.m.	108	33	29.96	761.0	30.01	762.2	78.1	25.6	73.9	2	.....	.....	3	2	4	12	8	.....	.....	.....	3	0.16	4.1
San Fernando	N. 36 28	W. 6 13	11.43 a.m.	95	29	29.90	759.4	29.99	761.8	57.2	14.0	80.4	2	1	2	8	9	1	2	4	2	.....	.....	8	11.44	290.5
San Juan de Porto Rico	N. 18 30	W. 66 10	7.44 a.m.	82	25	30.02	762.5	30.11	764.7	74.7	23.7	87.8	.....	.....	2	1	8	15	3	2	.....	.....	.....	6	1.06	27.0
Swedish Series.																										
Haparanda	N. 65 47	E. 23 15	1.41 p.m.	29	9	29.61	752.1	29.65	753.1	7.0	-13.9	96.1	9	7	2	4	.....	1	3	1	4	.....	.....	7	0.35	9.0
Umea	N. 63 50	E. 20 17	1.29 p.m.	39	12	29.63	752.5	29.69	754.0	13.6	-10.2	87.4	10	3	1	1	1	1	.....	6	8	.....	.....	8	1.13	28.8
Hernosand	N. 62 32	E. 17 57	1.20 p.m.	46	14	29.69	754.1	29.75	755.6	18.5	—7.5	80.0	7	2	4	4	1	1	.....	3	9	.....	.....	7	0.70	17.8
Stockholm	N. 59 20	E. 18 04	1.20 p.m.	144	44	29.60	751.7	29.78	756.4	20.5	—6.4	82.3	6	7	10	4	2	.....	2	.....	.....	.....	.....	6	0.40	10.2
Wisby	N. 57 39	E. 18 19	1.20 p.m.	52	16	29.69	754.0	29.74	755.4	27.1	—2.7	82.4	5	5	7	3	3	5	1	2	.....	.....	.....	7	0.64	16.2
Sub-Series.																										
Upsala	N. 59 51	E. 17 37	1.19 p.m.	79	24	29.65	753.1	29.74	755.3	18.3	—7.6	84.5	2	10	3	11	1	1	1	2	.....	.....	.....	6	0.47	12.0
Swiss Series.																										
Geneva	N. 46 12	E. 6 08	0.33 p.m.	1338	408	28.43	722.1	29.94	760.5	32.0	0.0	77.6	6	3	1	4	4	1	3	9	.....	.....	.....	8	2.28	57.9
Zurich	N. 47 22	E. 8 33	0.38 p.m.	1542	470	28.23	717.1	29.95	760.8	28.9	—1.7	75.1	1	.....	3	1	.....	1	8	.....	17	.....	.....	6	1.29	32.7
Turkish Series.																										
Constantinople	N. 41 00	E. 28 59	2.02 p.m.	?	?	.....	.....	29.98	761.5	45.1	7.3	77.6	7	4	2	7	.....	2	2	7	.....	.....	.....	9	5.85	148.6
Valona	N. 40 27	E. 19 27	1.25 p.m.	?	?	.....	.....	29.88	758 9	56.7	13.7	.....	.....	6	6	3	9	3	2	2	.....	.....	.....	8	4.37	111.0
Sub-Series.																										
Beirut	N. 33 54	E. 35 29	2.30 p.m.	98	30	.....	.....	30.22	767.6	59.9	15.5	64.1	.....	5	2	15	.....	1	.....	7	1	.....	.....	5	4.21	106.9

‖ Below sea level.

RESULT OF SIMULTANEOUS OBSERVATIONS FOR JANUARY, 1881.

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea. Feet.	Altitude of Barometer above sea. Met'rs	Mean Barometer. Actual. Inch.	Mean Barometer. Actual. Mill.	Mean Barometer. Reduced. Inch.	Mean Barometer. Reduced. Mill.	Mean Temperature. Fah.	Mean Temperature. Cent.	Mean Rel. Humidity.	Wind. Directions. N	NW	W	SW	S	SE	E	NE	C	Wind. Total Movement. Miles	Wind. Total Movement. Kil.	Average Cloudiness. 0–10	Total Precipitation. Inch.	Total Precipitation. Mill.
U. S. SERIES.	° ′	° ′																								
Albany	N. 42 40	W. 73 45	7.13 a.m.	75	23	30.08	764.0	30.17	766.3	16.2	—8.8	75.3	6	4	3	2	3	......	4	9	......	3807	6127	7	2.85	72.6
Alpena	N. 45 05	W. 83 28	6.34 a.m.	609	185	29.44	747.8	30.14	765.5	8.9	-12.8	77.2	2	7	10	6	3	1	......	2	......	5497	8846	7	1.59	40.4
Atlanta	N. 33 45	W. 84 23	6.31 a.m.	1131	345	28.95	735.3	30.15	765.8	35.1	1.7	78.8	3	11	3	3	......	......	9	1	1	6792	10930	7	8.35	212.1
Atlantic City	N. 39 22	W. 74 25	7.11 a.m.	13	4	30.15	765.8	30.16	766.1	24.7	—4.1	81.2	11	7	7	......	2	1	1	2	......	7096	11420	6	7.18	182.4
Attou, Aleutian I.	N. 52 38	E. 172 30	11.38 p.m.	......	......	29.32	744.7	......	......	30.6	—0.8	93.1	4	2	1	2	13	3	......	5	1	9933	15985	8	5.19	131.8
Augusta	N. 33 28	W. 81 54	6.41 a.m.	183	56	30.02	762.5	30.22	767.6	37.7	3.2	82.3	1	5	2	......	1	1	1	8	12	2510	4039	7	8.69	220.7
Baltimore	N. 39 18	W. 76 38	7.02 a.m.	45	14	30.14	765.5	30.19	766.8	26.2	—3.2	78.3	4	7	7	4	......	1	2	2	4	3673	5911	5	4.84	122.9
Barnegat	N. 39 48	W. 74 09	7.12 a.m.	20	6	30.12	765.0	30.14	765.5	23.9	—4.5	83.9	8	15	2	......	3	......	2	......	1	9974	16051	6	8.43	214.1
Bismarck	N. 46 48	W. 100 38	5.26 a.m.	1693	516	28.28	718.3	30.14	765.5	—6.7	-21.5	96.8	1	10	3	......	1	2	2	1	11	5691	9159	4	0.69	17.5
Boise City	N. 43 46	W. 116 06	4.24 a.m.	2750	838	27.29	693.2	30.25	768.3	26.2	—3.2	82.8	3	10	4	......	......	11	......	......	3	2790	4490	8	3.62	91.9
Boston	N. 42 21	W. 71 04	7.23 a.m.	142	43	29.94	760.5	30.11	764.8	17.3	—8.2	70.0	3	8	16	1	1	......	1	1	......	8372	13473	6	7.21	183.1
Brackettville	N. 29 17	W. 100 51	5.27 a.m.	1170	356	28.97	735.8	30.08	764.0	34.8	1.6	83.1	......	......	......	......	......	......	......	......	......	4613	7424	6	0.35	8.9
Brownsville	N. 26 00	W. 97 30	5.38 a.m.	43	13	30.10	764.5	30.14	765.5	45.9	7.7	90.7	12	2	1	......	1	2	1	3	8	4722	7599	7	2.73	69.3
Buffalo	N. 42 53	W. 78 55	6.52 a.m.	664	202	29.38	746 2	30.14	765.5	16.2	—8.8	81.3	......	4	4	17	......	......	2	4	......	6288	10119	9	2.31	58.7
Burlington	N. 40 49	W. 91 07	7.15 a.m.	268	82	29.88	758.9	30.20	767.1	11.2	-11.6	76.7	2	1	1	1	10	3	7	6	......	5665	9117	7	0.88	22.4
Cairo	N. 37 00	W. 87 12	6.11 a.m.	377	115	29.83	757.7	30.25	768.3	25.0	—3.9	80.6	8	5	3	2	......	8	......	......	5	4481	7210	5	3.56	90.4
Campo	N. 32 22	W. 116 08	4.22 a.m.	2500	762	27.50	698.5	30.06	763.5	31.8	—0.1	75.7	......	1	4	2	8	1	12	2	1	4832	7776	3	1.74	44.2
Camp Thomas	N. 32 04	W. 110 06	4.49 a.m.	2710	826	27.32	693.9	......	......	25.8	—3.4	74.0	......	......	2	......	......	......	......	1	28	......	......	2	0.03	0.8
Cape Henry	N. 36 56	W. 76 00	7.04 a.m.	16	5	30.15	765.8	30.17	766.3	33.3	0.7	76.5	10	10	3	5	1	......	......	2	......	7865	12657	5	4.03	102.4
Cape May	N. 38 56	W. 74 58	7.08 a.m.	27	8	30.12	765.0	30.16	766.1	27.0	—2.8	79.3	9	10	3	1	2	1	1	4	......	11852	19073	6	7.36	186.9
Castroville	N. 29 25	W. 98 50	5.33 a.m.	780	238	29.35	745.5	30.10	764.5	34.3	1.3	75.7	2	19	1	......	1	1	4	......	3	4611	7420	5	0.45	11.4
Cedar Keys	N. 28 12	W. 83 02	6.36 a.m.	22	7	30.12	765.0	30.14	765.5	50.6	10.3	88.8	8	2	......	2	2	3	5	8	1	7056	11355	5	9.36	237.7
Champaign	N. 40 07	W. 88 14	6.15 a.m.	767	234	29.31	744.5	30.18	766.6	15.0	—9.4	66.8	2	5	3	6	4	4	1	4	2	7652	12313	6	0.89	22.6
Charleston	N. 32 45	W. 79 55	6.49 a.m.	52	16	30.13	765.3	30.19	766.8	43.0	6.1	82.4	14	5	6	2	3	......	......	1	......	5263	8470	6	5.98	151.9
Charlotte	N. 35 13	W. 80 51	6.45 a.m.	808	246	29.29	744.0	30.14	765.5	32.2	0.1	79.1	3	1	4	6	2	......	3	11	1	3884	6250	6	6.81	173.0
Chattanooga	N. 35 04	W. 85 15	6.27 a.m.	783	239	29.36	745.7	30.20	767.1	31.9	—0.1	82.4	3	5	3	4	4	......	1	8	3	4607	7414	8	4.70	119.4
Cheyenne	N. 41 12	W. 104 42	5.09 a.m.	6089	1856	23.92	607.6	29.86	758.4	18.2	—7.7	63.9	7	9	7	3	...	2	......	1	2	9855	15860	3	0.36	9.1
Chicago	N. 41 52	W. 87 35	6.18 a.m.	661	201	29.40	746.7	30.15	765.8	15.6	—9.1	70.1	7	4	6	4	3	1	2	1	3	5358	8623	4	0.87	22.1
Chincoteague	N. 37 55	W. 77 20	7.06 a.m.	18	5	30.15	765.8	30.17	766.3	28.2	—2.1	87.8	4	17	1	3	......	2	......	4	......	9227	14849	7	4.04	102.6
Cincinnati	N. 39 06	W. 84 26	6.30 a.m.	620	189	29.52	749.8	30.22	767.6	25.5	—3.6	73.6	1	2	2	7	2	6	3	8	......	4254	6846	8	3.76	95.5
Cleveland	N. 41 30	W. 81 47	6.42 a.m.	690	210	29.40	746.7	30.18	766.6	17.5	—8.1	84.3	......	4	5	7	4	8	1	2	......	5925	9535	9	1.96	49.8
Coleman City	N. 31 55	W. 99 10	5.32 a.m.	1750	533	28.32	719.3	30.10	764.5	28.1	—2.2	68.9	7	6	......	9	5	......	......	2	2	9077	14608	5	0.36	9.1
Columbus	N. 39 57	W. 83 03	6.36 a.m.	805	245	29.29	744.0	30.19	766.8	20.7	—6.3	81.8	6	2	6	4	7	1	1	4	......	5446	8764	7	2.25	57.2
Concho	N. 31 22	W. 100 20	5.26 a.m.	1900	579	28.18	715.8	29.96	761.0	29.3	—1.5	77.5	5	4	3	11	1	......	......	3	4	7586	12208	4	0.22	5.6
Corsicana	N. 32 05	W. 96 30	5.41 a.m.	448	136	29.73	755.1	30.23	767.8	32.4	0.2	74.2	9	3	......	......	9	......	......	......	10	4910	7902	5	2.20	55.9
Davenport	N. 41 32	W. 90 30	6.06 a.m.	615	187	29.49	749.0	30.19	766.8	9.0	-12.8	76.7	1	6	7	1	4	1	1	4	6	4794	7715	6	1.34	34.0
Dayton	N. 46 23	W. 117 50	4.16 a.m.	1660	506	28.40	721.3	30.17	766.3	25.3	—3.7	94.3	......	......	......	14	5	1	......	1	10	2911	4685	7	5.03	127.8
Deadwood	N. 44 22	W. 103 34	5.14 a.m.	4600	1402	25.27	641.8	......	......	11.9	-11.2	97.9	......	......	......	......	......	......	......	......	......	3531	5682	5	3.10	78.7
Decatur	N. 33 10	W. 97 30	5.38 a.m.	1150	350	28.94	735.1	30.18	766.6	29.3	—1.5	81.7	10a	3	1	......	5	6	2	2	......	8426	13560	4a	0.93	23.6
Del. Breakwater	N. 38 48	W. 75 05	7.08 a.m.	20	6	30.14	765.5	30.16	766.1	27.2	—2.7	83.8	6	10	6	3	2	1	......	3	......	1063	1711	6	4.39	111.5
Denison	N. 33 50	W. 96 40	5.41 a.m.	767	234	29.34	745.2	30.19	766.8	28.1	—2.2	86.2	9	7	1	4	5	2	1	2	......	5758	9266	5	0.74	18.8
Denver	N. 39 45	W. 105 04	5.08 a.m.	5265	1605	24.71	627.6	29.93	760.2	19.4	—7.0	66.2	2	3	4	3	12	3	1	3	......	4333	6973	4	0.49	12.4
Des Moines	N. 41 35	W. 93 40	5.53 a.m.	849	259	29.24	742.7	30.21	767.3	9.1	-12.7	80.2	9a	3	......	3	......	2	......	2	11	3854	6202	6	1.55	39.4
Detroit	N. 41 21	W. 83 07	6.36 a.m.	645	197	29.43	747.5	30.15	765.8	14.8	—9.6	84.0	......	3	2	15	......	1	......	3	7	3484	5606	6	2.39	60.7
Dodge City	N. 37 39	W. 100 08	5.27 a.m.	2512	766	27.44	697.0	29.92	760.0	14.8	—9.6	61.9	9	6	4	5	2	1	1	2	1	8549	13758	5	0.15	3.8
Dubuque	N. 42 30	W. 90 44	6.05 a.m.	665	203	29.43	747.5	30.20	767.1	5.9	-14.5	81.3	2	7	2	3	3	2	......	......	12	2810	4522	6	1.87	47.5
Duluth	N. 46 48	W. 92 08	6.00 a.m.	644	184	29.42	747.3	30.19	766 8	0.6	-17.4	86.9	2	8	2	15	1	......	......	2	1	4599	7401	5	1.65	41.9
Eagle Pass	N. 28 40	W. 100 15	5.26 a.m.	780	238	29.40	746.7	30.17	766.3	35.7	2.1	75.8	7	5	1	1	......	10	......	3	4	3760	6051	4	1.15	29.2
Eagle Rock	N. 43 30	W. 112 04	4.40 a.m.	4781	1457	25.27	641.8	29.92	760.0	10.1	-12.2	80.1	17	1	......	9	1	......	......	......	3	5877	9458	8	3.66	93.0
Eastport	N. 44 55	W. 66 54	7.40 a.m.	61	18	29.92	760.0	30.00	762.0	14.2	—9.9	71.3	6	13	4	2	1	2	1	1	1	10017	16119	7	1.64	41.7
Edinburg	N. 26 03	W. 98 03	5.36 a.m.	?	?	......	......	......	......	44.6	7.0	74.7	18	......	......	......	8	1	......	......	4	......	......	7	2.79	70.9
El Paso	N. 31 46	W. 106 32	5.02 a.m.	3760	1146	26.26	667.0	......	......	30.4	—0.9	35.7	3	9	4	......	1	2	2	4	6	3595	5787	2	0.35	8.9
Erie	N. 42 07	W. 80 10	6.47 a.m.	681	208	29.37	746.0	30.14	765.5	20.2	—6.6	84.4	......	2	7	6	10	2	......	3	1	6527	10504	8	2.10	53.3
Escanaba	N. 45 46	W. 87 14	6.20 a.m.	612	186	29.43	747.5	30.16	766.1	3.0	-16.1	84.5	7	4	4	5	5	......	......	......	6	5464	8793	7	1.91	48.5
Florence	N. 33 03	W. 111 17	4.43 a.m.	1490	454	28.58	725.9	30.18	766.6	36.2	2.3	62.0	3	1	3	3	......	1	4	7	9	1839	2960	4	0	0
Fort Apache	N. 33 47	W. 109 58	4.49 a.m.	5050	1539	25.02	635.5	30.47	773.9	22.3	—5.4	53.8	3	......	2	1	......	4	6	11	4	4204	6766	3	0.20	5.1
Fort Assiniboine	N. 48 37	W. 109 43	4.49 a.m.	2710	826	27.22	691.4	......	......	4.0	-15.6	70.2	9	......	......	13	....	......	......	6	3	7503	12075	6	2.29	58.2
Fort Bennett	N. 44 42	W. 100 38	5.25 a.m.	1510	457	28.52	724.4	......	......	—0.3	-17.9	72.5	8	7	1	......	......	4	1	1	9	5074	8166	4	0.82	20.8
Fort Benton	N. 47 51	W. 110 40	4.45 a.m.	2700	823	27.27	692.6	......	......	5.8	-14.6	82.4	......	......	......	......	......	......	......	......	......	4585	7379	7	2.27	57.7
Fort Buford	N. 48 03	W. 103 58	5.12 a.m.	1900	579	28.12	714.2	30.21	767.3	- 7.1	-21.7	88.4	1	4	4	1	1	......	3	2	15	4118	6627	5	1.98	50.3
Fort Custer	N. 45 48	W. 107 38	4.58 a.m.	3040	927	26.87	682.5	......	......	3.9	-15.6	79.9	8	3	2	4	6	5	......	......	3	4450	7162	7	2.84	72.1
Fort Davis	N. 30 30	W. 103 45	5.13 a.m.	4940	1506	25.16	639.1	30.12	765.0	28.1	—2.2	80.0	......	......	......	......	......	......	......	......	......	6226	10020	3	0.50	12.7
Fort Elliot	N. 35 31	W. 100 27	5.28 a.m.	2650	808	27.26	692.4	29.70	754.4	17.8	—7.9	44.1	7	11	2	3	1	3	......	1	3	8746	14075	3	0.47	11.9
Fort Gibson	N. 35 43	W. 95 16	5.48 a.m.	540	165	29.59	751.6	30.17	766.3	22.5	—5.3	76.3	9	3	1	2	3	4	2	1	6	5217	8395	6	1.75	44.7
Fort Grant	N. 32 25	W. 109 56	4.49 a.m.	4860	1481	25.19	639.8	29.99	761.7	34.0	1.1	52.0	7	2	1	......	......	......	2	15	4	4918	7915	3	0.05	1.3
Fort Griffin	N. 32 53	W. 99 21	5.33 a.m.	1260	384	28.80	731.5	30.15	765.8	29.1	—1.6	66.5	6	4	3	......	7	3	1	1	6	7231	11637	5	0.62	15.7
Fort Keogh	N. 46 17	W. 105 55	5.05 a.m.	2372	723	27.56	700.0	......	......	1.6	-16.9	79.4	4	4	1	6	1	1	2	......	12	3673	5911	7	2.35	59.7
Fort Macon	N. 34 42	W. 76 40	7.01 a.m.	11	3	30.14	765.5	30.15	765.8	38.7	3.7	92.1	13b	6	4	3	......	1	......	2	......	8779	14128	7	5.66	143.8
Fort Missoula	N. 46 50	W. 114 01	4.32 a.m.	3140	957	26.76	679.7	......	......	33.3	0.7	94.9	4	3	1	4	2	2	2	1	12	1976	3180	7	8.22	208.8
Fort McKavett	N. 30 48	W. 99 58	5.28 a.m.	2240	683	27.83	706.9	29.86	758.4	29.5	—1.4	76.2	......	......	......	......	......	......	......	......	......	7347	11824	4	0.12	3.0
Fort St. Michael	N. 63 48	W. 161 00	1.24 a.m.	?	?	29.84	757.9	29.87	758.7	16.6	—8.6	100.0	12	1	......	2	9	2	3	2	......	8695	13961	6	0.06	1.5
Fort Shaw	N. 47 29	W. 111 46	4.41 a.m.	3550	1082	26.38	670.0	......	......	9.0	-12.8	90.9	......	......	......	......	......	......	......	......	......	6687	10762	6	2.50	63.5
Fort Sill	N. 34 40	W. 98 30	5.34 a.m.	1200	366	28.86	733.0	30.05	763.3	21.6	—5.8	78.5	10	3	......	......	3	1	1	1	12	6213	9999	5	1.92	48.8
Fort Stevenson	N. 47 36	W. 101 23	5.22 a.m.	1750	534	28.23	717.0	......	......	-12.5	-24.7	85.6d	......	......	......	......	......	......	......	......	......	5664	9115	4d	0.72	18.3
Fort Verde	N. 34 24	W. 111 53	4.38 a.m.	?	?	......	......	......	......	26.3	—3.2	61.0	10	11	5	1	3	......	1	......	......	......	......	3	0.07	1.8
Fredericksburg	N. 30 20	W. 98 40	5.33 a.m.	1700	518	28.33	719.6	30.01	762.2	34.1	1.2	81.4	13	2	7	......	......	1	......	2	6	5635	9068	4	0.95	24.1
Galveston	N. 29 18	W. 94 50	5.49 a.m.	40	12	30.11	764.8	30.16	765.1	43.8	6.6	83.7	8	4	2	1	4	......	6	6	......	7654	12318	4	3.94	100.1
Grand Haven	N. 43 05	W. 86 18	6.23 a.m.	620	189	29.42	747.3	30.13	765.3	17.3	—8.2	82.5	5	1	6	3	......	7	3	6	......	5989	9638	7	2.24	56.9
Hatteras	N. 35 14	W. 75 30	7.06 a.m.	19	6	30.12	765.0	30.14	765.5	38.5	3.6	83.7	11	7	4	5	......	1	1	2	......	10876	17503	6	7.27	184.7
Helena	N. 46 33	W. 112 02	4.40 a.m.	4100	1250	25.82	655.8	......	......	6.9	-13.9	88.6	......	......	......	......	......	......	......	......	......	2876	4628	6	2.86	72.6
Henrietta	N. 33 42	W. 98 00	5.36 a.m.	980	300	29.13	739.9	30.13	765.3	25.5	—3.6	75.1	4	9	1	4	4	3	......	4	2	7661	12329	5	0.99	25.1
Indianapolis	N. 39 47	W. 86 06	6.24 a.m.	746	227	29.33	745.0	30.17	766.3	19.8	—6.8	74.8	6	5	6	2	3	2	3	2	2	4091	6584	7	2.10	53.3
Indianola	N. 28 32	W. 96 38	5.42 a.m.	26	8	30.15	765.8	30.18	766.6	41.0	5.0	84.0	12	6	......	......	4	1	1	5	2	11107	17874	5	3.07	78.0
Jacksboro	N. 33 10	W. 98 00	5.35 a.m.	1120	341	28.96	735.6	30.16	766 1	30.3	—0.9	69.7	6	5	......	6	2	2	......	......	10	5394	8681	5	0.48	12.2
Jacksonville	N. 30 24	W. 80 40	6.41 a.m.	43	13	30.13	765.3	30.18	766.6	48.1	8.9	81.8	6	4	3	3	1	1	.....	13	......	5017	8074	6	9.12	231.6
Keokuk	N. 40 23	W. 91 25	6.02 a.m.	618	188	29.48	748.8	30.19	766.8	14.5	—9.7	75.3	3	4	6	3	3	2	1	4	5	4341	6986	6	0.50	12.7
Key West	N. 24 32	W. 81 48	6.41 a.m.	27	8	30.08	764.0	30.11	764.8	68.6	20.3	84.7	4	......	2	1	8	1	6	9	......	7159	11521	5	3.65	92.7
Kitty Hawk	N. 36 00	W. 75 23	7.05 a.m.	22	7	30.14	765.5	30.17	766.3	35.2	1.8	82.3	11	5	2	3	......	......	......	9	1	10740	17284	5	7.34	186.4
Knoxville	N. 35 56	W. 83 58	6.32 a.m.	980	299	29.15	740.4	30.21	767.3	30.5	—0.8	87.4	7	......	3	5	......	2	2	9	3	3812	6135	8	4.41	112.0
La Crosse	N. 43 48	W. 91 23	6.03 a.m.	702	214	29.37	746.0	30.19	766.8	4.5	-15.3	80.9	8	1	3	......	14	1	1	1	2	4514	7264	5	1.51	38.4
La Mesilla	N. 32 17	W. 106 48	5.01 a.m.	3900	1189	26.14	663.9	30.29	769.4	26.0	—3.3	65.1	10	1	2	1	3	2	1	2	9	1794	2887	3	0.04	1.0
Laredo	N. 27 32	W. 99 26	5.30 a.m.	460	136	29.72	754.9	30.07	763.8	40.5	4.7	82.8	9	4	......	......	6	1	1	5	5	3672	5909	6	3.15	80.0
Leavenworth	N. 39 19	W. 94 58	5.48 a.m.	842	256	29.28	743.7	30.20	767.1	15.3	—9.3	75.5	9	9	......	......	9	1	......	......	3	5845	9405	7	0.44	11.2
Lewiston	N. 46 25	W. 116 59	4.20 a.m.	619?	188?	29.36	745.7	30.05	763.3	27.9	—2.3	76.5	......	1	4	1	3	......	19	2	1	2564	4133	8	4.46	113.3
Little Rock	N. 34 40	W. 92 12	5.59 a.m.	298	91	29.86	758.4	30.19	766.8	31.0	—0.6	85.0	8	6	2	......	5	2	3	3	......	4524	7280	6	2.07	52.6
Los Angeles	N. 34 03	W. 188 16	4.15 a.m.	371	113	29.76	755.9	30.11	764.8	44.4	6.9	72.1	10	4	......	......	1	2	14	......	......	3258	5243	2	1.43	36.3
Louisville	N. 38 18	W 85 52	6.25 a.m.	530	162	29.58	751.3	30.18	766.6	25.5	—3.6	80.2	9	2	3	5	5	2	1	4	......	5733	9226	7	3.24	82.3
Lynchburg	N. 37 30	W. 79 02	6.52 a.m.	652	199	29.46	748.3	30.18	766.6	28.9	—1.7	79.0	1	3	4	3	1	1	2	3	13	2134	3434	6	4.47	113.5
Madison	N. 43 03	W. 89 30	6.10 a.m.	949	289	29.07	738.4	30.16	766.1	7.1	-13.8	74.6	5	5	8	3	6	2	1	1	......	6506	10470	5	2.05	52.1
Marquette	N. 46 33	W. 87 36	6.19 a.m.	673	205	29.35	745.5	30.13	765.3	6.7	-14.1	70.2	3	5	11	5	1	1	2	3	......	6215	10002	5	1.69	42.9
Mason	N. 30 42	W. 99 02	5.32 a.m.	1620	494	28.45	722.6	30.30	769.6	32.8	0.4	80.8	5	7	6	2	1	2	4	2	2	6751	10881	4	0.37	9.4
Memphis	N. 35 07	W. 90 07	6.08 a.m.	321	98	29.85	758.2	30.21	767.3	29.2	—1.6	81.2	5	6	3	......	1	9	3	1	3	3857	6207	7	4.38	111.2
Milwaukee	N. 43 03	W. 87 54	6.17 a.m.	697	212	29.36	745.7	30.16	766.1	11.7	-11.3	81.0	1	14	6	5	3	1	......	1	......	7419	10940	6	1.86	47.2
Mobile	N. 30 42	W. 87 59	6.16 a.m.	41	12	30.09	764.3	30.17	766.3	43.2	6.2	86.4	7	6	3	......	6	2	2	5	......	5305	8538	7	7.62	193.6
Montgomery	N. 32 22	W. 86 23	6.23 a.m.	219	66	29.95	760.7	30.20	767.1	39.3	4.1	86.3	9	6	3	2	......	4	4	3	......	4219	6790	7	3.58	90.9
Morgantown	N. 39 36	W. 79 52	6.48 a.m.	963	293	29.13	739.9	30.17	766.3	28.2	—2.1	72.3	3	......	2	9	......	1	......	2	14	3736	6012	8	3.08	78.2
Moorhead	N. 46 52	W. 96 40	5.41 a.m.	923	281	29.15	740.4	30.24	758.1	—8.1	-22.3	71.3	8	7	1	......	10	......	1	......	4	7575	12190	4	0.60	15.2

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for January, 1881.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.					
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
U.S. Series—*Continued.*																										
Mt. Washington	N. 44 16	W. 71 16	7.22 a.m.	6272	1902	23.39	594.1	29.75	755.6	2.2	−16.6	75.0	.....	24	1	.....	2	1	1	2	.....	28795	46195	8	3.94	100.1
Nashville	N. 36 11	W. 86 53	6.21 a.m.	507	154	29.64	752.8	30.20	767.1	29.8	−1.2	82.0	4	7	7	2	2	1	1	4	3	3002	4831	8	3.54	89.9
New Haven	N. 41 17	W. 72 57	7.16 a.m.	107	32	30.07	763.8	30.13	765.3	16.9	−8.4	73.0	10	6	5	1	1	.....	.....	7	1	5700	9173	5	4.79	121.7
New London	N. 41 22	W. 72 09	7.19 a.m.	47	14	30.06	763.5	30.12	765.0	20.1	−6.6	69.9	9	13	5	1	.....	.....	1	.....	2	4601	7469	5	6.76	171.7
New Orleans	N. 29 58	W. 90 07	6.08 a.m.	52	16	30.09	764.3	30.15	765.8	46.0	7.8	78.3	9	3	1	1	4	4	4	5	.....	5804	9340	6	11.15	283.2
Newport	N. 41 29	W. 71 19	7.23 a.m.	44	13	30.04	763.0	30.09	764.3	22.4	−5.3	79.5	8	7	9	3	1	.....	1	2	.....	7828	12598	4	5.70	144.8
New River	N. 34 30	W. 77 23	6.58 a.m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Shoreham	N. 41 10	W. 71 37	7.22 a.m.	27	8	30.08	764.0	30.11	764.8	25.9	−3.4	74.4	8	12	2	.....	1	1	1	7	.....	12629	21224	4	2.58	54.9
New York	N. 40 43	W. 74 00	7.12 a.m.	164	50	29.96	761.0	30.15	765.8	22.9	−5.1	87.8	8	9	7	3	1	.....	1	2	.....	5873	9452	6	5.41	137.4
Norfolk	N. 36 51	W. 76 19	7.03 a.m.	30	9	30.12	765.0	30.18	766.6	32.4	0.2	77.4	16	1	4	3	2	1	.....	3	1	5551	8933	5	3.55	90.2
North Platte	N. 41 08	W. 100 53	5.24 a.m.	2841	866	27.14	689.3	29.91	759.7	8.0	−13.3	78.3	7	9	4	2	1	.....	2	5	1	8462	13618	5	0.16	4.1
Olympia	N. 47 02	W. 122 56	3.56 a.m.	36	11	30.05	763.3	30.13	765.3	37.6	3.1	76.3	8	2	2	.....	9	2	1	6	1	3277	5274	1	8.90	226.1
Omaha	N. 41 16	W. 96 00	5.45 a.m.	1113	339	28.98	736.1	30.20	767.1	7.0	−13.9	82.8	11	6	1	.....	8	1	.....	.4	.....	7223	11624	6	0.61	15.5
Oswego	N. 43 29	W. 76 35	7.01 a.m.	304	93	29.78	756.4	30.13	765.3	18.8	−7.3	78.8	4	2	.....	6	6	9	1	3	.....	7094	11416	7	4.15	105.4
Pensacola	N. 30 25	W. 87 12	6.19 a.m.	30	9	30.15	765.8	30.19	766.8	45.0	7.2	86.1	7	4	1	.....	1	2	8	7	1	5214	8391	6	7.49	190.2
Philadelphia	N. 39 57	W. 75 10	7.07 a.m.	52	16	30.11	764.8	30.17	766.3	23.6	−4.7	82.5	7	3	6	1	2	.....	3	7	2	7427	11952	5	3.66	93.0
Phœnix	N. 33 18	W. 112 00	4.40 a.m.	1120	341	28.98	736.1	30.90	784.8	31.6	−0.2	68.8	3	2	.....	.....	1	3	21	.....	1	1797	2892	2	0	0
Pikes Peak	N. 38 48	W. 104 59	5.07 a.m.	14134	4308	17.44	443.0	29.65	753.1	−2.9	−19.4	67.2	6	7	7	5	1	.....	.....	2	3	17589	28306	3	2.58	65.5
Pilot Point	N. 33 20	W. 96 50	5.40 a.m.	800	244	29.31	744.5	30.25	768.3	34.3	1.3	67.2	10	6	5	1	6	4	.....	6	1	6786	10921	4	0.75	19.0
Pioche	N. 37 57	W. 114 26	4.30 a.m.	6110	1862	24.04	610.6	29.80	756.9	24.0	−4.4	61.5	6	6	.....	5	8	1	.....	1	4	5729	9220	4	0.47	11.9
Pittsburg	N. 40 32	W. 80 02	6.48 a.m.	776	236	29.31	744.5	30.17	766.3	24.7	−4.1	82.8	1	8	5	5	1	3	4	3	4452	7165	7	3.55	90.2
Port Huron	N. 42 58	W. 82 29	6.38 a.m.	633	193	29.42	747.3	30.15	765.8	12.5	−10.8	80.3	2	3	6	1	12	2	.....	4	1	6206	9985	7	3.50	88.9
Portland, Maine	N. 43 40	W. 70 16	7.27 a.m.	45	14	30.01	762.2	30.06	763.5	17.4	−8.1	70.3	4	15	7	.....	.....	.....	.....	4	1	5369	8640	5	4.30	109.2
Portland, Oregon	N. 45 30	W. 122 28	3.57 a.m.	67	20	30.07	763.8	30.15	765.8	37.0	2.8	83.7	1	6	1	1	5	5	7	4	1	3835	6172	7	8.57	217.7
Portsmouth	N. 35 02	W. 76 02	7.04 a.m.	40	12	.....	.....	.....	.....	38.6	3.7	82.4	6a	4	3	5	1	.....	.....	11	.....	11489	18489	7	2.72	69.1
Prescott *f*	N. 34 29	W. 112 31	4.38 a.m.	5300	1615	24.76	628.9	30.12	765.0	25.8	−3.4	65.0	2	2	2	4	6	2	.....	5	8	3296	5304	2	0.16	4.1
Punta Rassa	N. 26 36	W. 82 10	6.40 a.m.	13	4	30.09	764.3	30.11	764.8	60.7	15.9	86.3	6	1	.....	2	1	4	3	14	.....	8025	12915	6	4.02	102.1
Red Bluff	N. 40 10	W. 122 16	3.59 a.m.	350	106	29.77	756.1	30.13	765.3	46.5	8.1	80.2	9	7	2	2	6	3	.....	1	1	6893	11093	5	9.40	238.8
Rio Grande City	N. 26 22	W. 98 45	5.33 a.m.	230	70	29.97	761.2	30.20	767.1	43.1	6.2	79.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	4900	7886	7	3.48	88.4
Rochester	N. 43 08	W. 77 51	6.58 a.m.	589	179	29.46	748.3	30.12	765.0	17.8	−7.9	81.0	1	4	12	7	.....	5	1	1	.....	5316	9555	8	4.68	118.9
Roseburg	N. 43 10	W. 123 16	3.55 a.m.	511	156	29.56	750.8	30.15	765.8	40.5	4.7	92.6	2	1	1	2	3	.....	3	2	17	1973	3175	7	11.60	294.6
Sacramento	N. 38 35	W. 121 31	4.02 a.m.	70	21	30.07	763.8	30.15	765.8	45.7	7.6	89.7	7	1	.....	.....	7	11	4	1	.....	5548	8928	5	6.14	156.2
St. Louis	N. 38 37	W. 90 15	6.07 a.m.	568	173	29.58	751.3	30.20	767.1	18.2	−7.7	84.5	7	5	6	.....	7	2	4	.....	.....	7067	11373	6	0.49	12.4
St. Paul	N. 44 53	W. 93 05	5.56 a.m.	811	247	29.23	742.4	30.15	765.8	2.9	−16.2	78.7	3	8	3	2	.....	7	3	1	4	5570	8994	4	4.34	110.2
St. Vincent	N. 48 58	W. 97 03	5.40 a.m.	804	245	29.27	743.4	30.18	766.6	−10.3	−23.5	98.0	1	8	5	3	10	1	.....	2	1	7065	11370	3	0.13	3.3
Salt Lake City	N. 41 10	W. 112 00	4.40 a.m.	4348	1325	25.68	652.3	30.00	762.0	29.9	−1.2	46.9	6	.....	1	2	7	1	.....	.....	15	3360	5407	9	1.24	31.5
San Antonio *f*	N. 29 28	W. 98 22	5.34 a.m.	676	206	29.46	748.3	30.20	767.1	35.6	2.0	80.3	9	6	.....	1	2	.....	.....	4	9	3571	5747	5	0.58	14.7
San Diego	N. 32 32	W. 117 08	4.20 a.m.	67	20	30.07	763.8	30.14	765.5	46.4	8.0	70.6	4	1	1	.....	1	.....	6	14	4	4216	6785	3	0.52	13.2
Sandusky	N. 41 27	W. 82 43	6.37 a.m.	639	195	29.45	748.0	30.17	766.3	20.1	−6.6	78.8	.....	5	.....	11	8	.....	3	2	2	8240	13261	8	1.31	33.3
Sandy Hook	N. 40 28	W. 74 01	7.12 a.m.	28	8	30.11	764.8	30.15	765.8	23.3	−4.8	76.3	6	6	5	5	.....	1	1	6	1	9214	14828	5	5.03	127.8
San Francisco	N. 37 48	W. 122 26	3.58 a.m.	60	18	30.07	763.8	30.13	765.3	51.6	10.9	78.4	7	2	1	3	3	8	1	4	2	5586	8990	6	8.69	220.7
Santa Fé	N. 35 41	W. 106 10	5.04 a.m.	7049	2148	23.18	588.8	29.72	754.9	18.0	−7.8	68.5	13	.....	.....	1	.....	.....	3	.....	14	4232	6811	2	0.38	9.7
Savannah	N. 32 05	W. 81 08	6.44 a.m.	87	26	30.10	764.5	30.20	767.1	43.8	6.6	82.9	10	4	5	1	4	.....	2	5	.....	5067	8154	8	5.77	146.6
Shreveport	N. 32 30	W. 93 45	5.54 a.m.	227	69	29.93	760.2	30.19	766.8	35.6	2.0	83.3	1	5	4	2	4	.....	2	5	8	3906	6286	6	2.24	56.9
Silver City	N. 32 48	W. 108 15	4.55 a.m.	5890	1795	24.24	615.7	30.72	780.3	24.5	−4.2	56.7	12	9	2	.....	1	.....	.....	.....	7	2500	4023	1	0.02	0.5
Smithville	N. 33 55	W. 78 01	6.56 a.m.	33	10	30.14	765.5	30.18	766.6	39.0	3.9	86.0	17	4	3	2	1	1	.....	.....	3	5831	9384	7	6.05	153.7
Socorro *f*	N. 34 05	W. 106 55	5.01 a.m.	4565	1391	25.37	644.4	29.43	747.5	.....	.....	56.8	5	9	.....	5	1	2	3	5	1	4800	7725	2	0.55	14.0
Springfield, Ill	N. 39 48	W. 89 48	6.10 a.m.	644	196	29.47	748.5	30.20	767.1	17.9	−7.8	77.7	6	6	4	3	6	2	1	3	.....	6508	10473	6	0.84	21.3
Springfield, Mass.	N. 42 06	W. 72 36	7.18 a.m.	120	37	30.00	762.0	30.14	765.5	15.1	−9.4	67.2	15	4	4	1	2	.....	1	.....	4	3575	5753	4	3.16	80.3
Stockton	N. 30 50	W. 102 50	5.16 a.m.	3010	917	27.02	686.3	30.02	762.5	29.9	−1.2	77.6	9	1	1	10	7	.....	1	.....	2	6969	11215	4	0.20	5.1
Thatcher's Island	N. 42 36	W. 70 34	7.26 a.m.	48	15	30.03	762.7	30.09	764.3	22.4	−5.3	70.1	4	8	13	.....	.....	1	2	8	.....	14102	22694	7	4.56	115.8
Toledo	N. 41 40	W. 83 32	6.34 a.m.	651	198	29.43	747.5	30.16	766.1	19.5	−6.9	68.2	6	1	10	7	3	1	1	2	.....	5915	9519	4	0.54	13.7
Tucson	N. 32 14	W. 110 56	4.44 a.m.	2369	722	27.59	700.8	30.14	765.5	33.7	0.9	52.5	.....	.....	2	2	21	3	1	.....	2	2981	4797	1	0.05	1.3
Umatilla	N. 45 55	W. 119 21	4.11 a.m.	340	103	29.89	759.2	30.43	772.9	22.3	−5.4	86.5	1	5	6	3	2	8	3	2	1	4667	7511	7	2.45	62.2
Uvalde	N. 29 13	W. 99 40	5.29 a.m.	930	283	29.21	741.9	30.08	764.0	35.1	1.7	68.6	12	4	1	.....	3	1	1	2	7	3002	4830	7	0.43	10.9
Vicksburg	N. 32 23	W. 90 54	6.04 a.m.	244	74	29.93	760.2	30.20	767.1	47.9	8.8	81.4	10	3	1	.....	5	4	3	3	2	4958	7979	7	3.37	85.6
Visalia	N. 36 20	W. 119 16	4.11 a.m.	348	106	29.77	756.1	30.15	765.8	42.9	6.1	88.9	2	5	.....	.....	1	10	11	1	1	1898	3054	4	2.71	68.8
Washington	N. 38 53	W. 77 01	7.00 a.m.	106	32	30.06	763.5	30.19	766.8	23.4	−4.8	85.6	5	10	2	1	2	2	1	5	3	3133	5042	7	5.14	130.6
Wickenburg *f*	N. 33 58	W. 112 42	4.37 a.m.	?	?	.....	.....	.....	.....	31.0	−0.6	68.6	1	18	10	1	1	.....	.....	.....	.....	.....	.....	4	0.07	1.8
Wilmington	N. 34 11	W. 78 10	6.56 a.m.	73	22	30.12	765.0	30.18	766.6	39.4	4.1	76.2	9	2	4	1	2	.....	2	6	5	4066	6544	4	5.06	128.5
Winnemucca	N. 41 00	W. 119 21	4.17 a.m.	4342	1323	25.65	651.5	30.01	762.2	30.9	−0.6	71.6	.....	.....	.....	12	1	1	.....	16	1	6712	10802	3	3.08	78.2
Wood's Holl	N. 41 33	W. 70 40	7.26 a.m.	35	11	30.03	762.7	30.07	763.8	23.6	−4.7	78.4	6	15	3	2	.....	2	1	2	.....	11267	18132	5	2.57	65.3
Yankton	N. 42 45	W. 97 30	5.38 a.m.	1228	374	28.83	732.3	30.28	769.1	1.5	−16.9	73.9	10	6	1	2	1	1	.....	1	9	5557	8943	4	1.23	31.2
Yuma	N. 32 44	W. 114 36	4.30 a.m.	141	43	29.95	760.7	30.11	764.8	43.7	6.5	52.5	7	1	1	3	1	3	1	13	1	4248	6836	1	0	0
Sub-Series.																										
Bo,ota *a*	N. 4 36	W. 74 14	7.41 a.m.	8704	2653	22.00	558.8	.....	.....	50.8	10.4	69.9	.....	.....	.....	.....	1	.....	2	.....	27	.....	.....	4	0.29	7.4
Buff Bay Town, Jam‡	N. 18 15	W. 76 39	7.01 a.m.	?	?	29.89	759.2	30.20	767.1	68.2	20.1	88.1	*a*	.....	3	3	2	3	19	.....	.....	.....	.....	4	.....	.....
Havana	N. 23 09	W. 82 22	6.39 a.m.	50	15	30.05	763.3	30.10	764.5	72.4	22.4	81.9	2	.....	.....	1	.....	7	.....	1	20	.....	.....	5	8.77	222.8
Jakobshavn	N. 69 13	W. 50 55	8.44 a.m.	43	13	30.00	762.0	30.06	763.5	18.3	−7.6	.....	3	1	10	4	3	2	.....	8	.....	.....	.....	5	0.67	17.0
Kingston	N. 18 58	W. 76 48	7.01 a.m.	10	3	30.04	763.0	30.05	763.3	67.1	19.5	81.9	10	.....	.....	.....	.....	.....	.....	21	.....	2439	3925	1	0.79	20.1
Navassa	N. 19 25	W. 75 03	7.43 a.m.	77	23	29.96	761.0	30.04	763.0	76.4	24.7	72.2	.....	.....	.....	.....	.....	.....	7	24	.....	.....	.....	6	2.03	51.6
Paramaribo	N. 5 50	W. 55 13	8.27 a.m.	0	2	30.01	762.2	30.01	762.2	76.7	24.8	87.7	.....	1	.....	.....	.....	4	26	.....	.....	.....	.....	9	15.05	382.3
Puerto Berrio	N. 6 32	W. 74 28	7.10 a.m.	542	165	29.40	746.7	29.98	761.5	82.0	27.8	87.6	.....	1	.....	.....	1	.....	.....	29	.....	.....	.....	2	0.97	24.6
Rivas	N. 11 26	W. 85 47	6.25 a.m.	150	46	.....	.....	.....	.....	73.4	23.0	.....	.....	.....	.....	.....	.....	11	10	10	.....	.....	.....	2	0.10	2.6
Santiago deCuba	N. 19 55	W. 75 50	7.04 a.m.	21	6	30.02	762.5	30.05	763.3	73.6	23.1	77.0	11	1	.....	.....	.....	.....	.....	1	16	.....	.....	4	0.18	4.6
St. Thomas	N. 18 20	W. 64 55	7.48 a.m.	110	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Upernavik	N. 72 47	W. 56 00	8.24 a.m.	10	3	30.02	762.6	30.03	762.7	7.5	−13.6	.....	1	.....	14	1	2	4	1	.....	8	.....	.....	1	1.25	31.8
York Factory	N. 57 02	W. 92 56	5.58 a.m.	45	14	29.85	758.2	29.91	759.7	−32.9	−36.1	.....	3	9	4	7	8	.....	.....	.....	.....	.....	.....	4	0.49	12.4

The following table of Ocean Square mean data, from observations taken at 7.35 A. M, Washington or 0.43 P. M. Greenwich mean time, is computed from the isobars, isotherms and wind directions of the daily international charts, which latter are based upon the data obtained from the logs of vessels for the month of January, 1881.

Ocean Square Bounded by—	Barometer.		Temperature.		Prevail'g Wind.	Force 0–10.
	Inch.	Mill.	Fah.	Cent.		
N. 30° & 35° W. 10° & 15°	29.97	761.2	64.9	18.3	SW	3.1
N. 35 & 40 W. 10 & 15	29.87	758.7	58.7	14.8	SW	4.0
N. 35 & 40 W. 15 & 20	29.80	756.9	60.1	15.6	SW	4.6
N. 30 & 35 W. 15 & 20	29.89	759.2	65.0	18.3	SW	3.5
N. 40 & 45 W. 10 & 15	29.75	755.6	51.5	10.8	SE;NE	3.8
N. 45 & 50 W. 10 & 15	29.77	756.1	48.2	9.0	NE	4.7
N. 45 & 50 W. 15 & 20	29.73	755.1	50.4	10.2	NE;SE	5.3
N. 40 & 45 W. 15 & 20	29.70	754.4	53.6	12.0	SE	5.1
N. 50 & 55 W. 10 & 15	29.85	758.2	42.2	5.7	NE	4.0
N. 55 & 60 W. 10 & 15	29.91	759.7	39.5	4.2	NE	3.8
N. 55 & 60 W. 15 & 20	29.93	760.2	39.5	4.2	NE	4.1
N. 50 & 55 W. 15 & 20	29.87	758.7	44.1	6.7	NE	4.7
N. 10 & 15 W. 20 & 25	29.98	761.5	79.8	26.6	NE	2.0
N. 15 & 20 W. 20 & 25	30.02	762.5	76.3	24.6	NE	2.0
N. 15 & 20 W. 25 & 30	30.02	762.5	76.4	24.7	NE	2.0
N. 10 & 15 W. 25 & 30	30.00	762.0	79.3	26.3	NE	2.1
N. 20 & 25 W. 20 & 25	30.00	762.0	71.9	22.2	NE	2.6
N. 25 & 30 W. 20 & 25	29.95	760.7	68.2	20.1	SW	3.1
N. 25 & 30 W. 25 & 30	29.90	759.4	68.0	20.0	SW	3.4
N. 20 & 25 W. 25 & 30	29.97	761.2	71.5	21.9	NE	2.9
N. 30 & 35 W. 20 & 25	29.79	756.7	64.2	17.9	SW	4.4
N. 35 & 40 W. 20 & 25	29.67	753.6	60.0	15.6	SW	4.6
N. 35 & 40 W. 25 & 30	29.62	752.3	59.3	15.2	SW	3.8
N. 30 & 35 W. 25 & 30	29.72	754.9	63.1	17.3	SW	3.8
N. 40 & 45 W. 20 & 25	29.65	753.1	54.7	12.6	SE	4.9
N. 45 & 50 W. 20 & 25	29.67	753.6	51.2	10.7	NE;SE	5.4
N. 45 & 50 W. 25 & 30	29.61	752.1	51.4	10.8	SW	5.5
N. 40 & 45 W. 25 & 30	29.58	751.3	54.4	12.4	SE	4.9
N. 50 & 55 W. 20 & 25	29.80	756.9	45.1	7.3	NE	4.8
N. 55 & 60 W. 20 & 25	29.92	760.0	37.8	3.2	NE	4.4
N. 55 & 60 W. 25 & 30	29.90	759.4	38.0	3.3	NE	4.3
N. 50 & 55 W. 25 & 30	29.79	756.7	44.2	6.8	NE	4.9
N. 20 & 25 W. 30 & 35	29.96	761.0	71.0	21.7	NE	2.7
N. 25 & 30 W. 30 & 35	29.86	758.4	67.4	19.7	SW	3.1
N. 25 & 30 W. 35 & 40	29.87	758.7	67.1	19.5	SW	3.0
N. 20 & 25 W. 35 & 40	29.97	761.2	71.4	21.9	NE	2.1
N. 30 & 35 W. 30 & 35	29.70	754.4	62.5	16.9	SW	3.9
N. 35 & 40 W. 30 & 35	29.60	751.8	58.4	14.7	SW	3.8
N. 35 & 40 W. 35 & 40	29.62	752.3	57.9	14.4	SW	3.8
N. 30 & 35 W. 35 & 40	29.71	754.6	61.8	16.6	SW	3.2
N. 40 & 45 W. 30 & 35	29.53	750.0	54.1	12.3	SW	4.6
N. 45 & 50 W. 30 & 35	29.54	750.3	50.4	10.2	SE	5.6
N. 45 & 50 W. 35 & 40	29.52	749.8	49.0	9.4	NE	5.1
N. 40 & 45 W. 35 & 40	29.41	747.0	52.0	11.1	NE	4.8
N. 50 & 55 W. 30 & 35	29.73	755.1	43.2	6.2	NE	5.1
N. 55 & 60 W. 30 & 35	29.86	758.4	36.8	2.7	NE	4.4
N. 55 & 60 W. 35 & 40	29.84	757.9	35.9	2.2	NE	3.7
N. 50 & 55 W. 35 & 40	29.72	754.9	40.3	4.6	NE	4.5
N. 30 & 35 W. 40 & 45	29.77	756.1	61.5	16.4	SW	3.4
N. 35° & 40° W. 40° & 45°	29.67	753.6	58.3	14.6	SW	3.9
N. 35 & 40 W. 45 & 50	29.73	755.1	54.1	12.3	NW	4.2
N. 30 & 35 W. 45 & 50	29.82	757.4	61.1	16.2	NW	4.1
N. 40 & 45 W. 40 & 45	29.55	750.6	49.3	9.6	NE	4.5
N. 45 & 50 W. 40 & 45	29.54	750.3	43.9	6.6	NE	4.8
N. 45 & 50 W. 45 & 50	29.61	752.1	37.3	2.9	NE	4.1
N. 40 & 45 W. 45 & 50	29.62	752.3	41.9	5.5	NW	4.6
N. 50 & 55 W. 40 & 45	29.71	754.6	37.5	3.1	NE	4.1
N. 55 & 60 W. 40 & 45	29.84	757.9	33.7	0.9	NE	3.6
N. 55 & 60 W. 45 & 50	29.84	757.9	31.0	— 0.6	NE	3.3
N. 50 & 55 W. 45 & 50	29.76	755.9	31.2	— 0.5	NW	3.6
N. 30 & 35 W. 50 & 55	29.90	759.4	61.0	16.1	NW	3.7
N. 35 & 40 W. 50 & 55	29.80	756.9	53.0	11.7	NW	4.2
N. 35 & 40 W. 55 & 60	29.87	758.7	52.3	11.3	NW	4.1
N. 30 & 35 W. 55 & 60	29.96	761.0	60.8	16.0	NW	3.6
N. 40 & 45 W. 50 & 55	29.70	754.4	36.7	2.6	NW	4.2
N. 40 & 45 W. 55 & 60	29.78	756.4	31.9	— 0.1	NW	4.2
N. 30 & 35 W. 60 & 65	30.03	762.7	60.9	16.1	NW	3.7
N. 35 & 40 W. 60 & 65	29.96	761.0	49.6	9.8	NW	3.9
N. 35 & 40 W. 65 & 70	30.06	763.5	46.0	7.8	NW	3.9
N. 30 & 35 W. 65 & 70	30.08	764.0	56.5	13.6	NW	3.7
N. 40 & 45 W. 60 & 65	29.92	760.0	30.0	— 1.1	NW	4.0
N. 40 & 45 W. 65 & 70	30.01	762.2	24.6	— 4.1	NW	3.5
N. 25 & 30 W. 70 & 75	30.12	765.0	67.7	19.8	NW	3.2
N. 25 & 30 W. 75 & 80	30.14	765.5	61.4	16.3	NE	3.1
N. 30 & 35 W. 70 & 75	30.12	765.0	53.1	11.7	NW	3.4
N. 35 & 40 W. 70 & 75	30.10	764.5	38.5	3.6	NW	3.5
N. 30 & 35 W. 75 & 80	30.16	766.1	45.3	7.4	N	2.8

The following table shows the position of Ocean Squares, the total number of observations and the number of days on which observations were taken for each square during the month of January, 1881.

Ocean Square Bounded by—	No. of Days.	No. of Observations.	Ocean Square Bounded by—	No. of Days.	No. of Observations.
N. 55 & 60 W. 5 & 10	1	1	N. 15 & 20 W. 55 & 60	3	3
N. 35 & 40 W. 10 & 15	1	1	N. 15 & 20 W. 60 & 65	5	5
N. 35 & 40 W. 15 & 20	10	10	N. 10 & 15 W. 20 & 25	1	1
N. 30 & 35 W. 15 & 20	12	15	N. 10 & 15 W. 40 & 45	3	3
N. 40 & 45 W. 10 & 15	4	4	N. 10 & 15 W. 45 & 50	1	1
N. 45 & 50 W. 10 & 15	12	13	N. 10 & 15 W. 50 & 55	1	1
N. 45 & 50 W. 15 & 20	7	8	N. 10 & 15 W. 55 & 60	4	6
N. 40 & 45 W. 15 & 20	2	2	N. 10 & 15 W. 60 & 65	6	6
N. 50 & 55 W. 10 & 15	7	9	N. 10 & 15 W. 70 & 75	1	1
N. 55 & 60 W. 10 & 15	1	1			
N. 55 & 60 W. 15 & 20	1	1			
N. 50 & 55 W. 15 & 20	11	16			
N. 10 & 15 W. 20 & 25	1	1			
N. 15 & 20 W. 25 & 30	3	3			
N. 20 & 25 W. 20 & 25	8	12			
N. 25 & 30 W. 20 & 25	7	10			
N. 20 & 25 W. 25 & 30	3	3			
N. 30 & 35 W. 20 & 25	10	12			
N. 35 & 40 W. 20 & 25	8	11			
N. 35 & 40 W. 25 & 30	1	1			
N. 40 & 45 W. 20 & 25	2	2			
N. 45 & 50 W. 20 & 25	8	9			
N. 45 & 50 W. 25 & 30	12	14			
N. 40 & 45 W. 25 & 30	1	1			
N. 50 & 55 W. 20 & 25	10	12			
N. 50 & 55 W. 25 & 30	9	10			
N. 50 & 55 W. 5 & 10	12	13			
N. 35 & 40 W. 30 & 35	2	2			
N. 35 & 40 W. 35 & 40	3	3			
N. 30 & 35 W. 35 & 40	1	1			
N. 40 & 45 W. 30 & 35	1	1			
N. 45 & 50 W. 30 & 35	13	15			
N. 45 & 50 W. 35 & 40	13	15			
N. 40 & 45 W. 35 & 40	1	1			
N. 50 & 55 W. 30 & 35	4	5			
N. 50 & 55 W. 35 & 40	2	3			
N. 35 & 40 W. 40 & 45	1	1			
N. 40 & 45 W. 40 & 45	5	5			
N. 45 & 50 W. 40 & 45	11	13			
N. 45 & 50 W. 45 & 50	14	16			
N. 40 & 45 W. 45 & 50	7	7			
N. 45 & 50 W. 50 & 55	3	4			
N. 45 & 50 W. 55 & 60	1	1			
N. 40 & 45 W. 50 & 55	14	17			
N. 40 & 45 W. 55 & 60	13	18			
N. 30 & 35 W. 60 & 65	2	2			
N. 35 & 40 W. 60 & 65	2	2			
N. 35 & 40 W. 65 & 70	3	3			
N. 30 & 35 W. 65 & 70	4	4			
N. 40 & 45 W. 60 & 65	13	22			
N. 40 & 45 W. 65 & 70	11	18			
N. 40 & 45 W. 70 & 75	2	2			
N. 30 & 35 W. 70 & 75	2	2			
N. 35 & 40 W. 70 & 75	9	13			
N. 30 & 35 W. 75 & 80	2	2			
N. 45 & 50 W. 5 & 10	11	12			
N. 35 & 40 W. 65 & 70	9	13			
N. 35 & 40 W. 70 & 75	6	6			
N. 25 & 30 W. 15 & 20	4	4			
N. 25 & 30 W. 40 & 45	2	2			
N. 25 & 30 W. 55 & 60	3	3			
N. 25 & 30 W. 60 & 65	3	3			
N. 20 & 25 W. 45 & 50	2	2			
N. 20 & 25 W. 55 & 60	2	2			
N. 20 & 25 W. 60 & 65	8	8			
N. 15 & 20 W. 30 & 35	2	2			
N. 15 & 20 W. 35 & 40	2	2			
N. 15 & 20 W. 50 & 55	2	2			

GENERAL REMARKS.

All data which appears in the DAILY BULLETIN OF SIMULTANEOUS METEOROLOGICAL OBSERVATIONS are copied from the regular exchanges of this office. The barometer readings for land stations, in the first and second columns, are reduced to freezing and their respective standards; those in the third and fourth columns to sea-level. When necessary, corrections for instrumental error, temperature and reduction to sea-level are applied at this office. In the Naval and Marine Series, corrections for temperature and reduction to sea-level are always applied, while those for instrumental error only, when such corrections can be ascertained with close approximation, as by comparison when vessels are at or near land stations. Relative humidity generally requires computation from the hygrometrical observations. When rain has fallen, but neither the amount or duration is recorded, the word "blank" is published in the rain-fall column. The weather is generally published as given. The following symbols and abbreviations are common to all series, viz.: †, aneroid; *, instrumental error not known; ‡, observations taken at 7.35 a. m., Washington mean time; c, cirrus; k, cumulus, s, stratus; n, nimbus, d, scud; f, fracto; p, pallio, hz, haze; fg, fog; sk, smoke; d. clouds, detached clouds. The movement of the air is published as given on the originals, when indicated by velocity in miles per hour, in meters per second, or by force, all variations of the latter being reduced to the common scale of 0 to 10. Those stations reporting the movement in pounds pressure per square foot are reduced to force on the common scale, and those in kilometers per hour, to meters per second and miles per hour. The distinction between upper and lower clouds is carefully made in the United States and a portion of the Canadian series, and the various formations are indicated by the letters heretofore given and their combinations. In the MONTHLY SUMMARY OF INTERNATIONAL SIMULTANEOUS METEOROLOGICAL OBSERVATIONS the position of stations (latitude and longitude) are obtained from Keith Johnson's Index Geographicus, except where more exact information is furnished. The elevations of stations are obtained either from the annual, semi-annual and monthly publications of the various meteorological bureaus here represented, or from the original forms, upon which are entered the daily observations. In the United States series the elevations are computed from the latest surveys, and are carefully revised each month, in order to note any change in the elevation of the barometer cistern at any station. It is believed, for the most part, that throughout the European and other series, the elevations as given, represent the height of the barometer cistern above sea-level; at least this should be the case. The local time, where omitted or not given correctly in the originals, is carefully computed at this office. Generally, all conversions are made at this office. A letter placed opposite the name of a station or some portion of the data credited thereto, indicates that a certain number of observations are missing, corresponding to the relative position in the alphabet of the letter so used. The following remarks relate to the individual peculiarities in the *methods* of recording and the *times* of taking the international simultaneous meteorological observations, under the auspices of the various Meteorological Bureaus:

ALGERIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level; temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10. The rain-fall is measured at 7 a. m., local time, and the amount indicated in millimeters.

AUSTRALIAN SERIES.—At Melbourne the conversions are published as given in the originals. The movement of the air is indicated by velocity in miles per hour. The kind of clouds is not given except by inference from general weather terms. At Hobart Town the barometer is given in English inches reduced to sea-level. The movement of the air is indicated in pounds pressure per square foot. The kind of clouds is given and indicated by abbreviating the English nomenclature.

AUSTRO-HUNGARIAN SERIES—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. At the following stations the rain-fall is measured by local time: Lemburg, 7 p. m.; Vienna, 2 p. m.; Trieste, 7 a. m. The weather is given by the Vienna symbols or in general terms. At Gratz observations are made at 2 p. m., local time.

BELGIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The weather is occasionally given by the Vienna symbols. Except for Brussels, the distinction between upper and lower clouds is not made. At Furnes observations are taken at 12.26 p. m., local time, and at Maeseyck at 1 p, m., local time.

BRITISH SERIES.—In general the originals do not give rain-fall or distinction between upper and lower clouds. Relative humidity, except for Bradford and Silloth Rectory is not given on the originals, but is computed from hygrometrical observations. At Cardington, Galway, Oxford and Sandwick Manse the barometers are given as read off. At Free Town the barometer is reduced to freezing on the originals, but not to sea-level. The movement of the air is indicated by force, on a scale of 0 to 12, except pounds pressure per square foot at Greenwich. At the following stations rain-fall is measured by local time: Bradford, 9 a. m; Nottingham, 6 p. m.; and Aberdeen, 10 a. m. The wind directions are given to 32 points and weather by the Beaufort notation.

CANADIAN SERIES.—The originals give the barometer reduced to sea-level in English inches and the temperature in Fahrenheit. The movement of the air is indicated by the Beaufort scale, except at St. Pierre, where it is given on a scale of 0 to 7. Charlottetown, St. Andrews, Windsor and those stations marked with a star (*) give the clouds on a scale of 0 to 4. while the remainder report them on a scale of 0 to 10.

CAPE COLONY SERIES.—At Cape Town the barometer is given on the original as corrected for temperature only. Upper and lower clouds are given on a scale of 0 to 10 and the kind occasionally indicated by abbreviating Poëy's classification.

CHINESE SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is given in meters per second and the direction to 16 points. The kind of clouds is occasionally given, and the degree of cloudiness on the scale of 0 to 10; distinction between upper and lower clouds is sometimes made. The weather is given in general (French) terms. The rain-fall is given in millimeters and measured at the moment of simultaneous observation.

COSTA RICAN SERIES.—At San Jose the originals give the barometer as corrected for temperature only and the thermometer in Centigrade. Relative humidity is not given on the originals, but is computed from the hygrometrical observations. Upper and lower clouds are given, the amount on a scale of 0 to 10 and the kind by Howard's classification. The rain-fall is apparently measured at midnight.

DANISH SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force, on a scale of 0 to 6. The weather is occasionally given by the Vienna symbols, but it is not certain that they always refer to the moment of simultaneous observations, except at Copenhagen. No distinction is made between upper and lower clouds and the direction of movement, together with the rain-fall, is entirely omitted.

FRENCH SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 6, except in meters per second, for Mont Louis and Perpignan. In general, the rain-fall is measured at 9 a. m., local time, but at Lyons at the moment of simultaneous observation. The direction of upper and lower clouds is given, but no distinction is made in kind. The degree of cloudiness is given on a scale of 0 to 4 at Clermont-Ferrand, Commune de Greasque and Puy de Dome, while at other stations the scale of 0 to 10 is employed, or general weather terms, from which the amount of cloudiness is inferred. The weather is given in general terms, except occasionally by the Vienna symbols at Mont Louis and Perpignan.

GERMAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10, except at Carlsruhe, where the scale of 0 to 4 is used. No distinction is made between upper and lower clouds; the amount is given on a scale of 0 to 10, but the kind is rarely given. The weather is given in Vienna symbols or in general terms.

GREEK SERIES.—The originals give the barometer corrected for temperature only and the thermometer in Centigrade. Hygrometrical observations are not given, and the rain-fall is omitted. The kind of clouds is occasionally given, and the amount is inferred from the general weather terms. The movement of the air is indicated by force and is given on the scale of 0 to 10.

INDIAN SERIES.—The barometric observations refer to the Calcutta standard, which requires a correction of —0.011 inch, or 0.28 m. m. as compared with the Kew standard. The wind-velocity given is the average rate of wind since the observation of the preceding day. All conversions are published as given in the originals, where the data are recorded to an additional decimal. The weather is given by the Beaufort notation, Vienna symbols, or special symbols.

ITALIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometers per hour or by force on a scale of 0 to 4 at Mondovi, Florence and Cagliari. No distinction is made between upper and lower clouds and the amount is given on a scale of 0 to 10. The weather is given in Vienna symbols.

JAPANESE SERIES.—The rain-fall is measured at 9.30 a. m., local time, and the conversions are all published as given in the originals. Distinction is generally made between upper and lower clouds and the amount is given on the scale of 0 to 10. The weather is given in general terms.

MAURITIUS SERIES.—All conversions are published as given in the originals. The direction of the wind is given to 64 points and the rain-fall is measured at 9.30 a. m., local time.

MEXICAN SERIES.—All conversions (subject to correction at this office) are published as given in the originals. The kind of clouds are given, and also the direction and amount of both upper and lower. The degree of cloudiness is indicated on the scale of 0 to 10.

NETHERLAND SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by pressure in kilograms per square meter, except at Hellevoetsluis, which gives force on the scale of 0 to 12. The humidity is not given on the originals, but for two stations it is computed from the hygrometrical observations. The weather is only given for Utrecht, from which the amount of cloudiness at that station is inferred.

NORWEGIAN SERIES.—The originals give the barometer in millimeters, reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by velocity in meters per second or by force on a scale of 0 to 6. The weather is occasionally given by Vienna symbols. At Bergen, observations upon the weather and degree of cloudiness are made at 2 p. m., local time.

PORTUGUESE SERIES.—In the originals the barometer is given in millimeters and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometers per hour, except at Angra, which gives force on the scale of 0 to 9. The weather is occasionally given by the Vienna symbols. The rain-fall is measured at noon of each day.

RUSSIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by velocity in meters per second. No distinction is made between upper and lower clouds; the amount is given on the scale of 0 to 10 and the kind occasionally. The weather is occasionally given by the Vienna symbols. The rain-fall is not given.

SCOTTISH SERIES.—The originals give the barometer as read off and the movement of the air is indicated by force on a scale of 0 to 6. Distinction is made between upper and lower clouds as to degree and the amount of cloudiness is given on a scale of 0 to 10. The direction of upper clouds is given separately. The rain-fall and humidity are not given at North Unst. The wind direction is given to 32 points.

SPANISH SERIES.—The originals give the barometer at Barcelona, Bilbao, Burgos, Murcia, and Santiago as corrected for temperature only. The movement of the air, except for sub-series, is given in kilometers per hour. The kind of clouds is occasionally given and the degree of cloudiness on a scale of 0 to 10. The rain-fall at San Juan is measured at 4 p. m., local time and at San Fernando at midnight. The weather is given in general (Spanish) terms.

SWEDISH SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force, on a scale of 0 to 6, except in meters per second for Upsala. The kind of clouds is not given, but the degree of cloudiness is indicated on a scale of 0 to 10. The rain-fall is measured at 8 a. m., local time and the weather is occasionally given by the Vienna symbols.

SWISS SERIES.—The originals give the barometer in millimeters, corrected for temperature only and the thermometer in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10 and at Zurich on a scale of 0 to 4. The rain-fall at Zurich is measured at 9 a m., local time.

TURKISH SERIES.—The originals give the barometer in millimeters reduced to sea-level. The temperature is given in Centigrade. The movement of the air is indicated by force, on a scale of 0 to 7 for Valona and on a scale of 0 to 12 for Beirut. At Constantinople the velocity is given in meters per second. The kind of clouds is not given, but the amount is indicated on a scale of 0 to 10, except at Valona, at which station it is inferred from the general weather terms.

UNITED STATES SERIES.—The originals generally give the barometer reduced to sea-level and the temperature in Fahrenheit. At Bogota the barometer is corrected for temperature only; at Navassa and Puerto Berrio is given as read off and at Rivas is omitted. The amount of cloudiness is given on the scale of 0 to 4, except for Rivas, Paramaribo and York Factory. The movement of the air is generally indicated by velocity in miles per hour, except on a scale of 0 to 10 for Bogota, Paramaribo and Rivas, and 0 to 12 for Puerto Berrio. The wind-direction is generally given to 16 points, except 8 points for Bogota and 32 points for Rivas. The rain-fall at Rivas is given in centimeters and millimeters.

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

GERMAN NAVAL SERIES.—No vessels reporting.

PORTUGUESE NAVAL SERIES.—The originals give the barometer in millimeters, corrected for temperature only and the thermometer in Centigrade. The movement of the air is indicated by force on the scale of 0 to 10. The humidity is not given, but is computed from the hygrometrical observations. The kind of clouds is not given, but the amount is indicated on the scale of 0 to 10; the direction of movement is given without distinction between upper and lower. The height of sea disturbance is is given on the scale of 0 to 9, and the weather by the Beaufort notation. The rain-fall is not measured, but the duration is generally given in hours and minutes.

SWEDISH NAVAL SERIES.—The originals give the barometer as read off. The movement of the air is indicated by force on the scale of 0 to 12, and the direction is corrected for magnetic variation at this office. The humidity is not given, but is computed from the hygrometrical observations. The rain-fall is omitted. The height of the sea-swell is given on the scale of 0 to 9, and the weather by the Beaufort notation.

UNITED STATES NAVAL SERIES.—The originals give the barometer as read off. The humidity is not given, but is computed from the hygrometrical observations. The sea-swell and the weather are given in general terms. The direction of the wind is compass direction, corrected for variation.

BRITISH MERCHANT-MARINE SERIES.—Same as the Naval, except that frequently the direction of the wind is given to the true meridian.

GERMAN MERCHANT-MARINE SERIES.—Same as U. S. Naval, except that the S. S. Braunschweig gives the sea-swell occasionally on the scale of 0 to 9 and the S. S. Leipsig on the scale of 0 to 12.

SWEDISH MERCHANT-MARINE SERIES.—Same as Swedish Naval.

UNITED STATES MERCHANT-MARINE SERIES.—Same as U. S. Naval.

ERRATA.

DAILY BULLETIN, JANUARY, 1881—1st, page 11, White Star Line S. S Germanic, barometer reduced, 744.4, should read, 774.4. Swedish Merchant Marine Series, Barque Adolph Fredholm, should read. Barque Adolf Fredholm; make similar correction on the 2d, 4th, 5th, 6th, 7th, 8th, 10th, 12th, 14th, 16th, 18th, 20th, 22d, 24th, 26th, 28th, 30th.

2d, page 3, German Series, the following stations should read: Thorn, no observations; Wiessenburg, Bavaria, 28.90, &c.; Wustrow, 30.38, &c. Make similar corrections on the 3d, 4th, 5th, 6th, 7th, 8th.

5th, page 4, Italian Sub-Series, Stelvio, rain-fall, 11.811 inches or 300.0 m. m., should read, 1.181 inches or 30.0 m. m. Valdobbia, rain-fall, 59.055 inches or 1500.0 m. m.; should read 5.905 inches or 150.0 m. m.; total for 90 hours

6th, page 4, Italian Sub-Series, Stelvio, rain-fall, 5.118 inches or 130.0 m. m., should read, 0.512 inches or 13.0 m. m. Page 7, United States Series, New River, N. C., insert figure 2 in column for force.

10th, page 9, British Naval Series, H. M. S. Sea-Gull, E. 480° 09′, should read E. 48° 09′.

13th, page 9, British Naval Series, H. M. S. Superb, W. 15° 18′ should read, E. 15° 18′. Page 11, German Merchant Marine Series, S. S. Köln, rain and s'w, should read, rain and snow.

14th, page 4, Italian Series, Valdobbia, rain-fall, 11.811 inches, or 300.0 m. m., should read 1.181 inches or 30.0 m. m. Page 8, British Naval Series, H. M. S. Alexandra, reduced barometer 56.1, should read, 756.1

15th, page 5, Scottish Series, North Unst, barometer reduced, 29.71 in. or 754.6 m. m., should read 29.61 in. or 752.1 m. m.

20th, page 10, United States Naval Series, Alert, Hong-Kong, China, barometer reduced, 763.8, should read 763.5.

24th, page 9, British Naval Series, H. M. S., Tenedos, W. 90° 36′, should read W. 50° 36′.

MONTHLY SUMMARY, DECEMBER, 1880—Page 4, Russian Series, Barnaul, barometer reduced, 29.44, should read 30.44. Kieff, actual barometer, 740.6 should read 740.9.

Page 5, United States Series, Cleveland, temperature, Centigrade, 5.2, should read —5.2. McKavett, actual barometer, 25.84, should read 27.84. Jacksboro, total movement, 9584, should read 8584

Page 6, United States Series continued. San Diego, relative humidity, 90.3, should read 80.3. U. S. Sub-Series, Rivas, rain-fall, 0.16 inches or 4.1 m. m., should read ——. Santiago de Cuba, rain-fall, ——, should read 0.16 inches, or 4.1 m. m. St. Thomas, rain-fall, 0.005 inches or 0.13 m. m., should read ——. Upernavik, rain-fall, 0.26 inches or 6. m. m., should read 0.005 inches or 0.13 m. m. York Factory, rain-fall, ——, should read 0.26 inches or 6.6 m. m.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR:

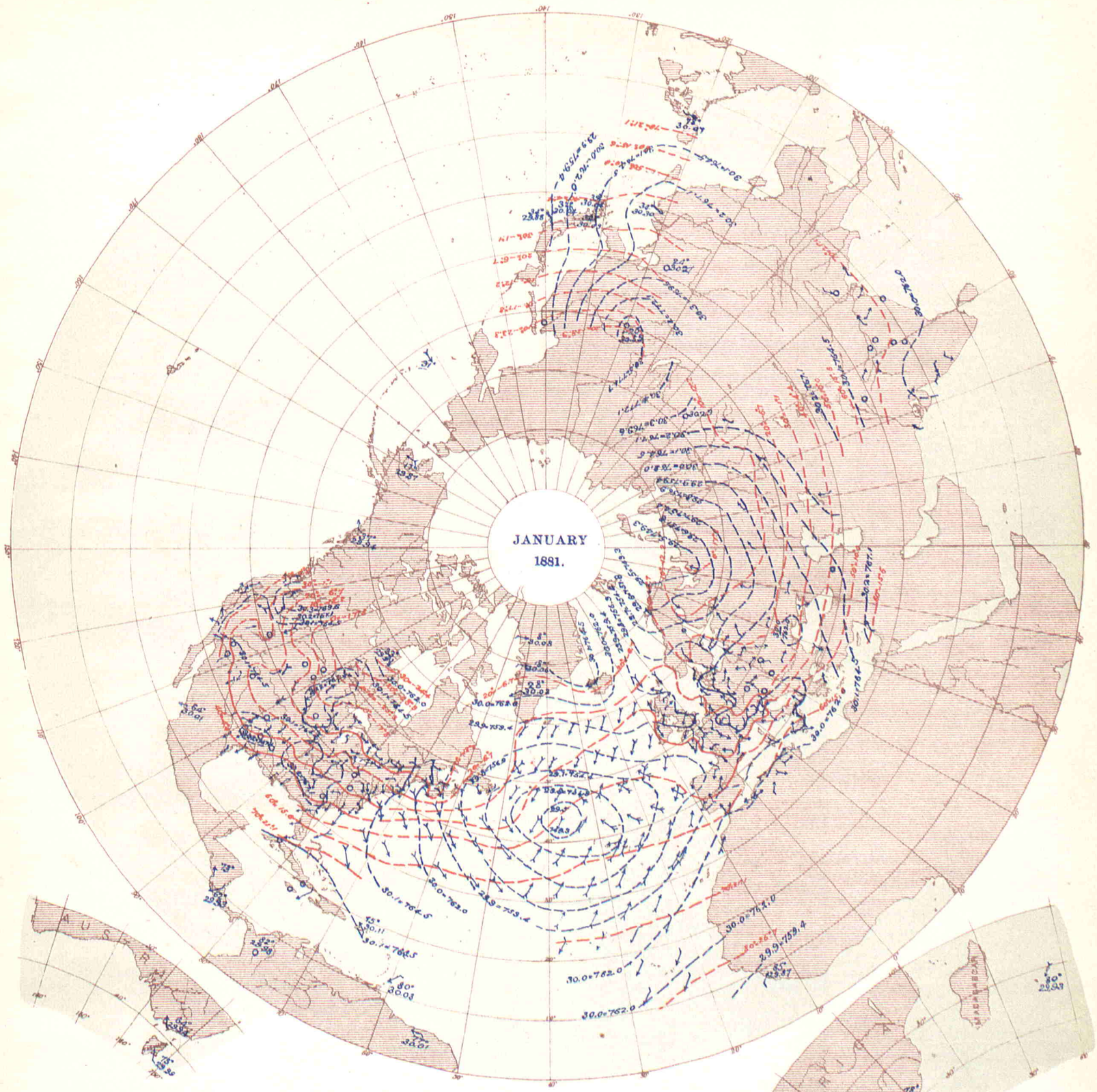
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Office of the Chief Signal Officer,

UNITED STATES ARMY.

Charted from Actual Observations taken Simultaneously, Series commencing January, 1877.

No. IV.



PREVAILING WINDS.

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

Symbols.	Force.	Velocity.	
		Miles per hour.	Metres per second.
O	0	0	0
→	1, 2	0 to 9	0 to 4.0
→	3, 4	9.1 to 22.5	4.1 to 10.1
→	5, 6	22.6 to 40.5	10.1 to 18.1
→	7, 8	40.6 to 67.5	18.1 to 30.2
→	9, 10	67.6 up.	30.2 & over.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

ISOBARS AND ISOTHERMS.

Isobars in *blue;* detached barometer means in English inches.
Isotherms in *red;* detached temperature means in degrees Fahrenheit.
Broken lines, are doubtful.

INTERNATIONAL MONTHLY CHART.

Showing mean pressure, mean temperature, mean force and prevailing direction of winds at 7:35 A. M., Washington mean time, for the month of JANUARY, 1881., based on the daily charts of the International Bulletin.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 1, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.24	768.2	68.0	20.0	79	NE			2		4			0	0	Fair	Dr. Ollive.
Nemours			30.08	763.9	66.2	19.0	88	SW			6		1			Inap.	Inap.	Very fair	Raynard.
Algiers			30.05	763.2	61.9	16.6	75	N			4		1			0.283	7.2	Very fair	Nicolas.
La Calle			29.87	758.6	63.0	17.2	78	WNW			5		7			0	0	Very cloudy	Fonfrède.
Tunis			29.84	757.8															Jacques.
Sfax			29.95	760.7															Gau.
Saida			30.15	765.7	58.1	14.5	53	WNW			5		8			0	0	Very cloudy	Dumas.
Tebessa			29.98	761.5	55.4	13.0	51	NW			6		6			0.126	3.2	Cloudy	Watrin.
Geriville																			Lonchamp.
Laghouat			30.13	765.2	62.2	16.8	61	W			6		4			0	0	Fair	Herbin.
Biskra			30.05	763.3															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.87	758.7	29.96	761.0	62.7	17.1	78	SE	7	3.1			1			0	0	Very fine	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania			29.90	759.4	77	25.0		NW			3		10lm			0.05	1.3		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.21	742.0	29.78	756.5	36.7	2.6	98	W			1		10			0.228	5.8	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.06	738.1	29.85	758.3	31.6	— 0.2	89	SW	1.8	0.8			10			0	0		Dr. Wiersbicki.
Eperies	28.89	733.9	29.81	757.2	31.5	— 0.3	100	Calm			0		Fog			0	0		Julius Mikolik.
Gratz‡	28.52	724.3	29.80	756.9	37.9	3.3	83	S			2		10			0	0		Andreas Rospini.
Hermannstadt	28.30	718.7	29.76	756.0	34.9	1.6	77	S			2		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.44	722.4	29.82	757.4	37.0	2.8	91	Calm			0		8			0	0		The Staff.
Lemberg	28.79	731.3	29.82	757.3	31.5	— 0.3	90	SE			1		10			0	0		Dr. T. Stanecki.
Pola	29.55	750.6	29.65	753.2	51.1	10.6	56	NE			3		7			0	0		I. R. HydrographicOffice
Szathmar	29.19	741.5	29.65	753.2	32.7	0.4	90	N			2		10			0	0	Foggy	Beicht Peter, S. J.
Szegedin	29.21	749.7	29.81	757.1	36.3	2.4	96	Calm			0		10			0.059	1.50		Karl Stancel.
Trieste	29.63	752.6	29.73	755.2	48.0	8.9	65	E			1		10			0	0	Cloudy	P. Busin.
Vienna	29.10	739.1	29.84	757.8	38.8	3.8	83	N			1		10			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.64	752.9	29.84	758.0	44.1	6.7	68	S			1	1		SW		0	0		Royal Observatory
Furnes																0	0	Foggy	M. E. de Cae.
Maeseyck	29.73	755.2	29.86	758.4	39.2	4.0	88	E			2		0					Light rain	M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 6, 1882.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.

BRITISH SERIES.

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

Aberdeen	29.62	752.3	29.72	754.9	39.3	4.1	64	W	10	4.5			0					0	0	Blue sky	W. Boswell.
Armagh, Observatory	29.57	751.1	29.82	757.4	38.0	3.3	90	SW	8	3.6			8							Foggy	S. Call.
Bidston, Liverpool Obs'y			29.82	757.4	44	6.7	74	SW	11	4.9			1							Blue sky	John Hartnup.
Bolton, Sharples	29.29	744.0	29.83	757.7	36.0	2.2	97	SE					10							Overcast	Thomas Mackereth.
Bradford, Yorkshire	29.40	746.7	29.79	756.7	41.4	5.2	86	SW			1		6					0.01	0.3	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.97	761.2	30.00	762.0	81	27.2	66	NE			3		6							Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			29.83	757.7	40.0	4.4	88	SE			0.4		9							Overcast	John McLaren.
Chatham, School M. E.	29.74	755.4	29.87	758.7	37.1	2.8	65	SW			1		0							Misty	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.69	754.1	29.92	760.0	45.6	7.6	92	W			1		6							D. clouds	The Staff.
Fort Napier, Natal	27.58	700.5	29.79	756.7	87.0	30.6	100	NE			1		0							Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	87	30.6	88	SW			1		3							D. clouds	C. E. Keane.
Galway, Queen's College			29.66	753.4	43	6.1	100	W			2		2							D. clouds	J. O'Donoghadue.
Gibraltar, Mediterranean	30.15	765.8	30.20	767.1	63.6	17.6	94	NW			2		3							Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.55	750.6	29.76	755.9	35.8	2.1	97	SW			1									Foggy	D. G. MacLean.
Greenwich, Royal Obs'y	29.70	754.4	29.88	758.9	35.1	1.7	100	SW			1		10							Foggy	The Staff.
Guernsey	29.69	754.1	29.91	759.7	47.5	5.6	85	NW			2		4					0.50	12.7	D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.86	758.4	29.90	759.4	36.2	2.3	97	SSW	7	3.1			10							Foggy	The Met'g'l Office.
Leicester, Museum	29.55	750.6	29.81	757.2	39.9	4.4	80	S			1		10							Overcast	J. E. Carryer.
Malta, Mediterranean	29.59	751.6	29.67	753.6	63	17.2	78	W			3		6							D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.12	765.0	70.2	21.2	94	SE			1		4							D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.32	744.7	29.86	758.4	42.0	5.6	87	W			1		7							Misty	Robert Pate.
Oxford, Radcliffe Obs'y	29.65	753.1	29.91	759.7	36.4	2.4	98	WSW			1		10							Foggy	The Staff.
Plymouth	29.82	757.4	29.89	759.2	43.6	6.4	97	SW			1		10							Misty	John Merrifield.
Sandwick Manse, Orkneys			29.61	752.1	41	5.0	93	NW	22	9.8			5							Showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.55	750.6	29.61	752.1	45.2	7.3	94	NE			2		10							Misty	Serg't W. H. Lyne.
Sheffield	29.54	750.3	29.83	757.7	43.4	6.3	76	W			1		5					0	0	Misty	W. F. Cooper.
Silloth Rectory	29.80	756.9	29.83	757.7	37.5	3.1	95	SE			2		10					0	0	Overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.83	757.7	38.1	3.4	91	NW	3	1.3			10							Misty	Rev. S. J. Perry.
Strathfield Turgiss	29.67	753.6	29.90	759.4	37.2	2.9	98	SW			1		10							Foggy	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	29.82	757.4	29.89	759.2	50	10.0	86	SW			4		6							D. clouds	W. Newcombe.
Valencia, Observatory	29.76	755.9	29.78	756.4	45.6	7.6	80	SE	9	4.0			7							D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B	29.95	760.7	29.99	761.7	3.5	—15.8		NW	4	1.8			10n			Inap.	Inap.			Snowing	Hon. J. Ferguson.
Chatham, N. B.*	29.86	758.4	29.92	760.0	2	—16.7	91	W	3	1.3			10n		W	0.04	1.0			Light snow	G. A. Blair.
Charlottetown, P. E. Island	29.78	756.4	29.82	757.4	4	—15.6	100	W	15	6.7			10s			0.300	7.62			Cloudy	H. J. Cundall, C. E.
Chicontime, Quebec					—18.3	—27.9		NW			3	0	0			0	0			Clear	Rev. V. A. Huart.
Cornwall, Ontario	30.19	766.8	30.42	772.7	—15.0	—26.1	100	N			1	10cs	0			0	0			Cloudy	James Smith, M. A.
Dalhousie, N. B	30.01	762.2	30.05	763.3	— 3.0	—19.4		W			2		10n			0.40	10.2			Snowing	H. A. Johnson.
Father Point, Quebec*	30.13	765.3	30.15	765.8	—11	—23.9	77	NW	5	2.2			10n			0.20	5.1			Cloudy	J. McWilliams.
Fredericton, N. B	29.98	761.5	30.05	763.3	— 6.9	—21.6	96	NW	17	7.6		0	0			0	0			Clear	Prof. Harrison.
Fort Garry, Manitoba*	29.63	752.6	30.61	777.5	—20	—28.9	100	E	2	0.9			10n			0	0			Cloudy	James Stewart.
Granton, Ontario	29.04	737.6	30.27	768.8	2.7	—16.3	81	NE			2		10n			Inap.	Inap.			Snowing	James Grant.
Halifax, N. S.*	29.77	756.1	29.92	760.0	6	—14.4	90	NW	12	5.4		0	8k		NW	0	0			Cloudy	A. Allison.
Hamilton, Ontario	29.89	759.2	30.33	770.4	1.7	—16.8	97	NE			2	0	10ks			0	0			Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	30.03	762.7	30.41	772.4	— 6	—21.1	83	N	5	2.2			10ks		Calm	0	0			Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	29.67	753.6	29.71	754.6	25.0	— 3.9	97	E	3	1.3			10n			0.20	5.1			Snowing	C. H. Rigby.
Montreal, Quebec*	30.19	766.8	30.43	772.9	—12	—24.4	90	N	10	4.5		2cs	2s			0	0			Fair	C. H. McLeod, C. E.
Moose Factory, Ontario																					J. R. Nason.
Norwood, Ontario																					Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.69	754.1	30.49	774.4	9	—12.8	79	N	13	5.8			10n		N	0	0			Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.59	751.6	30.46	773.7	— 5.9	—21.1	62	NE			2		10ks			0	0			Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.47	748.5	30.23	767.8	9	—12.8	100	NE	13	5.8			10n			0	0			Threatening	H. Morgan.
Port Stanley, Ontario	29.61	749.5	30.22	767.6	8	—13.3	83	E	18	8.0			10n		E	Inap.	Inap.			Cloudy	M. Payne.
Quebec, Quebec*	29.91	759.7	30.29	769.4	—15	—26.1	73	W			5	0	2s		W	0	0			Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.03	762.7	30.58	776.7	—17	—27.2	76	W	4	1.8			10n			0	0			Hazy	W. H. McIntyre.
St. Andrews	29.96	761.0	30.02	762.5	— 1	—18.3	90	NW	14	6.3		0	0			0	0			Clear	
St. John's, N. B	29.79	756.7	29.98	761.5	—2.0	—18.9	100	NW	20	8.9		0	0			0.06	1.5			Clear	G. Murdock, C. E.
Saugeen, Ontario*	29.63	752.6	30.44	773.2	— 3	—19.4	97	NE	25	11.2			10ks			0	0			Cloudy	K. Stewart.
Stratford, Ontario	28.86	733.0	30.30	769.6	—1.5	—18.6	94	E	15	6.7			10s			0	0			Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.65	753.1	29.70	754.4	19	— 7.2	97	W	3	1.3			10n			0.55	14.0			Heavy snow	T. C. Hill, C. E.
Toronto, Ontario*	29.96	761.0	30.40	772.1	— 1	—18.3	85	NE	20	8.9			10n			0	0			Cloudy	Magnetic Observatory.
Windsor, N. S.	29.79	756.7	29.89	759.2	6.0	—14.4	100	NW	11	4.9		0	8n			0	0			Overcast	
Woodstock, Ontario	29.09	738.9	30.28	769.1	1.3	—17.1	86	N	26	11.6			10s			0	0			Cloudy	Prof. Wolverton.
Yarmouth, N. S.*	29.94	760.5	30.01	762.2	11	—11.7	62	NW	15	6.7			10s		NW	0.08	2.0			Cloudy	Lt. F. E. Wilmot, R. N
SUB-SERIES.																					
St. John's, Newfoundland	29.58	751.3	29.84	757.9	26	— 3.3	100	W	1	0.4		0	0			0	0			Fine	John Delany.
St. Pierre, N. F			29.63	752.6	28.4	— 2.0		E			2					0	0				N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																0	0			The Staff, for D. Gill.
Cape Town, C. G. H. Obs'y	29.81	757.2	29.85	758.2	91.5	33.1	50	S	5.4	2.4		0	2ks			0	0	Cloudy		John Duthie.
Cape St. Francis Lt. House	29.78	756.4			68.2	20.1	93	W	17.2	7.7			9s							

CHINESE SERIES.

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

SUB-SERIES.																				
Zi-Ka-Wei, near Shanghai	30.03	762.7	30.05	763.3	45.9	7.7	91	WNW	7.4	3.3			1gn			0.016	0.4	Covered		M. Marc Dechevrens, S J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.19	665.2	29.91	759.7	64.4	18.0	88	SE			2	1c	2d		NE	0	0	Fair	Federico Maison.

DANISH SERIES.

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

Copenhagen	29.67	753.5	29.71	754.7	34.3	1.3	94	SW	18	8			10					Foggy	Oversergent Fischer.
Fanöe	29.72	755.0	29.74	755.5	33.4	0.8	100	WSW			4		10					Foggy	Overloerer Lauridsen.
Godthaab, Greenland	29.95	760.9	30.00	762 0	24.4	— 4.2	64	ENE			2		4						S. Kleinschmidt.
Stykkisholm, Iceland	30.21	767.4	30.25	768.5	4.3	—15.4	90	E			2		0						A. O. Thorlacius.
Thorshavn	29.79	756.6	29.82	757.5	35.1	1.7	78	ENE	34	15			10						Overloerer Bergh.
Vestervig	29.58	751.2	29.67	753.6	33.4	0.8		W			2		10					Raining	Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.29	744.0	29.93	750.1	52.2	11.2	80	NW			1		10n	E	E	0.385	9.8	Covered	M. Labroue, Director.
Alençon	29.36	745.8	29.91	759.8	44.6	7.0	77	NE			1		10n			0.28	7.	Covered	M. Nicot, Director.
Arras, Engineer School	29.60	751.8	29.86	758.5	43.5	6.4	74	NE	6.3	2.8			ks						M. Klein, Commandant.
Avignon, Normal School	29.72	755.0	29.80	757.0	53.4	11.9	73	NNE			1		2n		NW	0	0	Slightly cl'dy	M. Giraud, Director.
Bar-sur-Seine	29.21	741.9	29.77	756.1	47.3	8.5	88	SE			1		10kn		W	0.059	1.5	Covered	M. Saillard, Director.
Beauvais, Normal School	29.58	751.4	29.85	758.3	43.3	6.3	73	N			1		5		NNW	0	0	Cloudy	M. Frère Eugene Marie.
Besançon, Normal School	28.92	734.6	29.84	757.9	44.6	7.0	86	S			1		10n		S			Raining	M. Gobin, Director.
Bordeaux, Observatory	29.69	754.2	29.96	761.0	52.5	11.4	80	N			2		8		WNW	0.610	15.5	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.24	742.6	29.80	757.0	44.2	6.8	91	W			2		n		W	0.138	3.5		M. Postel, Director.
Brest, Naval Observatory	29.74	755.5	29.98	761.6	45.0	7.2	94	NE			1		10		NE	0	0	Foggy	M. de Rermaree, Dir.
Caen, Normal School	29.79	756.6	29.87	758.6	48.9	9.4	89	NE			1		0			0	0	Clear	M. Bétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.48	748.9	29.81	757.2	41.4	5.2	93	E			1		10			0.098	2.5	Covered	M. Jadot, Director.
Charleville, Normal School	29.28	743.7	29.84	758.0	42.4	5.8	61	E			1		10			0	0	Covered	M. Grimard.
Clermont-Ferrand Obs'y	28.42	721.8	29.78	756.3	49.3	9.6	69	WNW			1		8		NW	0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	28.87	733.3	29.71	754.6	46.9	8.3	87	N			1		8			0.049	1.25		M. de Villemontée, Dir.
Commercy, Normal School	28.91	734.3	29.79	756.7	40.8	4.9	94	ESE			1		n		ESE	0.12	3.		Dr. Coulet, Director.
Gap, Normal School	25.19	639.8	29.88	758.9	44.6	7.0	31	S			2		10		W	0	0	Covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.72	729.4	29.86	758.4	49.3	9.6	74	NW			3		8		W	0.130	3.3	¾ covered	M. Kina, Director.
Grenoble, Normal School	29.02	737.0	29.79	756.7	43.9	6.6	85	NE			1		en			0.165	4.20		M. Ablard, Director.
Guéret, Normal School	28.25	717.5	29.87	758.6	41.7	5.4	78	NW			3		10		NE	0.480	12.2	Covered	M. Rivoir, Director.
Lamballe, Normal School	29.66	753.3	29.95	760.6	49.3	9.6	95	S			1				S	0.047	1.2		M. Ollitrault, Director.
Lescar, Normal School	29.13	740.0	29.81	757.2	49.1	9.5	69	W			1		10		W	0.016	0.4		M Chauvin, Director.
Lorient, Naval Observatory	29.89	759.2	29.99	761.8	52.2	11.2	77	S			3		0			0	0	Clear	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.71	729.2	29.74	755 3	47.3	8.5	78	S			1		n			0.091	2.3		M. André, Director.
Mans, Normal School	29.56	750.9	29.88	758.9	45.9	7.7	90	NE			3		0			0.130	3.3	Clear	M. Piboeu, Director.
Marseille, Observatory	29.53	750.0	29.80	756.8	52.3	11.3	73	WNW			2		9		NW	0.079	2.00		M. Stephan, Director.
Montlouis l'Instituteur	24.67	626.6	29.91	759.6	39.2	4.0	61	E	5.6	2.5			4		N	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.70	754.4	29.81	757.2	55.8	13.2	53	W			3		5		NW	0.08	2.	Raining	M. Galzin, Director.
Nancy, Normal School	29.02	737.0	29.81	757.1	35.6	2.0	96	SW			1		10n			0.157	4.0	Raining	M. Hasse.
Nantes, Observatory	29.82	757.4	29.98	761.5	50.7	10.4	74	WNW			1		0			0	0	Misty	M. Larocque, Director.
Nice	29.68	753.9	29.72	754.8	56.8	13.8	76	SW			3		1	SW	SW	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.74	755.5	29.85	758.2	60.6	15.9	52	N	22.4	10.0			3	NW	NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.35	567.8			24.6	—4.1							10		NW	0.535	13.6	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.74	730.0	29.81	757.2	51.1	10.6	93	W			1		10n	NW	NW	0	0	Covered	M. Taillieu.
Puy de Dôme O s'y, Summit	24.82	630.5			31.5	—0.3	100	W			8		10			0.252	6.4	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.88	759.0	29.91	759.8	47.7	8.7	95	WNW			1		10			0.20	5.	Covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.76	755.9	29.98	761.4	48.4	9.1	86	NW			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.71	703.7	29.87	758.8	44.2	6.8	85	W			1		8n			0.260	6.6		M. Richard, Director.
Rouen, Normal School	29.75	756.0	29.85	758.1	51.8	11	41	NNE			1		0			0	0	Clear	M. Platrier, Director.
Saint Lô, Normal School	29.79	756.7	29.95	760.7	45.5	7.5	90	SW			1		1	WSW	W	0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.66	753.4	29.83	757.0	43.6	6.1	78	NNW			3		9			0.693	17.6		M. Renou, Director.
Toulouse, Observatory	29.23	742.5	29.96	760.9	48.7	9.3	98	NW			3		10			0.173	4.4	Covered	M. Baillaud, Director.
Tours	29.75	755.9	29.88	758.9	49.6	9.8	72	N			1		5	Calm	N	0.051	1.3	½ covered	M. de Tastes.
Versailles, Observatory	29.35	745.4	29.84	758.0	43.9	6.6	77	N			1					0.171	4.34		Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

GERMAN SERIES.

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

Bamberg	28.97	735.8	29.83	757.6	41.9	5.5	80	NNW			3		2s			0	0		Prof. Dr. Holt.
Berlin	29.65	753.1	29.83	757.6	42.8	6.0	79	NW			1		1			0	0		Prof. Dr. Arndt.
Breslau	29.33	745.0	29.85	758.4	39.9	4.4	84	W			1		5	SW		0.041	1.05		Royal University Obs'y.
Carlsruhe	29.40	746.7	29.83	757.7	41.7	5.4	63	SE			0		10	SW		0.097	1.7	Raining	Albert Senz.
Cassel	29.22	742.3	29.83	757.7	42.1	5.6	72	S			2		2	SW		0	0		Dr. H. Möhl.
Frankfort on the Main	29.48	748.8	29.86	758.3	40.3	4.6	78	NNE			2		2			0	0		Physical Society.
Friedrichshafen	28.35	720.0	29.81	757.2	39.9	4.4	80	SSW			2		3	SW		0	0		Chief Telegrapher Wilhelm.
Hamburg	29.70	756.0	29.84	757.8	35.1	1.7	95	WSW			3		10			0	0		Dr. R. Kleeman.
Kiel	29.74	755.3	29.75	755.7	35.4	1.9	96	Calm			0		10			0.005	0.16		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.43	747.5	29.86	758.5	40.5	4.7	67	W			0-1		9			0	0	Foggy	Prof. Dr. Bruhns.
Magdeburg	29.62	752.3	29.85	758.1	39.4	4.1	88	Calm			0		0			0.071	1.8		Dr. Assmann.
Memel	29.79	756.7	29.84	757.9	31.5	—0.3	98	SSE			2		10n					Foggy	Reinbrecht & Issermann.
Munich	27.97	710.4	29.82	757.3	29.8	—1.2	95	Calm			0		10			0	0	Heavy fog	Central Station.
Neufahrwasser	29.82	757.3	29.83	757.7	39.2	4.0	90	Calm			0		10			0.087	2.2	Hazy	A Lothes.
Neustadt, Palatinate	29.21	742.0	29.74	755.3	42.1	5.6	78						7			0	0	Heavy fog	Dicknether.
Stuttgart	28.83	732.2	29.74	755.3	41.9	5.5	70	NE			1		9	NW		0.016	0.4		Prof. Dr. Schoder.
Thorn	29.63	752.5	29.81	757.2	38.5	3.6	93	NW			2		10			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	28.30	718.9	29.81	757.2	36.7	2.6	91	W			2		10	W		0	0		Prof. Kemlein.
Wustrow	29.80	756.8	29.82	757.4	32.7	0.4	100	SW			2		10			0	0	Foggy	Profs. Brandes & Reimer.

STATIONS.	BAROMETER. Corrected for instru-m'tal error and tem-perature.		Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direc-tion.	Velocity.		Force	CLOUDS. Amount and kind.		Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

GREEK SERIES.

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

Athens	29.23	742.4	29.62	752.4	60.1	15.6		SW			1.0		5					½ clear	Schmidt & Wourlisch.

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	29.97	761.2	30.02	762.4	77.1	25.1	56	S	7.0	3.1			3	WNW		0	0	D. clouds	
Deesa	29.47	748.5	29.94	760.6	80.5	26.9	23	N	8.6	3.8			6	SSW		0	0	D. clouds	
Bombay	29.90	759.4	29.94	760.4	78.9	26.1	58	NW	15.0	6.7			0			0	0	Blue sky	
Poona, Yarrowda	28.05	712.4	29.88	759.0	84.7	29.3	17	ESE	4.0	1.8			0			0	0	Blue sky	
Belgaum	27.34	694.3	29.85	758.3	80.5	26.9	23	E	2.0	0.9			0			0	0	Blue sky	
Lahore	29.24	742.7	30.00	762.1	68.7	20.4	27	Calm	1.3	0.6			4			0	0	Blue sky	
Roorkee	29.03	737.2	29.95	760.7	69.8	21.0	24	NW	1.7	0.8			6			0	0		
Agra	29.41	747.0	29.98	761.6	76.3	24.6	28	E	3.0	1.3			4		E	0	0		
Nagpur	28.90	734.1	29.95	760.6	81.7	27.6	26	SE	2.6	1.2			0			0	0	Blue sky	
Jubbulpore	28.60	726.4	29.98	761.6	74.8	23.8	35	N	1.8	0.8			0			0	0	Blue sky	
Lucknow	29.58	751.4	29.97	761.1	76.2	24.6	16	W	2.3	1.0			0			0	0	Blue sky	
Allahabad	29.64	752.8	29.95	760.8	74.7	23.7	37	Calm	2.3	1.0			0			0	0	Blue sky	
Patna	29.82	757.5	30.01	762.2	68.2	20.1	58	W	0.6	0.3			0			0	0	Blue sky	
Hazaribagh	27.92	709.1	29.98	761.4	67.6	19.8	26	WNW	9.0	4.0			0			0	0	Blue sky	
Cuttack	29.89	759.2	29.97	761.3	75.7	24.3	46	Calm	0.3	0.1			0			0	0	Blue sky	
Calcutta, Alipore	29.93	760.3	29.96	760.8	71.5	21.9	42	NNW	1.0	0.4			0			0	0	Blue sky	
Goalpara	29.50	749.3	29.92	759.9	67.4	19.7	53	Calm	1.8	0.8			0			0	0	Blue sky	
Chittagong	29.89	759.2	29.98	761.6	72.0	22.2	67	W	2.4	1.1			0			0	0	Blue sky	
Sibsagar	29.62	752.2	29.96	761.0	64.0	17.8	77	NE	1.7	0.8			10	W	W	0	0	D. clouds	

ITALIAN SERIES.

By authority of the MINISTER OF AGRICULTURE, INDUSTRY AND COMMERCE.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.32	744.7	29.74	755.4	48.2	9.0	58	Calm	0	0			7			0	0		Prof. Giovanni Clodig
Milan	29.22	742.2	29.76	755.8	38.1	3.4	80	WSW	0.7	0.3			6			0	0		Prof. Schiaparelli.
Padua	29.62	752.4	29.73	755.2	48.2	9.0	68	NNE	2.5	1.1			1			0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.84	732.6	29.78	756.5	37.9	3.3	76	ENE	1.3	0.6			2			0	0		Prof. P. F. Denza.
Genoa	29.52	749.7	29.71	754.6	55.0	12.8	42	NE	4.3	1.9			0			0	0		Prof. G. M. Garibaldi.
Mondovi	27.82	706.7	29.79	756.6	42.3	5.7	49	W			2		2			0	0		Prof. D. C. Bruno.
Pesaro	29.70	754.3	29.75	755.6	45.3	7.4	77	NW	11.2	5.0			6	NNE		0	0		Prof. Luigi Guidi.
Florence	29.42	747.2	29.68	753.8	51.8	11.0	61	NE			2		0			0	0		Cav. F. Meucci.
Leghorn	29.60	751.9	29.69	754.0	54.5	12.5	70	N	1.8	0.8			5			0	0		Prof. P. S. Ferrari.
Rome	29.43	747.5	29.62	752.4	53.6	12.0	63	Calm	0	0			3			0	0		Prof. C. de Giorgi.
Lecce	29.38	746.2	29.63	752.7	52.3	11.3	74	NNE	5.8	2.6			8			0	0		Prof. D. Conti.
Cosenza	28.75	730.2	29.65	753.0	54.7	12.6	75	SE	0.7	0.3			10	SSE		0.441	11.2		Prof. A. Pacinotti.
Cagliari	29.51	749.6	29.71	754.6	60.1	15.6	50	NW			6		2	W		0.031	0.8		Prof. G. Ciacciatore.
Palermo	29.45	747.9	29.70	754.3	59.9	15.5	62	NW	12.5	5.6			9	NW		0.386	9.8		Prof. Vincenzo Guiliano
Syracuse	29.58	751.4	29.63	752.5	59.0	15.0	62	E	2.5	1.1			9	WNW		0	0		
SUB-SERIES.																			
Naples, S. R.	29.09	738.8	29.61	752.0	53.6	12.0	83	NNW	0	0			10	WNW		0	0		Prof. F. Brioschi.
Stelvio	21.99	558.6			19.0	— 7.2	64	E			2		ICS			0	0	Clear	P. F. Denza.
Valdobbia	21.87	555.4			21.9	— 5.6	85	E			1	IC	0	S		0	0	Misty	

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	30.18	766.6	30.20	767.1	35.6	2.0	83	NE	3.1	1.4			10n			0.082	2.08	Raining	K. Sasaki.
Kioto	30.03	762.7	30.21	767.3	29.0	— 1.7	82						1s			0	0	Fair	
Nagasaki, I. M. Obs'y	29.88	758.9	30.09	764.3	40.2	4.6	95	N	1.8	0.8			8s			0.610	15.49	Cloudy	S. Takehayashi.
Tokei Obs'y, Yeddo	30.03	762.7	30.10	764.5	32.9	0.5	75	SW	4.9	2.2			0			0	0	Clear	The Staff.
Wakayama	30.13	765.3	30.19	766.8	33.2	0.7	75	N	2.3	1.0			0			0	0	Clear	S. Iwahashi.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.88	758.9	30.07	763.8	78.7	25.9	48	ESE	17.5	7.8		0	4		ESE	0	0	Squally	A. N. Figon.

MEXICAN SERIES.

By authority of the SECRETARY of PUBLIC WORKS.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Colima																			R. Banda, C. E.
Guadalajara																			Prof. L. Perez.
Guanaxuato																			Vicente Fernandez.
Leon	24.47	621.6	30.25	768.2	47.5	8.6	93	NW			1	3c	0	SW		0.035	0.9	Clear	Prof. M. Leal.
Mazatlan	29.75	755.7	30.02	762.4	68.5	20.3	84	E	0	0		2c	0			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.09	586.5	30.24	768.1	42.8	6.0	86	W	6.3	2.8		0	0			0.152	3.8	Fine	The Staff.
Morelia																			M. Fena, M. D.
Pabellon, Aguascalientes	23.90	607.2	29.99	761.7	49.5	9.7	93	Calm				0	9kn			0.094	2.4	Very cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.36	593.2	30.24	768.0	44.6	7.0	50	Calm	0	0		0	0			0	0	Fine	Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam	29.96	761.0	29.97	751.3	68.9	20.5	96	Calm	0	0		0	0			0	0	Foggy	Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.54	572.5	30.29	769.4	44.2	6.8	78					IC	0			0	0	Clear	J. A. Bonilla, M. E.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	29.86	758.4	29.86	758.4	41.0	5.0		NW			1					0.008	0.2		
Groningen	29.79	756.6	29.84	758.0	34.2	1.2		SW			1					0	0		
Helder	29.82	757.5	29.82	757.5	34.9	1.6		SSW			1					0	0		
Hellevoetsluis	29.83	757.7	29.83	757.7	38.5	3.6		Calm			0					0	0		
Utrecht	29.82	757.4	29.87	758.6	36.9	2.7	95	SW			1					0.008	0.2	Hazy	H. van der Brink

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.53	750.0	29.59	751.6	36.3	2.4	93	SSE	7.4	3.3			10			0.315	8.0		
Christiania	29.54	750.4	29.70	754.3	30.0	— 1.1	94	NNE	2	1			10					Snowing	
Gjæsvær	29.65	753.0	29.67	753.6	18.0	— 7.8		WNW			6		10					Snowing	
Lodingen	29.75	755.6	29.80	756.8	13.3	—10.4	63	Calm			0		0			0.083	2.1		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.67	753.7	29.83	757.7	59.7	15.4	80	W	13.0	5.8			3			0.059	1.5		Dr. J. A. Sampaio.
Campo Major	29.20	741.7	30.21	767.3	59.4	15.2	76	W	3.1	1.4			9			0.276	7.0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.19	766.7	30.27	768 9	67.3	19.6	72	WSW	6.3	2.8			8			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.86	758.4	30.22	767.6	60.1	15.6	87	SW	9.8	4.4			9			0.386	9.8		The Staff.
Ponta Delgada, Azores	29.86	758.4	29.93	760.2	60.1	15.6	89	SW	29.8	13.3			10			0.154	3.9		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.45	747.9	30.65	778.6	4.6	—15.2	64	Calm	0	0			3						Capt. Lasarew.
Archangel	29.85	758.3	29.87	758.8	13.6	—10.2	90	S	4	2			10					Snowing	Capt. Sselilwerstow.
Astrakhan	30.10	764.4	30.01	762.3	33 3	0.7	78	E	2	1			10cp					Heavy cld's	Capt. Wisganow.
Barnaul	30.22	767.5	30.79	782.1	— 4.5	—20.3	78	Calm	0	0			2						Meteorological Obs'y.
Dorpat	29.57	751.0	29.82	757.4	33.4	0.8	96	SE	2	1			10n						Observatory.
Ekaterinburg	29.42	747.3	30.48	774.3	8.1	—13.3	72	WSW	2	1			8c					Light clouds	Meteorological Obs'y.
Kasan	29.96	760.9	30.26	768.5	7.9	—13.4	72	ESE	7	3			10						Observatory.
Kertch	29.82	757.4	29.84	757.9	32.9	0.5	94	NE	4	2			8						Lagorio.
Kieff	29.28	743.8	29.97	761.2	19.0	— 7.2	100	ESE	4	2			10					Foggy	Observatory.
Krotkowo, N. 58°47′, E. 48°34′	29.72	754.8	29.93	760.2	33.4	0.8	89	E	9	4			10						Cand. Fatjanow.
Lugan	29.48	748.9	30.08	764.0	16.0	— 8.9	81	S	4	2			10s						Meteorological Obs'y.
Moscow	28.62	711.7	30.72	780.2	—22.2	—30.1	84	Calm	0	0			0						Meteorological Obs'y.
Nertchinsk	29.86	758.4	29.93	760.2	26.6	— 3.0	98	N	9	4			10n						Meteorological Obs'y.
Nikolaiev	29.78	756.5	29.87	758.7	— 6.5	—21.4	71	W	16	7			6s						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.85	758.1	30.11	764.7	32.9	0.5	90	ENE	4.0	2.2			10ks						Lieut. Iwanow.
Nukuss	30.22	767.5	30.36	771.1	23.2	— 4.9	64	SE	4	2			3k						Dr. Dobrochotow.
Pekin, China	29.82	757.5	29.84	757.9	25.0	— 3.9	87	SSE	11	5			10n						Physical Observatory.
St. Petersburg	28.62	726.9	30.22	767.5	49.3	9.6	34	NE	4	2			0						Central Physical Obs'y.
Tashkend, Laboratory	28.48	723.5	29.90	759.5	54.1	12.3	52	S	4	2			8s					Hazy	Teich, A. M.
Tiflis	29.41	747.1	29.85	758.3	29.3	— 1.5	92	SE	4	2			10ks						Physical Observatory.
Warsaw	29.46	748.3	29.90	759.5	25.0	— 3.9	91	S	4	2			10					Heavy cl'ds.	Astronomical Obs'y.
Wilna	30.48	774.2	30.82	782.9	—19.3	—28.5	76	Calm	0	0			0						Berg, Assistant.
Yeniseisk																			M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.78	756.4	39.9	4.4	82	W			1		0			0	0	Fine	Andrew Gibb.
Monach Lt. House, Hebrides			29.71	754.6	46	7.8	92	SW			3	5	3	SE		0	0	D. clouds	J. Youngclause.
North Unst, Shetland Isl'ds			29.56	750.8				NE			6		10			Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29 78	756.5	29.89	759.2	59.0	15	53	W	15.2	6.8			0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.06	763.4	30.11	764.9	55.6	13.1	86	NW	2.5	1.1			10			0.039	1.0	Rainy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.12	688.8			48.6	9.2	71	W	5.8	2.6		0	2			0.217	5.5	Light clouds	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.90	708.7	30.16	766.1	52.2	11.2	75	SW	18.3	8.2		0	7			0	0	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.92	760.0	30.07	763.8	69.1	20.6	83	NW	4.2	1.9		0	1			0	0	Almost clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.11	739.4	30.01	762.3	55.4	13.1	85	SSW	11.2	5.0			10			0.150	3.8	Covered	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	30.03	762.8	30.10	764.5	67.0	19.4	91	Calm	0	0		2c	1k	WSW		0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.92	760.0	29.97	751.3	80.4	26.9	69	SE	5.5	2.5						0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.20	767.0	30.30	769.5	63.0	17.2	83	W	5.8	2.6		3	4	W	W	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.04	763.0	30.13	765.3	71.6	22.0	100	SE	2.2	1.00		3k	5kn	SE	SE	0.492	12.50	Cloudy	Enrique Gades, Chief Engineer.
Tugnegarao, Philippine Ids	29.87	758.6	30.01	762.3	76.0	24.4	79	NW	4.5	2.0			2k		NW	0	0	Clear	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.68	753.9	29.72	754.9	8.2	—13.2	100	E			2		10			0	0		
Umea	29.71	754.5	29.76	755.8	13.3	—10.4	93	N			2		9			0	0		
Hernosand	29.76	755.9	29.81	757.2	17.4	— 8.1	80	NNE			2		10			0.083	2.1		
Stockholm	29.53	750.1	29.71	754.6	30.2	— 1.0	92	NNE			2		10			0.177	4.5		
Wisby	29.60	751.7	29.65	753.2	36.3	2.4	96	Calm			0		10			0.004	0.1	Rain & fog	
SUB-SERIES.																			
Upsala	29.63	752.5	29.71	754.7	25.7	— 3.5	93	N	6.0	2.7			10			0.073	1.86		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.37	720.6	29.84	758.0	39.2	4.0	98	N			1		10			0.165	4.2	Raining	The Observatory.
Zurich	28.16	715.3	29.85	758.2	39.2	4.0	71	E			1		7			0.012	0.3	Foggy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —6.5 mm.; Ther. +1°.6 cent.; Hum. +23 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.66	753.3	44.6	7.0	95	NE	6	2.5			10		N	0.057	1.7		The Observatory.
Valona			29.63	752.5	59.2	15.1		W			1		5			0	0	Cloudy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.80	756.8	69.8	21.0	69	SW			2	2c				0	0		Prof. C. V. A. van Dyck.

STATIONS.	BAROMETER. Corrected for instru-m'tal error and tem-perature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direc-tion.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

Albany, New York	30.23	767.8	30.32	770.1	9	—12.8	78	N	12	5.4			10s		Calm	0	0	Cloudy	
Alpena, Michigan	29.77	756.1	30.50	774.7	0	—17.8	70	NE	12	5.4			10s		Calm	0	0	Cloudy	
Atlanta, Georgia	28.74	730.0	29.85	758.2	61	16.1	94	SW	14	6.3			10n		Calm	0.13	3.3	Light rain	
Atlantic City, New Jersey	30.07	763.8	30.09	764.3	24	— 4.4	100	NE	25	11.2			10n		Calm	0.05	1.3	Heavy snow	
Attou Id., Alaska ‡	30.09	764.3			25	— 3.9	100	S	1	0.4		0	0			0	0	Clear	
Augusta, Georgia	29.78	756.4	29.97	761.2	64	17.8	82	SW	10	4.5			10s		SW	0.01	0.2	Cloudy	
Baltimore, Maryland	30.04	763.0	30.10	764.5	22	— 5.6	86	NE	9	4.0			10n		Calm	0.13	3.3	Light snow.	
Barnegat, New Jersey	30.10	764.5	30.12	765.0	23	— 5.0	86	NE	31	13.9			10n		NE	0.03	0.8	Heavy snow	
Benton, Montana	27.04	686.8			4	—15.6	74	SW	1	0.4			10s		Calm	0	0	Cloudy.	
Bismarck, Dakota	28.47	723.1	30.33	770.4	0	—17.8	85	E	4	1.8			10s		Calm	Inap.	Inap.	Cloudy	
Boise City, Idaho	27.20	690.9	30.16	766.1	40	4.4	91	SE	14	6.3			10s		W	0	0	Cloudy	
Boston, Massachusetts	30.05	763.3	30.22	767.6	8	—13.3	55	NW	12	5.4			10s		Calm	0	0	Cloudy	
Brackettville, Texas	28.83	732.3	29.88	758.9	58	14.4	94	N	8	3.6		0	1s		N	0.05	1.3	Clear.	
Brownsville, Texas	29.93	760.2	29.97	761.2	69	20.6	95	S	8	3.6			10s		Calm	0	0	Cloudy	
Buffalo, New York	29.50	749.3	30.29	769.4	5	—15.0	88	NE	20	8.9			10s		Calm	Inap.	Inap.	Cloudy	
Burlington, Vermont	30.14	765.5	30.48	774.2	— 7	—21.7	59	N	11	4.9			10s		NW	0	0	Cloudy	
Cairo, Illinois	29.74	755.4	30.15	765.8	37	2.8	81	NW	13	5.8			10s		NW	0.03	0.8	Threatening	
Campo, California	27.55	699.8	30.12	765.0	39	3.9	82	E	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.40	696.0			36	2.2	71	E			1	0	0			0	0	Clear	
Cape Henry, Virginia	29.88	758.9	29.90	759.4	39	3.9	82	NE	12	5.4			10n		Calm	0.23	5.8	Light rain	
Cape May, New Jersey																			
Castroville, Texas																			
Cedar Keys, Florida	30.09	764.3	30.11	764.8	57	13.9	94	SE	8	3.6		2c	0	Calm		0	0	Clear	
Champaign, Illinois	29.25	742.9	30.11	764.8	18	— 7.8	68	NE	20	8.9			10s		NE	0.61	15.5	Cloudy	
Charleston, S. Carolina	29.94	760.5	30.00	762.0	60	15.6	88	S	9	4.0		0	8s		S	0	0	Cloudy	
Charlotte, N. Carolina	29.02	737.1	29.84	757.9	41	5.0	100	N	3	1.3			10n		Calm	0.19	4.8	Light rain	
Chattanooga, Tennessee	29.05	737.9	29.83	757.7	60	15.6	100	SW	16	7.2			10n;fg		W;C	0.55	14.0	Light rain	
Cheyenne, Wyoming	24.18	614.2	30.12	765.0	30	— 1.1	47	NW	6	2.7		0	0			0	0	Clear	
Chicago, Illinois	29.48	748.8	30.23	767.8	18	— 7.8	84	E	16	7.2			10n		Calm	0.08	2.0	Heavy snow	
Chincoteague, Virginia	29.92	760.0	29.94	760.5	32	0.0	100	NE	20	8.9			10n		NE	0.06	1.5	Light rain	
Cincinnati, Ohio	29.27	743.4	29.95	760.7	29	— 1.7	89	N	11	4.9			10s		Calm	1.50	38.1	Cloudy	
Cleveland, Ohio	29.29	744.0	30.08	764.0	13.5	—10.3	100	NE	16	7.2			10n		Calm	0.17	4.3	Light snow.	
Coleman City, Texas	28.45	722.6	30.23	767.8	30	— 1.1	78	N	24	10.7			10s		N	0.06	1.5	Cloudy	
Columbus, Ohio	29.03	737.3	29.91	759.7	22	— 5.6	93	NE	16	7.2			10s		Calm	0.70	17.8	Cloudy	
Concho, Texas	28.34	719.8	30.12	765.0	33	0.6	89	N	15	6.7			10s		Calm	0.13	3.3	Cloudy	
Corsicana, Texas	29.79	756.7	30.28	769.1	37	2.8	63	N	12	5.4			10ks		Calm	0.39	9.9	Cloudy	
Davenport, Iowa	29.61	752.1	30.32	770.1	11	—11.7	80	N	13	5.8			10s		Calm	0.12	3.0	Cloudy	
Dayton, Washington T'y	28.01	711.4	29.73	755.1	25	— 3.9	88	S	8	3.6			10n		Calm	0.30	7.6	Light rain	
Deadwood, Dakota	25.42	645.7			16	— 8.9	66	NW	1	0.4		0	0			0	0	Clear	
Decatur, Texas	29.08	738.6	30.34	770.6	29	— 1.7	89	N	16	7.2			10s		Calm	0.02	0.5	Cloudy	
Delaware Breakwater, Del.	30.00	762.0	30.02	762.5	28	— 2.2	100	NE	36	16.1			10n		NE	0.03	0.8	Heavy snow	
Denison, Texas	29.48	748.8	30.33	770.4	29	— 1.7	89	N	12	5.4			10s		N	0.04	1.0	Cloudy	
Denver, Colorado	24.92	633.0	30.14	765.5	34	1.1	79	SE	1	0.4		0	0			0	0	Clear	
Des Moines, Iowa	29.45	748.0	30.41	772.4	15	— 9.4	82	N	4	1.8			10s		Calm	0.04	1.0	Cloudy	
Detroit, Michigan	29.44	747.8	30.17	766.3	9	—12.8	100	NE	20	8.9			10n		Calm	0.62	15.8	Light snow.	
Dodge City, Kansas	27.70	703.6	30.25	768.3	10	—12.2	38	N	15	6.7		0	0			0	0	Clear	
Dubuque, Iowa	29.60	751.8	30.38	771.6	8	—13.3	78	N	10	4.5		0	2s		NE	0.72	18.3	Clear	
Duluth, Minnesota	29.81	757.2	30.59	777.0	1	—17.2	85	NE	17	7.6			10s		NE	0	0	Cloudy	
Eagle Pass, Texas	29.28	743.7	30.01	762.2	57	13.9	87	NE	1	0.4			10s		Calm	0.01	0.3	Cloudy	
Eagle Rock, Texas	25.36	744.1	30.01	762.2	33	0.6	89	SW	12	5.4			10s		SW	0	0	Cloudy	
Eastport, Maine	29.97	761.2	30.04	763.0	— 2	—18.9	67	NW	23	10.3		1c	0	NW		0	0	Clear	
Edinburg, Texas					59	15.0	82	N			1					0	0	Cloudy	
El Paso, Texas	26.38	670.0			39	3.9	64	W	2	0.9		0	0			0	0	Clear	
Erie, Pennsylvania	29.38	746.2	30.16	766.1	9	—12.8	100	NE	28	12.5			10n		Calm	0.08	2.0	Light snow.	
Escanaba, Michigan	29.82	757.4	30.58	776.7	— 5	—20.6	83	N	13	5.8			10s		Calm	0	0	Cloudy	
Florence, Arizona	28.62	726.9	30.22	767.6	43	6.1	67	NE	1	0.4		0	0			0	0	Clear	
Fort Apache, New Mexico	25.18	639.6	30.63	778.0	27	— 2.8	53	E	3	1.3		0	0			0	0	Clear	
Fort Assinniboine, Montana	27.07	687.6			3	—16.1	73	SW	10	4.5			10s		Calm	0	0	Cloudy	
Fort Bennett, Dakota	28.74	730.0			0	—17.8	70	SW	4	1.8		5cs	0	Calm		0.21	5.3	Fair	
Fort Buford, Dakota	28.15	715.0	30.31	769.9	—18	—27.8	67	Calm	0	0		0	0			0.11	2.8	Clear	
Fort Custer, Montana	26.79	680.4			5	—15.0	75	Calm	0	0			10s		Calm	0	0	Cloudy	
Fort Davis, Texas	25.34	643.6	30.30	769.6	40	4.4	73	SE	3	1.3		0	0			0	0	Clear	
Fort Elliott, Texas	27.51	698.7	29.98	761.5	21	— 6.1	57	N	20	8.9		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.78	756.4	30.36	771.1	24	— 4.4	87	N	14	6.3			10s		N	0	0	Cloudy	
Fort Grant, Arizona	25.33	643.4	30.13	765.3	45	7.2	40	NE	9	4.0		0	0			0	0	Clear	
Fort Griffin, Texas	28.97	735.8	30.34	770.6	27	— 2.8	76	N	11	4.9		0	0			0	0	Clear	
Fort Keogh, Montana	27.55	699.8			— 2	—18.9	67	NE	8	3.6			10s		Calm	0.01	0.3	Cloudy	
Fort McKavett, Texas	27.92	709.2	29.93	760.2	37	2.8	90	NE	16	7.2			10n		Calm	0.06	1.5	Light rain	
Fort Macon, North Carolina	29.89	759.2	29.90	759.4	51	10.6	100	SW	5	2.2			10n		Calm	0.05	1.5	Light rain	
Fort St. Michaels	29.82	757.4	29.85	758.2	8	—13.3	100	N	4	1.8		0	0						
Fort Missoula, Montana	26.50	673.1			28	— 2.2	100	E	6	2.7			10n		Calm	0.15	3.8	Heavy snow	
Fort Shaw, Montana	26.12	663.4			31	— 0.6	79	SW	16	7.2		10cs	0	Calm		0	0	Cloudy	
Fort Sill, Indian Territory	29.10	739.1	30.31	769.9	21	— 6.1	71	N	20	8.9		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.39	721.1			—10	—23.3	77	SE	2	0.9			10ks		SE	Inap.	Inap.	Cloudy	
Fort Verde, Arizona					36	2.2	80	NW			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.40	721.3	30.00	762.0	47	8.3	92	N	8	3.6			10s		Calm	0.04	1.0	Cloudy	
Galveston, Texas	29.96	761.0	30.00	762.0	63	17.2	100	S	4	1.8			Fog		Calm	0.56	14.2	Heavy rain	
Grand Haven, Michigan	29.57	751.1	30.29	769.4	9	—12.8	100	NE	14	6.3			10n		Calm	0.52	13.2	Light snow.	
Hatteras, North Carolina	29.86	758.4	29.88	758.9	45	7.2	100	W	8	3.6			10n;fg		Calm	0.14	3.6	Light rain	
Helena, Montana	25.65	651.5			5	—15.0	75	Calm	0	0			10s		Calm	0	0	Cloudy	
Henrietta, Texas	29.33	745.0	30.36	771.1	24	— 4.4	61	N	17	7.6		0	0			0	0	Clear	
Indianapolis, Indiana	29.18	741.1	30.00	762.0	23	— 5.0	73	N			2		10s		Calm	1.25	31.7	Cloudy	
Indianola, Texas	29.68	761.5	30.00	762.0	64	17.8	100	SE	2	0.9			10n		Calm	0.08	2.0	Light rain	
Jacksboro, Texas	29.14	740.1	30.36	771.1	29	— 1.7	56	N	12	5.4			10s		N	0.02	0.5	Cloudy	
Jacksonville, Florida	30.06	763.5	30.10	764.5	58	14.4	82	SW	8	3.6		5cs	0	W		0	0	Fair	
Keokuk, Iowa	29.60	751.8	30.31	769.9	18	— 7.8	84	N	9	4.0			10s		Calm	0.09	2.3	Cloudy	
Key West, Florida	30.11	764.8	30.14	765.5	70	21.1	85	NE	8	3.6		8k	0	E		0	0	Cloudy	
Kittyhawk, North Carolina	29.86	758.4	29.88	758.9	42	5.6	91	N	6	2.7			10n		Calm	0.67	1.8	Light rain	
Knoxville, Tennessee	28.80	731.5	29.77	756.1	59	15.0	97	SW	12	5.4			10n		Calm	0.63	16.0	Light rain	
La Crosse, Wisconsin	29.64	752.8	30.47	773.9	6	—14.4	76	NE	3	1.3		0	0			0.43	10.9	Clear	
La Mesilla, New Mexico	26.24	666.5	30.39	771.9	41	5.0	57	NW	2	0.9		0	0			0	0	Clear	
Laredo, Texas	29.54	750.3	29.88	758.9	64	17.8	100	Calm	0	0			10n		Calm	0.05	1.3	Light rain	
Leavenworth, Kansas	29.49	749.0	30.43	772.9	15	— 9.4	65	NW	12	5.4			10s			Inap.	Inap.	Cloudy	
Lewiston, Idaho	28.87	733.3	29.51	749.5	36	2.2	100	E	3	1.3			10n		Calm	0.20	5.1	Light rain	
Little Rock, Arkansas	29.82	757.4	30.16	766.1	39	3.9	82	NW	9	4.0			10s		Calm	0.18	4.6	Cloudy	
Los Angeles, California	29.78	756.4	30.15	765.8	50	10.0	86	N	2	0.9		0	0			0	0	Clear	
Louisville, Kentucky	29.34	745.2	29.91	759.7	36	2.2	90	NE	4	1.8			10n		Calm	0.29	7.4	Light rain	
Lynchburg, Virginia	29.25	742.9	29.96	761.0	34	1.1	79	NE	5	2.2			10n		NE	0.30	7.6	Light rain	
Madison, Wisconsin	29.28	743.7	30.39	771.9	2	—16.7	72	N	16	7.2		0	1s		NW	0.62	15.7	Clear	
Marquette, Michigan	29.78	756.4	30.60	777.2	— 1	—18.3	68	NE	4	1.8			10s		NE	0	0	Cloudy	
Mason, Texas	28.56	725.4	30.40	772.1	38	3.3	91	N	18	8.0			10s		N	0.04	1.0	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.76	755.9	30.11	764.8	40	4.4	82	NW	4	1.8			10s		Calm	0.24	6.1	Cloudy	
Milwaukee, Wisconsin	29.51	749.5	30.30	769.6	16	— 8.9	83	NE	23	10.3			10n		NE	0.68	17.3	Light snow.	
Mobile, Alabama	29.97	761.2	30.04	763.0	60	15.6	94	SW	6	2.7			10n;fg		Calm	0.07	1.8	Light rain	
Montgomery, Alabama	29.75	755.6	29.98	761.5	64	17.8	89	SW	8	3.6			10n		SW	0.03	0.8	Light rain	
Moorhead, Minnesota	29.44	747.8	30.57	776.5	—15	—26.1	71	NW	2	0.9		0	0			0	0	Clear	
Morgantown, W. Virginia	28.78	731.0	29.79	756.7	33	0.6	65	E	12	5.4			10n		Calm	0.75	19.0	Light rain	
Mt. Washington, N. H.	23.33	592.6	29.69	754.1	— 9	—22.8	78	NW	36	16.1		8c	0	NW		0	0	Cloudy	
Nashville, Tennessee	29.42	747.3	29.96	761.0	45	7.2	84	W	15	6.7			10ks		W	0.84	21.3	Cloudy	
New Haven, Connecticut	30.09	764.3	30.22	767.6	9	—12.8	78	NE	7	3.1			10s		Calm	0	0	Cloudy	
New London, Connecticut	30.17	766.3	30.22	767.6	13	—10.6	81	N	6	2.7			10s		N	0	0	Cloudy	
New Orleans, Louisiana	29.99	761.7	30.05	763.3	64	17.8	100	S	4	1.8			Fog			0	0	Dense fog	
Newport, Rhode Island	30.15	765.8	30.21	767.3	11	—11.7	80	N	11	4.9			10s		Calm	0	0	Cloudy	
New River, N. Carolina					51	10.6	93	SW			4		10s		SW			Cloudy	
New Shoreham, Rhode I'd	30.17	766.3	30.21	767.3	13	—10.6	81	N	24	10.7			10s		N	0	0	Cloudy	
New York, New York	30.02	762.5	30.21	767.3	14	—10.0	100	N	13	5.8			10n		Calm	0.01	0.3	Light snow.	
Norfolk, Virginia	29.82	757.4	29.89	759.2	36	2.2	90	N	9	4.0			10n;fg		Calm	0.09	2.3	Light rain	
North Platte, Nebraska	27.37	695.2	30.24	768.1	7	—13.9	77	W	4	1.8		0	0			0	0	Clear	
Olympia, Washington T'y	29.37	746.0	29.41	747.0	43.0	6.1	92	S	14	6.3			10n		Calm	2.06	52.3	Light rain	
Omaha, Nebraska	29.25	742.9	30.51	774.9	0	—17.8	86	N	13	5.8		0	1s		Calm	Inap.	Inap.	Clear	
Oswego, New York	29.98	761.5	30.34	770.6	0	—17.8	85	NE	16	7.2			10s		NE	0	0	Cloudy	
Pensacola, Florida	30.04	763.0	30.07	763.8	63	17.2	94	SW	10	4.5			10s		SW	0.32	8.1	Cloudy	
Philadelphia, Pa	30.10	764.5	30.16	766.1	14	—10.0	100	NE	24	10.7			10n		Calm	0.22	5.6	Light snow.	
Phœnix, Arizona	29.05	737.9	30.94	785.9	43	6.1	67	E	2	0.9		0	0			0	0	Clear	
Pike's Peak, Colorado	17.74	450.6	29.94	760.5	12	—11.1	61	NW	20	8.9		0	5ks		NW	0.02	0.5	Fair	
Pilot Point, Texas	29.50	749.3	30.40	772.1	30	— 1.1	78	N	10	4.5			10s		Calm	0.06	1.5	Cloudy	
Pioche, Nevada	24.19	614.4	29.96	761.0	33	0.6	79	W	1	0.4		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.07	738.4	29.92	760.0	24	— 4.4	87	NE	12	5.4			10n		NE	0.64	16.3	Light snow.	
Port Huron, Michigan	29.51	749.5	30.25	768.3	6	—14.4	87	N	25	11.2			10s		Calm	0.07	1.8	Cloudy	
Portland, Maine	30.13	765.3	30.18	766.6	8	—13.3	78	NW	10	4.5			10s		Calm	0	0	Cloudy	
Portland, Oregon	29.54	750.3	29.61	752.1	38	3.3	95	NW	4	1.8			10n		S	2.12	53.8	Light rain	
Portsmouth, N. Carolina					49	9.4	100	SW	6	2.7			10n		Calm	0.49	12.4	Light rain	
Prescott, Arizona	24.93	633.2	30.29	769.4	28	— 2.2	66	N	1	0.4		0	0			0	0	Clear	
Punta Rassa, Florida	30.09	764.3	30.11	764.8	62	16.7	72	NE	8	3.6		1c	0	Calm		0	0	Clear	
Red Bluff, California	29.78	756 4	30.13	765.3	54.5	12.5	93	S	3	1.3			10s		Calm	0.02	0.5	Cloudy	
Rio Grande City, Texas	29.77	756.1	29.99	761.7	66	18.9	95	Calm	0	0			8s		Calm	0	0	Fair	
Rochester, New York	29.64	752.8	30.32	770.1	8	—13.3	89	E	12	5.4			10n		E	0.03	0.8	Light snow.	
Roseburg, Oregon	29.19	741.4	29.74	755.4	61.5	16.4	63	S	10	4.5			10s		Calm	0	0	Threatening	
Sacramento, California	30.11	764.8	30.18	766.6	52	11.1	93	SE	5	2.2		0	0			0	0	Clear	
St. Louis, Missouri	29.57	751.1	30.18	766.6	29	— 1.7	89	NW	17	7.6			10n		Calm	0.07	1.8	Light snow.	
St. Paul, Minnesota	29.54	750.3	30.48	774.2	3	—16.1	86	N	2	0.9		0	0			0.98	24.9	Clear	
Salt Lake City, Utah	25.77	654.5	30.10	764.5	40	4.4	56	N	4	1.8		0	1s		Calm	0.14	3.6	Clear	
San Antonio, Texas	29.38	746.2	30.11	764.8	58	14.4	94	N	12	5.4			10n		Calm	0.01	0.3	Light rain	
San Diego, California	30.08	764.0	30.16	766.1	50	10.0	93	N	2	0.9		0	Fog			0	0	Clear	
Sandusky, Ohio	29.38	746.2	30.11	764.8	15	— 9.4	100	NE	45	20.1			10n		NE	0.19	4.8	Light snow.	
Sandy Hook, New Jersey	30.14	765.5	30 18	766.6	16	— 8.9	100	NE	20	8.9			10n		Calm	Inap.	Inap.	Light snow.	
San Francisco, California	30.10	764.5	30.17	766.3	56	13.3	90	S	5	2.2			Fog		SW	0	0	Dense fog	
Santa Fé, New Mexico	23.41	594.6	29.95	760.7	34	1.1	61	N	10	4.5		0	0			0	0	Clear	
Savannah, Georgia	29.9	760.5	30.04	763.0	61	16.1	88	SW	8	3.6			10ks		W	0	0	Cloudy	
Shreveport, Louisiana	29.9	760.0	30.18	766.6	43	6.1	92	N	12	5.4			10s		Calm	0.12	3 0	Cloudy	
Silver City, New Mexico	24.41	620 0	30.74	780.8	38	3.3	54	N	1	0.4		0	0			0	0	Clear	
Smithville, North Carolina	29.92	760.0	29.99	761.0	55	12.8	93	SW	10	4.5			10s		Calm	0	0	Cloudy	
Socorro, New Mexico	25.65	651.0	29.70	754.4	40	4.4	56	NW	3	1.3		0	0			0	0	Clear	
Springfield, Illinois	29.48	748.8	30.20	767.1	22	— 5.6	86	N	14	6.3			10s		N	0.79	20.1	Cloudy	
Springfield, Massachusetts	30.11	764 8	30.26	768.6	9	—12.8	57	N	7	3.1			10s		Calm	0	0	Cloudy	
Stockton, Texas																			
St. Vincent, Minnesota	29.56	750.8	30.50	774.7	—14	—25.6	100	E	1	0.4			10s		Calm	0	0	Cloudy	
Thatcher's Island, Mass	30.16	766.1	30.22	767 0	12	—11.1	61	N	17	7.6			10s		N	0	0	Cloudy	
Toledo, Ohio	29.40	746.7	30.15	765 8	11	—11.7	80	N	29	13.0			10n		Calm	0.31	7.9	Light snow.	
Tucson, Arizona	27.68	703.1	30.23	767.8	41	5.0	57	SW	4	1.8		0	0			0	0	Clear	
Umatilla, Oregon	29.51	749.5	30.02	762.5	27.5	— 2.5	94	SE	4	1.8			10n		Calm	0.23	5.8	Sleeting	
Uvalde, Texas	29.18	741.1	30.00	762.0	63	17.2	78	S	3	1.3		10k	0	Calm		0.04	1.0	Cloudy	
Vicksburg, Mississippi	29.80	756.9	30.06	763.5	61	10.1	100	W	4	1.8			10n		Calm	0.60	15.2	Heavy rain	
Visalia, California	29.79	756.7	30.17	766.3	51	10.6	89	E	1	0.4		0	0			0	0	Clear	
Washington, D. C.	29.93	760.2	30.05	763.3	23	— 5.0	86	NE	6	2.7			10n		Calm	0.31	7.9	Light snow.	
Wickenburg, Arizona					38	3.3	72	NW			1	0	0			0	0	Clear	
Wilmington, N. Carolina	29.85	758.2	29.90	759.4	59	15.0	88	W	16	7.2			10s		Calm	0.01	0.3	Cloudy	
Winnemucca, Nevada	25.68	652.3	30.04	763.0	40	4.4	82	SW	10	4.5			10s		Calm	0.05	1.3	Cloudy	
Wood's Holl, Mass	30.16	766.1	30.20	767.1	10	—12.2	79	N	13	5.8			10s		Calm	0	0	Cloudy	
Yankton, Dakota	29.04	737.6	30.54	775.7	—10	—23.3	54	N	4	1.8		0	0			0.15	3.8	Clear	
Yuma, Arizona	29.98	761.5	30.13	765.3	53	11.7	67	E	2	0.9		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.05	560.1			53.0	11.7	79	Calm	0	0		2ck	0			0	0	Fair	Thomas Herran.
Buff Bay Town, Jam ica. †	29.85	758.2	30.16	766.1	67	19.4	90	E				0	0			0	0		
Havana, Cuba, W. I.	30.00	762.5	30.11	764.8	70	21.1	79	Calm	0	0		2cs	2ks	W	SW	0	0	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	30.14	765.5	30.20	767.1	10.0	—12.2		Calm			0		0			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	30.02	762.5	30.03	762.7	71.0	21.7	73	Calm	0	0		0	0			0	0		Robert Johnstone.
Navassa, W. I.	29.86	758.4	29.94	760.5	75	23.9	77	NE	8	3.6		2k	5s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	78	25.6	82	E			2	4k	3c	E		0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.34	745.2	29.69	759.2	83	28.3	76	Calm			0		10ks		SE	0	0	Cloudy	Francesco J. Cisneros
Rivas, Nicaragua					73.4	23		NE			3	0	1ks		NE	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.04	763.0	30.07	763.8	73	22 8	85	Calm	0	0		0	0			0.05	1.3		Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	30.19	769.9	30.29	769.4	— 2.2	—19		W			2		5			0	0		K. Elberg.
York Factory, B. A.	30.71	780.0	30.77	781.5	—28.0	—33.3		W	7	3.1		1c	0	W		0	0	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.	Force	Amount and kind.		Direction.							
									Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r. / Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatros																		Comm. A. J. Errington.
H. M. S. Alert																		Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.73	755.1	61	16.1	85	WNW		5-6		8	SW						Squally	Capt. Lord Walter Kerr Capt. Hon. W. H. Jolliffe.
H. M. S. Antelope																		Comm. R. W. Stopford
H. M. S. Arab																		Capt. Lord C. Scott.
H. M. S. Bacchante																		
H. M. S. Beacon N. 23° 37′, E. 58° 36′	30.07	763.8	74	23.3	81	NW		1		7	NW				0		D. clouds	Comm. G. Hand. Comm. E. B. Pusey.
H. M. S. Bittern																		Capt. C. G. F. Knowles.
H. M. S. Blanche																		
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.83	757.7	79	26.1	66	ENE		5-6		4	ENE				6	ENE	Squally	Capt. F. W. Richards. Capt. G. R. Hope.
H. M. S. Champion																		Capt. H. T. Gerfell.
H. M. S Cockatrice																		Capt. J. W. East.
H. M. S. Comus																		Comm. F. W. Egerton.
H. M. S. Condor																		Lt. Comm. J. L. Barr.
H. M. S. Coquette																		Capt. F. A. Wetherall.
H. M. S. Cruizer																		
H. M. S. Curacoa, N. 24° 28′, E. 118° 03′	29.88	758.9	64	17.8	83	Calm		0		0							Misty	Capt. W. H. Cuming. Capt. J. C. Parvis.
H. M. S. Danae																		Capt. F. J. Elliott.
H. M. S. Daring																		Capt, C. Domville.
H. M. S. Dido																		
H. M. Dock-Yard, Bermuda, W. I.	30.08	764.0	61.5	16.4	77	SW		1		1	SW						Blue sky	Capt. J. Moresby. Capt. Hulton.
H. M. S. Dragon																		Capt. W. R. Kennedy.
H. M. S. Druid																		
H. M. S. Dryad, N. 8° 34′, E. 81° 14′	29.89	759.2	81	27.2		N		2		3	N				2	NNE	D. clouds	Comm. John Hext. Capt. E. St. J. Garforth.
H. M. S. Eclipse																		Comm. C. Johnstone.
H. M. S. Egeria																		Capt. W. H. Maxwell.
H. M. S. Emerald																		Capt. L. Ching.
H. M. S. Encounter																		
H. M. S. Euryalus, Bombay, India	29.88	758.9	79	26.1	63	NW		3-4		0							Blue sky	Capt. R. D. King. Comm. W. H. C. Selby.
H. M. S. Falcon																		Capt. W. C. Karslake.
H. M. S. Fantome																		Capt. P. Aldrich.
H. M. S. Fawn																		Capt. R. N. Castance.
H. M. S Flamingo																		Capt. R. F. Hoskyn.
H. M. S. Flying Fish																		
H. M. S. Gannet, S. 9° 05′, W. 78° 32′	29.87	758.7	68	20.0	90	S		1		10							Misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.40	746.7				SW		6									Squally	Capt. L. F. Jones.
H. M. S. Griffin																		Capt. T. L. H. Ward.
H. M. S. Hecla																		Capt. J. L. Way.
H. M. S. Humber																		Capt. C. C. P. Fitzgerald
H. M. S. Inconstant																		Capt. E. H. Seymour.
H. M. S. Iris,																		
H. M. S. Iron Duke, N. 22° 16′, E. 149° 57′	29.96	761.0	68.5	20.3	84	NE		1		0							Blue sky	Capt. R. E. Tracey. Comm. R. H. Thornton.
H. M. S. Kingfisher																		Capt. W. G. Scott.
H. M. S. Lapwing																		Comm. S. Grove.
H. M. S. Lily																		
H. M. S. London, S. 6° 10′, E. 39° 14′	29.89	759.2	83	28.3	87	S		1-2		2	NE				1	NE	Blue sky	Capt. C. J. Brownrigg. Capt. R. H. Napier.
H. M. S. Magpie																		
H. M. S. Malabar, Suez Canal	29.90	759.4	70	21.1	85	W		2-3		3	W						D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, Nigo, Spain	30.04	763.0	60.5	15.8	91	WSW		3		10	SW						Overcast	Capt. H. Rawson. Capt. J. G. Mead.
H. M. S. Modeste																		Capt. G. Tryon, C. B.
H. M. S. Monarch																		

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Barbadoes, W. I.	30.04	763.0	77	25.0	77	NE			3		3	E						D. clouds	Capt. E. Drummond.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			Capt. W. B. Orlebar.
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	30.20	767.1	63	17.2	78	SW			2		7							D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.66	753.4	78	25.6	75	ESE			2		0					1	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 10° 43′, W. 78° 08′	29.91	759.7	68	20.0	95	SE			1		7	SSE				3	S	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Callao Bay, Peru	29.87	758.7	67.5	19.7	97	Calm			0		10							Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.02	762.5	73	22.8		NE			1–2		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, Palestine	29.97	761.2	69.5	20.8	48	S			4–5		2	S						D. clouds	Capt. F. Negham.
H. M. S. Zephys																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Bulama, Senegambia	29.93	760 3	79.7	26.5	89	NW			1		5							D. clouds	S. C. da Silva Costa, Comd't.
Sado, S. 6° 09′, E. 12° 05′	29.85	758.3	83.1	28.4	82	S			3		4		S			2	S	D. clouds	G. A. de Brito Capello, Comd t.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.13	765.3	55	12.8	80	N	6	2.7	.....	.....	8	.....	N	0.18	4.6	.....	.....	Fair	
N. Yard, Portsmouth, N. H.	30.17	766.3	5	—15.0	25	NW	4	1.8	.....	10c	.....	NW	.....	0	0	.....	.....	Cloudy.	
Naval Hospital, Yokohama, Japan	29.95	760.7	34.5	1.4	67	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	Clear	
Adams, Callao, Peru	29.89	759.2	69	20.6	95	Calm	.....	.....	0	.....	10	.....	.....	.....	.....	Sm'h	.....	Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.13	765.3	55	12.8	93	Calm	.....	.....	0	.....	10	.....	.....	0	0	.....	.....	Cloudy	
Alert, Hong-Kong, China *.	29.88	758.9	66	18.9	74	ENE	.....	.....	1	.....	8	.....	SW	0	0	Sm'h	.....	Hazy	
Alliance, Havanna, Cuba	30.11	764.8	70	21.1	90	Calm	.....	.....	0	.....	0	.....	.....	0	0	Sm'h	.....	Clear	
Ashuelot, Tientsin, China	30.35	770.9	27	— 2.8	100	ESE	.....	.....	2	.....	2	.....	Calm	.....	.....	.....	.....	Clear	
Colorado, New York, N. Y.	30.18	766.6	14	—10.0	82	NNE	15	6.7	.....	.....	10	.....	.....	.....	.....	.....	.....	Snowing	
Constitution, N. Yard, League I'd., Pa	.....	.....	16	— 8.9	.....	NE	.....	.....	.....	.....	10	.....	.....	.....	.....	.....	.....	Snowing	
Franklin, Norfolk, Va	29.87	758.7	36	2.2	90	NE	8	3.6	.....	.....	10	.....	ENE	0.13	3.3	.....	.....	Drizzling	
Galena, Villafranca, France	29.69	754.1	57	13.9	75	SW	.....	.....	1	.....	5	.....	SW	.....	.....	Sm'h	.....	Fair.	
Independence, N. Yard, Mare I'd, Cal.	30.17	766.3	55	12.8	80	Calm	0	0	.....	.....	5	.....	WNW	0	0	.....	.....	Fair	
Jamestown, Sitka, Alaska *	30.09	764.3	30	— 1.1	.....	NW	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	Snowing	
Kearsarge, N. 19° 15′, W. 82° 20′	30.07	763.8	79	26.1	78	E	.....	.....	2	.....	2	.....	E	.....	.....	Sm'h	E	Fair	
Lackawanna, Chimbote, Peru †	30.01	762.2	70	21.1	95	S	.....	.....	1	.....	10	.....	SE	0	0	.....	.....	Cloudy	
Marion, Sandy P't, Terra del Fuego	29.88	758.9	52	11.1	60	WSW	.....	.....	4	.....	8	.....	.....	.....	.....	Sm'h	.....	Fair	
Michigan, Erie, Pennsylvania	30.13	765.3	10	—12.2	.....	E	8	3.6	.....	.....	10	.....	.....	.....	.....	.....	.....	Snowing	
Minnesota, New York, N. Y.	30.22	767.6	17	— 8.3	.....	NNE	.....	.....	4	.....	10	.....	.....	.....	.....	.....	.....	Snowing	
Monocacy, Shanghai, China	30.00	762.0	47	8.3	92	WNW	.....	.....	3	.....	10	.....	Calm	.....	.....	.....	.....	Misty	
New Hampshire, Port Royal, S. C.	30.06	763.5	59	15.0	88	SW	15	6.7	.....	.....	8	.....	SW	0	0	.....	.....	Cloudy.	
Nipsic, Marseilles, France	29.79	756.7	55	12.8	74	NW	.....	.....	2	.....	5	.....	.....	.....	.....	Sm'h	.....	D. clouds	
Onward, Chimbote Bay, Peru †	29.87	758.7	69	20.6	90	Calm	.....	.....	0	.....	10	.....	.....	.....	.....	Long	N;W	Cloudy	
Palos, Shanghai, China	30.08	764.0	43	6.1	100	NW	.....	.....	4	.....	10	.....	NW	.....	.....	.....	.....	Overcast	
Passaic, Washington, D. C.	30.12	765.0	24	— 4.4	87	NE	.....	.....	4	.....	10	.....	NE	.....	.....	.....	.....	Snowing	
Pensacola, N. 15° 47′, W. 98° 46′	29.91	759.7	81	27.2	78	NE	.....	.....	0-1	.....	0	.....	.....	c	0	Long	W	Clear	
Portsmouth, Washington, D. C.	30.04	763 0	23	— 5.0	100	NE	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	Snowing	
Powhatan, New York, N. Y.	30.22	767.6	14	—10.0	100	N	.....	.....	5	.....	10	.....	.....	.....	.....	.....	.....	Snowing	
Quinnebaug, Naples, Italy	29.59	751.6	55	12.8	74	Calm	.....	.....	0	.....	10	.....	SW	.....	.....	Sm'h	.....	Overcast	
Richmond, Hong-Kong, China	30.09	764.3	66	18.9	89	ESE	.....	.....	3	.....	0	.....	.....	0	0	.....	.....	Clear	
Saratoga, Baltimore, Md	30.05	763.3	23	— 5.0	100	NE	.....	.....	4	.....	10	.....	Calm	Mod.	snow	.....	.....	Snowing	
Shenandoah, Montevideo, Uruguay *	30.17	766.3	67	19.4	60	S	.....	.....	3	.....	8	.....	S	.....	.....	Sm'h	.....	Fair	
St. Louis, League Island, Pa	30.20	767.1	16	— 8.9	83	NNE	15	6.7	.....	.....	10	.....	.....	.....	.....	.....	.....	Snowing	
Swatara, Nagasaki, Japan †	29.98	761.5	44	6.7	84	NNE	....	....	.....	2	2	.....	NNE	.....	.....	Sm'h	.....	D. clouds	
Tennessee, Kingston, Jamaica, W.I.	30.04	763.0	77	25.0	86	N	4	1.8	.....	.....	2	.....	Calm	0	0	Sm'h	.....	Hazy	
Ticonderoga, N. Yard, Mare Id., Cal.	30.19	766.8	65	18.3	53	Calm	.....	.....	0	.....	10	.....	.....	0	0	.....	.....	Overcast	
Trenton, Villafranca, France *	29.69	754.1	64	17.8	55	NNW	.....	.....	2-3	.....	0	.....	.....	0	0	Sm'h	.....	Clear	
Vandalia, Bridgetown, Barbadoes, W.I	30.20	767.1	77	25.0	90	ENE	.....	.....	2	.....	5	.....	C;NE	.....	.....	.....	.....	Fair	
Wabash, Boston, Massachusetts	30.22	767.6	8	—13.3	55	N	10	4.5	.....	.....	10	.....	Calm	0	0	.....	.....	Overcast	
Wachusetts, Panama, Panama *.	29.50	749.3	77	25.0	91	WNW	.....	.....	2	.....	5	.....	N	.....	.....	Sm'h	.....	Fair	
Wyoming, Villafranca, France	29.71	754.6	62	16.7	56	S	.....	.....	1	.....	5	.....	N	.....	.....	Mod.	S	Fair	

UNITED STATES NAVAL SERIES.

By authority of the Secretary of the Navy.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
S. 16° 06′, W. 5° 22′	30.00	762.0	79.2	26.2	70	ENE			3		4							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 28° 18′, W. 20° 06′	30.27	768.8	70.5	21.4	62	ENE			2		6							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang, ‡																			
N. 20° 04′, W. 28° 18′	30.10	764.5	73	22.8	76	NE			5		6							D. clouds	Capt. H. Youlden.
S. S. Cipero																			W. N. Lailey.
City of Agra, ‡																			Capt. T. Young.
Barque Commewyne, ‡																			
N. 23° 51′, W. 64° 45′	30.25	768.3	76.8	24.9	63	NE			1		1							Blue sky	Capt. W. Scott.
Barque Coppename,																			
N. 9° 06′, W. 49° 14′	30.02	762.5	79.6	26.4	73	ENE			5		4							D. clouds	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 26° 12′, E. 5° 44′	30.04	763.0	73	22.8	63	SE			3		6							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart, ‡																			
N. 20° 50′, E. 88° 20′	29.97	761.2	73.5	23.1	66	SW			3		0							Misty	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope, ‡																			
S. 4° 50′, W. 36° 32′	30.01	762.2	81.1	27.2	87	E			4		1							Blue sky	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 19° 07′, W. 32° 44′	30.16	766.1	73.7	23.2	90	NE			5		7					4–5	NNW	Misty	Capt. H. W. Dyke.
Barque Mertola,																			
N. 47° 01′, W. 12° 09′	29.71	754.6	52.8	11.6	100	SSE			6		10							Raining	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee, ‡																			
N. 15° 06′, W. 21° 00′	29.96	761.0	75.2	24.0	92	NNE			4		0						NE	Blue sky	Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven																			Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡																			
N. 43° 07′, W. 9° 25′	30.01	762.2	58	14.4	90	S			4		6							D. clouds	Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, ‡																			
N. 45° 08′, W. 41° 47′	29.33	745.0	43	6.1		NE			5		2		NE			Mod.	NE	Clear	Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, ‡																			
N. 41° 25′, W. 56° 32′ †	29.70	754.4	33	0.6		NW			6		10		NW			R'gh	NW	Cloudy	Capt. J. W. Jennings.
S. S. Baltic, ‡																			
N. 44° 15′, W. 54° 44′	29.61	752.1	31	— 0.6	89	WNW			4		10		NW			Cof'd	W;NE	Rain & snow	Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, ‡																			
Liverpool, England †	29.63	752.6	48	8.9		S			2		8?		S	Sho	wers			Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, ‡																			
N. 39° 41′, W. 63° 43′	29.99	761.7	42.8	6.0		WNW			5		10		WNW	0	0	Long	NW	Clearing	Capt. H. Baur.
S. S. Köln																			
S. S. Leipzig,																			
N. 38° 28′, W. 69° 11′	30.11	764.8	41.5	5.3	78	ENE			3		10		ENE	¼ ho	ur	Mod.	NNW	Drizzling	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm †																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. ‡ N. 40° 01′, W. 64° 29′	30.00	762.0	38	3.3	90	NNW			6		8		NNW			Mod.	NNW	Fair	Capt. J. W. Shackford.
S. S. Indiana. ‡ Liverpool, England †	29.73	755.1	46	7.8	69	S			3		2		S	0	0			Fine	Capt. R. W. Sargent.
S. S. Ohio.																			Wm. Shakford, 1st Off'r
S. S. Pennsylvania, N. 49° 02′, W. 36° 36′ †	29.39	746.5	41	5.0	74	W			2		8		NW	0	0	Mod.	NW	Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern.																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 22° 20′, E. 114° 54′ †	30.04	763.0	69	20.6	100	ENE			2		0			0	0	Sl't	NE		Capt. H. Davison.
S. S. Gaelic, N. 37° 08′, W. 177° 59′ †*	29.91	759.7	54	12.2	100	NW			3		2		NW			High	N	Fair	Capt. W. H. Kidley.
S. S. Oceanic, San Francisco, Cal.	30.20	767.1	56	13.3	87	SE			4		10		SE	0	0			Cloudy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 41° 06′, W. 124° 34′ †	29.95	760.7	55	12.8	87	S			8		10		S			R'gh; H'vy	S	Misty	Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon †	29.53	750.0	38.0	3.3	100	NW			1		10		NW					Rainy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, Port Harford, Cal. †	30.16	766.1	53	11.7	93	Calm			0		0					Mod.	SW	Foggy	Capt. J. N. Ingalls.
S. S. Idaho, ‡ San Francisco, Cal. †	30.18	766.6	55	12.8	93	S			2		Fog							Foggy	C. E. Lyons, 1st Officer.
S. S. Orizaba.																			
S. S. Senator, San Francisco, Cal. †	30.30	769.6	56	13.3	94	S			1		10							Hazy	Thos. Wallace.
S. S. State of California, San Francisco, Cal. †.	30.19	766.8	53	11.7	100	Calm			0		10			0	0			Foggy	Capt. G. Debney.
S. S. Victoria, N. 42° 58′, W. 125° —′ †	29.69	754.1	55	12.8	87	SE			7		10		SE			Very h'vy	SE	Raining	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, Auckland, New Zealand	30.33	770.4	70	21.1	95	NNE			5		8		NNE			R'gh	NE	Cloudy	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W. †	29.99	761.7	72	22.2	100	W			2		10		W	0	0			Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 13° 56′, W. 90° 58′ †	29.99	761.7	73	22.8	85	E			1		0			0	0	Long	SSE	Clear	Capt. D. S. Austin.
S. S. City of Peking, Yokohama, Japan †	30.04	763.0	35	1.7	70	NE			1		0			0	0	Sm'h		Clear	Capt. G. G. Berry.
S. S. City of Sidney.																			Capt. H. C. Dearborn.
S. S. City of Tokio.																			A. L. Ritchie, 2d Officer.
S. S. Colima.																			Capt. R. R. Searle.
S. S. Dakota.																			Capt. D. E. Griffiths.
S. S. Granada, Panama, Panama †	29.80	756.9	78	25.6	86	NW			2		0			0	0			Hazy	
S. S. Zealandia, S. 3° 13′, W. 167° 01′	29.89	759.2	80	26.7	78	ESE			5		0					Sm'h	ESE	Clear	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland, ‡ Flushing, Netherlands †	29.43	747.5	34	1.1	90	SE			3		8		S			Sm'h		Foggy	Capt. Sam'l Jackson.
S. S. Nederland, ‡ N. 41° 35′, W. 55° 19′ †	29.82	757.4	47	8.3		NNW					10		N	Rain	& s'w	Mod.	NNW	Fine	Capt. S. Stokes.
S. S. Rhyniand, ‡ Flushing, Netherlands	29.86	758.4	38	3.3		W			2		2		W	0	0			Hazy	Capt. W. Geo. Randle.
S. S. Vaderland.																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, ‡ N. 33° 45′, W. 77° 03′ †	29.94	760.5	60	15.6		WSW			5		10			1-16	hour	Long	SW	Threatening	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va.	29.93	760.2	38	3.3	100	Calm	0	0			10n		Calm	0.18	4.6			Raining	Capt J. Jorgensen.
Sch'r Annie R. Lewis, N. 26° 50′, W. 61° 34′ †	30.11	764.8	71	21.7		NW			2		10		N	Show	ers	Mod.	N	Raining	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 38° 37′, E. 8° 16′ †*	30.02?	762.5?	61	16.1		WNW			6		5		WNW; NNW			R'gh	WSW	Fair	Capt. B. F. Woodbury.
Brigantine George, ‡ Ponce, Porto Rico †	30.32	770.1	75	24.4		NE			2		0			0	0	Sm'h		Fine	Capt. W H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va. †	29.94	760.5	37	2.8	90		3	1.3		5n	5n			0.02	0.5			Raining	Capt. James S. Gawin.
Ship Jumna.																			
Bark Sunbeam, ‡ Lisbon, Spain †	30.22	767.6	63	17.2	100	SW			4		8		W	0	0			Cloudy	Capt. Jos. Hand.

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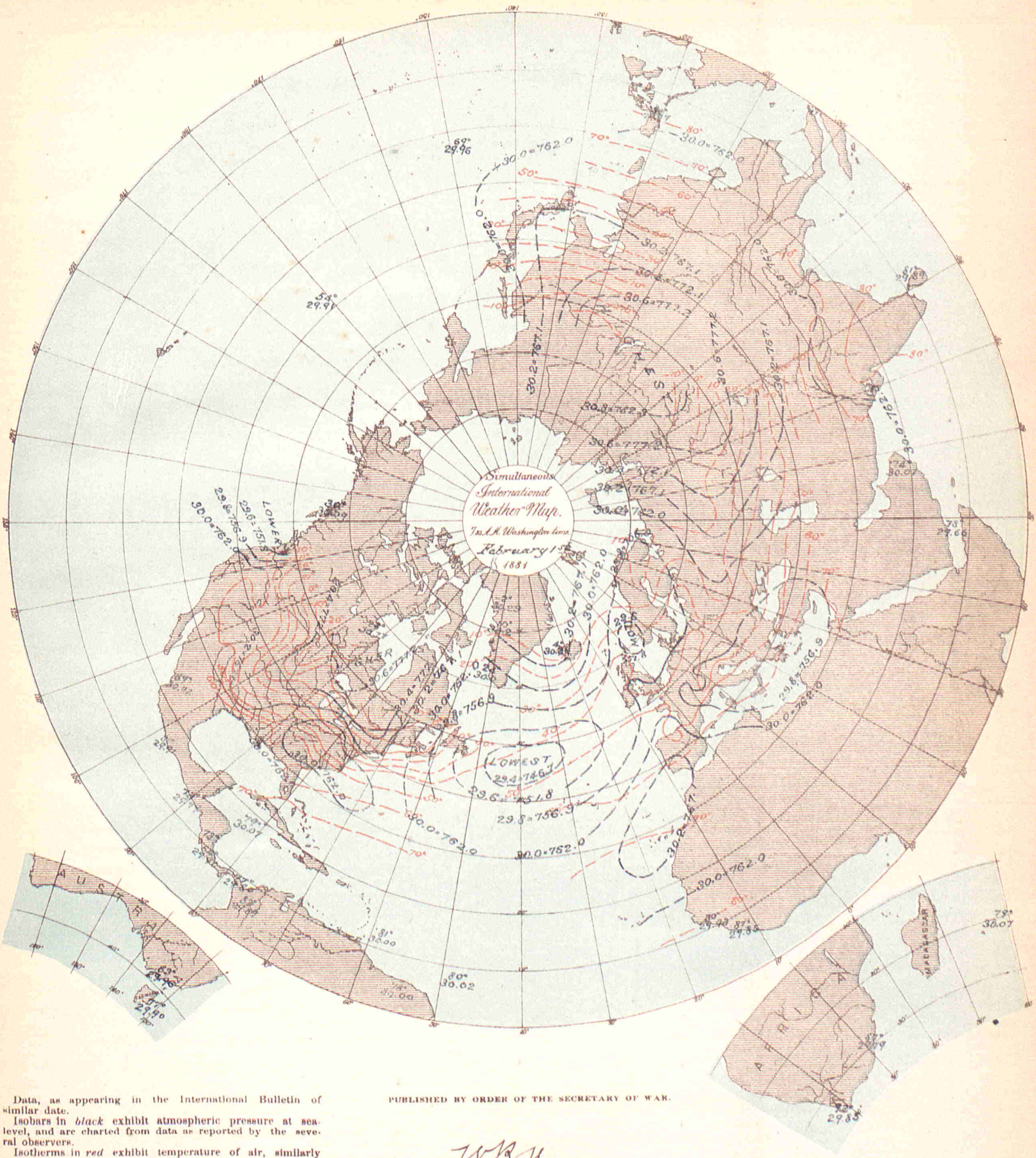
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.

CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 2, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. P'er Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.19	766.7	67.3	19.6	83	NE			2	3				0	0	Pretty fair	Dr. Ollive.
Nemours			30.11	764.7	66.0	18.9	90	N			4	1				0	0	Very fair	Raynard.
Algiers			30.08	764.1	63.7	17.6	45	WSW			4	0				0	0	Clear	Nicolas.
La Calle			29.91	759.8	60.4	15.8	81	WNW			5	7				0.374	9.5	Very cloudy	Foufrède.
Tunis			29.85	758.2															Jacques.
Sfax			29.98	761.5															Gau.
Saida			30.17	766.2	62.8	17.1	46	W			4	5				0	0	Cloudy	Dumas.
Tebessa			29.99	761.8	55.8	13.2	36	NW			7	5				0	0	Cloudy	Watrin.
Geryville																			Lonchamp.
Laghouat			30.15	765.7	55.0	12.8	100	W			4	3				0	0	Pretty fair	Herbin.
Biskra			30.09	764.2															Baudassé.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.91	759.7	30.00	762.0	64.0	17.8	81	SSE	7	3.1		3				0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania			30.00	762.0	71	21.7		SW			2	5kn				0.22	5.6	Cloudy	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.43	747.6	30.00	762.0	38.8	3.8	95	SW			2	10				0.134	3.4	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.26	743.1	30.05	763.3	36.7	2.6	93	SW	0	0		10				0.031	0.8		Dr. Wiersbicki.
Eperies	29.07	738.4	29.98	761.4	39.2	4.0	84	Calm			0	ns				0	0		Julius Mikolik.
Gratz‡	28.72	729.5	30.00	762.1	40.5	4.7	86	SW			2	10				0	0		Andreas Rospini.
Hermannstadt	28.51	724.1	30.02	762.4	27.9	— 2.3	96	S			2	10				0	0		Prof. A. Gotischling.
Kremsmunster, Obs'y	28.66	727.9	30.04	763.1	38.1	3.4	92	Calm			0	10				0	0		The Staff.
Lemberg	28.98	736.2	30.02	762.6	28.8	— 1.8	92	NE			1	10				0	0		Dr. T. Stanecki.
Pola	29.78	756.4	29.89	759.3	49.6	9.8	53	E			2	8				0	0		I. R. HydrographicOffice
Szathmar	29.43	747.4	29.88	759.0	30.2	— 1.0	90	E			2	10				0	0	Foggy	Beicht Peter, S. J.
Szegedin	29.68	753.9	29.98	761.4	32.0	0.0	100	Calm			0	10				0	0		Karl Stancel.
Trieste	29.86	758.4	29.96	761.0	47.1	8.4	62	ENE			2	8				0	0		P. Busin.
Vienna	29.30	744.3	30.04	763.0	42.8	6.0	75	NW			2	8				0	0		I. R. Central Met. Obs'y
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.74	755.3	29.94	760.5	39.7	4.3	73	S			3	10				0	0		Royal Observatory.
Furnes					39.2	4.0	85	SSW			2	10				0.020	0.5		M. E. de Cae.
Maeseyck	29.86	758.5	29.99	761.7	40.1	4.5	77	SW			2	10				0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 6, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.69	754.1	29.79	756.7	32.5	0.3	90	W	5	2.2			6			0.150	3.81	Misty	W. Boswell.
Armagh, Observatory	29.20	741.7	29.44	747.8	41.2	5.1	89	E	18	8.0			10					Overcast	S. Call.
Bidston, Liverpool Obs'y			29.55	750.6	39.3	4.1	95	ESE	23	10.3			7					Misty	John Hartnup.
Bolton, Sharples	29.07	738.4	29.62	752.3	37.6	3.1	91	SSE					10					Overcast	Thomas Mackereth.
Bradford, Yorkshire	29.25	742.9	29.64	752.8	38.5	3.6	95	SW			1		10			0.25	6.3	Overcast	J McLandsborough, F.R.S
Bridgetown, Barbadoes	29.93	760.2	29.97	761.2	82	27.8	63	NE			3		4					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			29.64	752.8	46.0	7.8	92	SE			1.0		10					Overcast	John McLaren.
Chatham, School M. E.	29.63	752.6	29.76	755.9	42.1	5.6	93	SW			4		10					Raining	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.43	747.5	29.66	753.4	52.0	11.1	86	SW			5		7					Foggy	The Staff.
Fort Napier, Natal	26.53?	673.8?	28.74?	730.0?	89.3	31.8	99	NE			1		2					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	86	30.0	92	SE			1		5					D. clouds	C. E. Keane.
Galway, Queen's College			29.26	743.2	48	8.9	92	W			2		8					Showery	J. O'Donaghadue.
Gibraltar, Mediterranean	30.10	764.5	30.15	765.8	63.6	17.6	93	N			2		4					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.42	747.3	29.63	752.6	38.5	3.6	77	E			4							Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.55	750.6	29.73	755.1	43.9	6.6	94	S			3		10					Drizzling	The Staff.
Guernsey	29.53	750.0	29.96	761.0	52	11.1	86	SSW			3		3					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.68	753.9	29.72	754.9	45.4	7.4	91	S	14	6.3			10					Drizzling	The Met'g'l Office.
Leicester, Museum	29.37	746.0	29.63	752.6	41.2	5.1	97	S			2		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.69	754.1	29.77	756.1	61	16.1	66	NW			3		3					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			30.00	762.0	71.0	21.7	90	S			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.10	739.1	29.63	752.6	40.2	4.6	99	S			1		10					Overcast	Robert Pate.
Oxford, Radcliffe Obs'y	29.42	747.3	29.68	753.9	47.0	8.3	96	SSE			3		10					Raining	The Staff.
Plymouth	29.59	751.6	29.66	753.4	50.3	10.2	94	SW			4		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.82	757.4	35.5	1.9	87	E	18	8.0			10					Overcast	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.74	755.4	29.81	757.2	44.0	6.7	94	NE			2		10			Blank		Drizzling	Serg't W. H. Lyne.
Sheffield	29.39	746.5	29.67	753.6	36.4	2.4	97	Calm			0		10			0.30	7.6	Drizzling	W. F. Cooper.
Silloth Rectory	29.58	751.3	29.61	752.1	42.9	6.1	89	N			5		10			0.633	16.08	Overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.62	752.3	35.9	2.2	88	E	12	5.4			10					Drizzling	Rev. S. J. Perry.
Strathfield Turgiss	29.49	749.0	29.71	754.6	46.4	8.0	98	SE			2		10					Raining	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	29.59	751.6	29.65	753.1	53	11.7	93	SW			7		10					Gloomy	W. Newcombe.
Valencia, Observatory	29.31	744.5	29.33	745.0	49.8	9.9	91	SSW	38	17.0			10			Blank		Gloomy	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.	29.83	757.7	29.87	758.7	3.5	—15.8		Calm	0	0			10n			0	0	Cloudy	Hon. J. Ferguson.
Chatham, N. B.*	29.71	754.6	29.78	756.4	3	—16.1	95	Calm	0	0			10n			0.38	9.7	Light snow	G. A. Blair.
Charlottetown, P. E. Island	29.62	752.3	29.66	753.4	17	— 8.3	98	Calm	0	0			10n			0.170	4.32	Light snow	H. J. Cundall, C. E.
Chicontime, Quebec					—14.1	—25.6		NW			3		10s			0	0	Cloudy	Rev. V. A. Huart.
Cornwall, Ontario	30.11	764.8	30.34	770.6	—19.3	—28.5	100	W			2	0	0			0	0	Clear	James Smith, M. A.
Dalhousie, N. B.	29.80	756.9	29.83	757.7	— 2.5	—19.2		W			2		10n			0.60	15.2	Snowing	H. A. Johnson.
Father Point, Quebec*	29.95	760.7	29.97	761.2	— 7	—21.7	73	NW	8	3.6			10n			Inap.	Inap.	Light snow	J. McWilliams.
Fredericton, N. B.	29.78	756.4	29.85	758.2	— 4.9	—20.5	100	NW	17	7.6			10n			0.100	2.54	Snowing	Prof. Harrison
Fort Garry, Manitoba*	29.23	742.4	30.14	765.5	4	—15.6	100	SE	20	8.9			10n			0.080	2.03	Light snow	James Stewart.
Granton, Ontario	29.29	744.0	30.62	777.7	—25.1	—31.7	19	Calm			0	0	0			0	0	Clear	James Grant.
Halifax, N. S.*	29.53	750.0	29.66	753.4	13	—10.6	98	NW	6	2.7			10n			Inap.	Inap.	Light snow	A. Allison.
Hamilton, Ontario	30.10	764.5	30.56	776.2	—16.6	—27.0	88	SW			1	4ck	0			0	0	Fair	Geo. Dickson, B. A.
Kingston, Ontario*	30.04	763.0	30.44	773.2	—16	—26.7	63	NW	1	0.4		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S.	29.58	751.3	29.62	752.3	27.0	— 2.8	95	E	3	1.3			10n			0.10	2.5	Snow squalls	C. H. Rigby.
Montreal, Quebec*	30.04	763.0	30.28	769.1	—16	—26.7	82	W				0	0			0	0	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	29.76	755.9	30.61	777.5	—29	—33.9	89	Calm	0	0		0	2ks			0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.66	753.4	30.56	776.2	— 2.9	—19.4		NW			1	0	0			0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.72	754.9	30.54	775.7	—15	—26.1	100	NW	4	1.8		0	0			0.07	1.8	Clear	H. Morgan.
Port Stanley, Ontario	29.79	756.7	30.56	776.2	—23	—30.6	100	N	1	0.4		0	0			Inap.	Inap.	Clear	M. Payne.
Quebec, Quebec*	29.75	755.6	30.13	765.3	—19	—28.3	67	W			3	0	2s		W	0	0	Clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.95	760.7	30.50	774.7	—20	—28.9	86	NW	6	2.7		0	0			0	0	Clear	W. H. McIntyre.
St. Andrews	29.77	756.1	29.83	757.7	— 4	—20.0	93	NW	13	5.8			10n			0	0	Cloudy	
St. John's, N. B.	29.59	751.6	29.78	756.4	— 1.0	—18.3	100	NW	10	4.5			10n			Inap.	Inap.	Snowing	G. Murdock, C. E.
Saugeen, Ontario*	29.76	755.9	30.62	777.7	—25	—31.7	48	NE	4	1.8		0	0			0	.0	Clear	K. Stewart.
Straiford, Ontario	29.07	738.4	30.44	773.2	—29.3	—34.1	87	Calm	0	0		0	0			0	0	Clear	C. J. Macgregor, M. A.
Sydney, C. B*	29.63	752.6	29.67	753.6	27	— 2.8	95	E	2	0.9			10n			0.26	6.6	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	30.10	764.5	30.55	776.0	—13	—25.0	90	N	6	2.7		0	0			0	0	Clear	Magnetic Observatory.
Windsor, N. S.	29.57	751.1	29.67	753.6	15.0	— 9.4	91	NW	8	3.6			10n			0	0	Overcast	
Woodstock, Ontario	29.32	744.7	30.59	777.0	—21.2	—29.6	85	NW	3	1.3		0	0			0	0	Clear	Prof. Wolverton.
Yarmouth, N. S.*	29.66	753.4	29.73	755.1	11	—11.7	70	N	5	2.2			10n			0.11	2.8	Light snow	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.67	753.6	29.93	760.2	24	— 4.4	87	SW	1	0.4		0	5k			0	0	Fair	John Delany.
St. Pierre, N. F.			29.63	752.6	26.0	— 3.0		E			2					0	0		N. F. Land, Comd't.

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

CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	30.02	762.5	30.06	763.5	84.8	29.3	38	S	12.3	5.5		2	4ks			0	0		The Staff, for D. Gill.
Cape St. Francis Lt. House	29.90	759.4			67.5	19.7	89	W	11.7	5.2			7s			0	0	Cloudy	John Duthie.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.24	768.2	30.27	768.9	32.7	0.4	100	NNW	4.5	2.0			10n			0.311	7.9	Snowing	M. Marc Dechevrens, S J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.18	665.0	29.90	759.4	62.6	17.0	96	NE			2	1c	2d		NE	0	0	Fair	Federico Maison.

DANISH SERIES.

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

Copenhagen	29.88	758.9	29.93	760.1	34.3	1.3	91	SW	16	7			10					Foggy	Oversergent Fischer.
Fanöe	29.91	759.6	29.93	760.1	33.8	1.0	96	W			2		10						Overloorer Lauridsen.
Godthaab, Greenland	29.96	761.0	30.00	762.1	23.4	— 4.8	79	ENE			2		3						S. Kleinschmidt.
Stykkisholm, Iceland	30.15	765.9	30.20	767.0	—4.4	—20.2	86	E			6		0						A. O. Thorlacius.
Thorshavn,	29.95	760.6	29.98	761.5	33.3	0.7	75	E	27	12			7						Overloorer Bergh.
Vestervig	29.78	756.5	29.88	758.9	32.9	0.5		SSW			2		9					Foggy	Locarer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.42	747.2	30.09	764.2	44.6	7	97	SSE			2		kn		E	0	0		M. Labroue, Director.
Alençon	29.43	747.6	29.98	761.6	42.4	5.8	97	SW			1		2kn			0.04	1.	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.65	753.2	29.92	760.0	36.0	2.2	93	SW	7.6	3.4			10					Raining	M. Klein, Commandant.
Avignon, Normal School	29.91	759.6	29.98	761.6	52.3	11.3	61	NNW			2		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.49	749.0	30.06	763.5	41.0	5.0	84	S			1		10			0.031	0.8	Covered	M. Saillard, Director.
Beauvais, Normal School	29.69	754.0	29.96	760.9	39.2	4	93	SSE			1		10		S			Raining	M. Frère Eugene Marie.
Besançon, Normal School	29.19	741.5	30.11	764.9	41.7	5.4	94	SSW			1		n		S	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.75	755.7	30.02	762.4	49.8	9.9	86	SSE			1		2		WNW	0.020	0.5	Slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.40	746.8	29.97	761.3	41.0	5		ESE			1		n		ESE	0	0		M. Postel, Director.
Brest, Naval Observatory	29.61	752.1	29.85	758.3	52.9	11.6	93	SW			2		6		SW	0.945	24.00	Misty	M. de Rermaree, Dir.
Caen, Normal School	29.72	754.9	29.80	756.9	47.5	8.6	100	E			1		10		E	0.059	1.5	Covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.73	755.2	30.06	763.6	32.4	0.2	96	SSE			1		10			0	0	Covered	M. Jadot, Director.
Charleville, Normal School	29.48	748.9	30.06	763.4	35.6	2.0	71	S			1		10			0	0	Covered	M. Grimard.
Clermont-Ferrand Obs'y	28.64	727.5	30.03	762.8	43.2	6.2	69	NW			1		10			0	0	Covered	M. Alluard, Director.
Cluny, Normal School	29.27	743.4	30.11	764.8	47.7	8.7	74	SE			2		6		NE	0.075	1.9		M. de Villemontée, Dir.
Commercy, Normal School	29.17	741.0	30.11	764.7	35.1	1.7	85	N			1		n		N	0.008	0.2	Foggy	Dr. Coulet, Director.
Gap, Normal School	27.24	691.9	29.79	756.7	44.6	7	53	W			3		2		W	0	0	½ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.86	733.1	30.00	762.1	52.0	11.1	54	N			1		2		N	0.008	0.2	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.10	739.0	29.87	758.8	44.8	7.1	85	NW			1		k		SE	0.126	3.20		M. Ablard, Director.
Guéret, Normal School	28.40	721.4	30.02	762.5	43.2	6.2	82	SW			1		10n		NE	0	0	Covered	M. Rivoir, Director.
Lamballe, Normal School	29.54	750.3	29.83	757.6	55.0	12.8	74	SSE			4		Mist		SSE	0.098	2.5	Misty	M. Ollitrault, Director.
Lescar, Normal School	29.44	747.8	30.12	765.0	51.8	11	90	WNW			1		10		W	0	0	Covered	M. Chauvin, Director.
Lorient, Naval Observatory	29.78	756.5	29.89	759.1	54.0	12.2	95	SW			3			W	SW	0.205	5.2		Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.98	736.2	30.04	762.9	43.3	6.3	73	ESE			1		ck		ESE	0.059	1.5		M. André, Director.
Mans, Normal School	29.62	752.4	29.94	760.4	41.9	5.5	97	SSW			1		10			0	0	Covered	M. Piboen, Director.
Marseille, Observatory	29.67	753.6	29.94	760.4	55.6	13.1	62	NW			1		3		WNW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.78	629.5	30.02	762.5	39.2	4.0	30	SE	7.4	3.3			5		E	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.89	759.2	30.00	762.0	56.1	13.4	52	NW			1		2		NW	0	0	Slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	29.28	743.6	30.03	762.8	49.3	9.6	87	WNW			1		10n			0.053	1.6	Foggy	M. Hasse.
Nantes, Observatory	29.77	756.1	29.93	760.2	52.9	11.6	96	S			1		10n			0.102	2.6		M. Larocque, Director.
Nice	29.89	759.3	29.93	760.1	56.8	13.8	69	SW			3		1	SW	SW	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.91	759.6	30.01	762.3	55.9	13.3	28	NW	1.8	0.8			1		W	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.48	571.1			30.2	—1.0							10		W	0.504	12.8	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.01	736.9	30.10	764.4	47.8	8.8	89	N			1	2c		N	N	0	0	Slightly cl'dy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.04	635.9			27.3	—2.6	90	W			4		8			0.335	8.5	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.95	760.8	29.98	761.6	49.5	9.7	93	S			1		5		SW	0.12	3.	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.64	752.8	29.85	758.3	47.3	9.6	97	S			1		10			0.094	2.4	Covered	M. Mouillot, Director.
Rodez, Normal School	27.91	708.8	30.10	764.5	42.4	5.8	90	S			2		2n		E	0.035	0.9		M. Richard, Director.
Rouen, Normal School	29.82	757.4	29.91	759.6	47.8	8.8	94	SE			1		10		N	0.063	1.6	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.69	754.1	29.85	758.1	49.1	9.5	91	WSW			1		8		SSE	0.094	2.4	Raining	M. Delaplanche, Dir.
Saint Maur, Observatory	29.80	756.9	29.97	761.1	37.9	3.3	93	SSE			2		10		WSW	0.024	0.6		M. Renou, Director.
Toulouse, Observatory	29.37	745.9	30.09	764.3	45.1	7.3	94	SSE			1		10			0	0	Foggy	M. Bailland, Director.
Tours	29.75	755.7	29.95	760.7	44.2	6.8	91	SSW			2		10		S			Rainy	M. de Tastes.
Versailles, Observatory	29.44	747.7	29.93	760.2	41.4	5.2	84	S			3		10			0.046	1.17	Covered	Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

GERMAN SERIES.

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

Bamberg	29.19	741.4	30.05	763.3	33.4	0.8	90	NE			2		10ks			0	0		Prof. Dr. Hoh.
Berlin	29.84	757.9	30.02	762.4	40.5	4.7	64	SW			1		0			0	0		Prof. Dr. Arndt.
Breslau	29.51	749.6	30.04	763.1	35.4	1.9	93	Calm			0		10			0	0	Foggy	Royal University Obs'y.
Carlsruhe	29.65	753.1	30.09	764.3	39.2	4.0	97	SE			0		10			0	0		Albert Senz.
Cassel	29.39	746.5	30.00	762.1	38.5	3.6	82	S			2		2	SW		0	0		Dr. H. Möhl.
Frankfort on the Main	29.75	755.7	30.13	765.4	37.2	2.9	91	SSE			1		10			0	0	Foggy	Physical Society.
Friedrichshafen	28.60	726.4	30.07	763.7	43.2	6.2	85	W			3		10	W		0	0		Chief Telegrapher Wilhelm.
Hamburg	29.94	760.5	30.01	762.3	34.2	1.2	88	SW			2		Fog	S		0.004	0.1		Dr. R. Kleeman.
Kiel	29.93	760.1	29.94	760.5	33.3	0.7	96	Calm			0		10			0.005	0.12		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.61	752.2	30.05	763.2	39.6	4.2	71	SW			2		0			0	0	Dense haze.	Prof. Dr. Bruhns.
Magdeburg	29.80	756.8	30.03	762.7	37.9	3.3	80	S			1		3ks	S		0	0	Foggy	Dr. Assmann.
Memel	29.85	758.1	29.89	759.3	33.6	0.9	83	SW			1		10n						Reinbrecht & Issermann.
Munich	28.18	715.8	30.04	763.1	37.9	3.3	93	W			1		10			0.016	0.4	Hazy	Central Station.
Neufahrwasser	29.98	761.5	30.00	761.9	37.0	2.8	79	Calm			0		10			0	0		A Lothes.
Neustadt, Palatinate	29.44	747.8	29.97	761.2	36.3	2.4	94						10			0	0	Light fog	Dicknether.
Stuttgart	29.08	738.7	30.00	762.1	40.1	4.5	87	N			1		10			0	0	Foggy	Prof. Dr. Schoder.
Thorn	29.82	757.5	30.01	762.2	33.4	0.8	96	SW			2		10			0.035	0.9		Dr. O. Cunerth.
Weissenburg, Bavaria	28.51	724.1	30.03	762.7	35.4	1.9	91	Calm			0		10	W		0	0		Prof. Kemlein.
Wustrow	29.98	761.6	30.01	762.2	31.3	—0.4	100	SW			2		10			0	0	Foggy	Profs. Brandes & Reimer.

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

GREEK SERIES.

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

Athens	29.28	743.7	29.68	753.8	54.3	12.4	.....	N	.....	.....	4.0	.....	10	.....	.....	.....	.....	Covered.....	Schmidt & Wourtisch.

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	29.96	760.8	30.01	762.1	77.1	25.1	60	SSW	17.0	7.6	.....	.....	0	.....	.....	0	0	Blue sky.....	
Deesa	29.45	748.0	29.92	760.0	84.4	29.1	10	NNW	9.4	4.2	.....	.....	0	.....	.....	0	0	Blue sky.....	
Bombay	29.92	760.0	29.96	761.0	79.0	26.1	66	NW	13.0	5.8	.....	.....	6	.....	W	0	0	D. clouds....	
Poona, Yarrowda	28.06	712.7	29.90	759.5	83.5	28.6	20	N	13.0	5.8	.....	.....	6	.....	SW	0	0	D. clouds....	
Belgaum	27.37	695.1	29.89	759.2	80.2	26.8	30	WSW	3.0	1.3	.....	.....	5	SW	.....	0	0	D. clouds....	
Lahore	29.16	740.8	29.92	760.0	71.8	22.1	34	Calm	0.9	0.4	.....	.....	0	.....	.....	0	0	Blue sky.....	
Roorkee	29.02	737.2	29.95	760.8	66.2	19.0	43	Calm	1.7	0.8	.....	.....	7	.....	.....	0	0	.....	
Agra	29.39	746.4	29.96	761.0	75.3	24.1	31	W	2.9	1.3	.....	.....	0	.....	.....	0	0	.....	
Nagpur	29.90	734.2	29.95	760.7	81.7	27.6	31	S	3.3	1.5	.....	.....	9	.....	E	0	0	D. clouds....	
Jubbulpore	28.60	726.5	30.00	762.0	68.7	20.4	25	N	1.6	0.7	.....	.....	7	.....	N	0	0	D. clouds....	
Lucknow	29.58	751.3	29.96	761.0	75.2	24.0	22	WNW	1.9	0.8	.....	.....	5	ENE	.....	0	0	D. clouds....	
Allahabad	29.66	753.4	29.98	761.6	69.8	21.0	48	Calm	0.5	0.2	.....	.....	3	.....	W	0	0	D. clouds....	
Patna	29.82	757.3	30.00	762.1	68.2	20.1	59	W	0.5	0.2	.....	.....	8	W	W	0	0	D. clouds....	
Hazaribagh	27.95	709.8	30.00	762.1	68.0	20.0	23	NNW	6.0	2.7	.....	.....	9	.....	.....	0	0	.....	
Cuttack	29.90	759.5	29.98	761.6	77.0	25.0	46	Calm	0.3	0.1	.....	.....	0	.....	.....	0	0	Blue sky.....	
Calcutta, Alipore	29.97	761.2	29.99	761.8	74.2	23 4	41	WSW	2.0	0.9	.....	.....	0	.....	.....	0	0	Blue sky.....	
Goalpara	29.57	751.0	29.98	761.5	68.5	20.3	45	Calm	1.6	0.7	.....	.....	1	SW	.....	0	0	D. clouds....	
Chittagong	29.91	759.7	30.00	762.0	71.3	21.8	66	WNW	2.5	1.1	.....	.....	0	.....	.....	0	0	Blue sky..	
Sibsagar	29.68	753.9	30.03	762.8	63.9	17.7	85	NE	1.8	0.8	.....	.....	4	.....	.....	0.30	7.6	Blue sky.....	

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.53	750.1	29.95	760.8	47.7	8.7	53	Calm	0	0	.....	.....	1	.....	.....	0.008	0.2	.....	Prof. Giovanni Clodig
Milan	29.43	747.6	29.97	761.2	36.3	2.4	79	SW	3.1	1.4	.....	.....	3	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.85	758.1	29.96	760.9	46.2	7.9	83	NNW	0.7	0.3	.....	.....	1	NE	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.94	737.6	29.98	761.5	34.0	1.1	80	ENE	0.7	0.3	.....	.....	0	.....	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.73	755.2	29.93	760.1	58.1	14.5	29	N	3.8	1.7	.....	.....	0	.....	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.01	711 4	29.97	761.3	44.8	7.1	47	ESE	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.87	758.8	29.93	760.1	42.8	6.0	82	NW	10.5	4.7	.....	.....	7	NE	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.64	752.8	29.90	759.4	50.7	10.4	53	NE	.....	.....	4	.....	1	NE	.....	0	0	.....	Cav. F. Meucci.
Leghorn	29.82	757.4	29.90	759.5	49.6	9.8	80	NE	9.8	4.4	.....	.....	3	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.61	752.1	29.79	756.6	54.1	12.3	47	N	8.1	3.6	.....	.....	4	.....	.....	0	0	.....	Prof. P. S. Ferrari.
Lecce	29.46	748.3	29.72	754.8	51.3	10.7	83	NW	11.9	6.3	.....	.....	5	N	.....	0.059	1.5	.....	Prof. C. de Giorgi.
Cosenza	28.85	732.7	29.74	755.5	52.7	11.5	73	NE	1.3	0.6	.....	.....	8	ENE	.....	0.165	4.2	.....	Prof. D. Conti.
Cagliari	29.68	753.9	29.88	758.9	58.1	14.5	64	NW	.....	.....	4	.....	4	N	.....	0.083	2.1	.....	Prof. A. Pacinotti.
Palermo	29.57	751.1	29.82	757.5	57.2	14.0	58	NNW	11.2	5.0	.....	.....	5	NNW	.....	0.323	8.2	.....	Prof. G. Cincciatore.
Syracuse	29.64	752.9	29.69	754.0	58.1	14.5	62	WNW	3.8	1.7	.....	.....	7	WNW	.....	0.051	1.3	.....	Prof. Vincenzo Gulliano
Sub-Series.																			
Naples, S. R.	29.24	742.8	29.77	756.1	53.6	12.0	57	NE	4.9	2.2	.....	.....	3	ESE	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.05	560.0	.....	.....	18.7	— 7.4	77	SE	.....	.....	4	.....	10s	.....	.....	0	0	Clear.....	P. F. Denza.
Valdobbia	22.04	559.8	.....	.....	31.6	— 0.2	79	N	.....	.....	2	10	0	N	.....	0	0	Misty.....	

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	29.93	760.2	29.95	760.7	40.1	4.5	97	NNE	4.3	1.9	.....	.....	10ks	.....	.....	0.040	1.02	Overcast....	K. Sasaki.
Kioto	29.77	756.1	29.95	760.7	42.5	5.8	90	.....	.....	.....	.....	.....	10n	.....	.....	0.370	9.40	Raining.....	.....
Nagasaki, I. M. Obs'y	29.75	755.6	29.96	761.0	51.1	10.6	88	WNW	2.9	1.3	.....	.....	1s	.....	.....	0.080	2.03	Clear.....	S. Takehayashi.
Tokei Obs'y, Yeddo	29.94	760.5	30.02	762.5	38.4	3.6	73	NE	3.0	1.3	.....	.....	10s	.....	.....	0.020	0.51	Cloudy.....	The Staff.
Wakayama	29.86	758.4	29.92	759.9	50.1	10.1	95	W	0.3	0.1	.....	.....	10s	.....	.....	0.631	16.03	Cloudy.	S. Iwahashi.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.89	759.2	30.08	764.0	78.9	26.1	56	E	22.5	10.1	.....	0	4	.....	ESE	0.05	1.3	Squally.....	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Colima	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. Banda, C. E.
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanaxuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	24.46	621.3	30.27	768.9	50 0	10.0	90	NE	.....	.....	1	5c	0	S	.....	0	0	½ cloudy...	Prof. M. Leal.
Mazatlan	29.69	754.2	29.95	760.7	68.3	20.2	77	ENE	0.9	0.4	.....	3c	0	.....	.....	0	0	Clear.....	F. Quijano, C. E.
Mexico, Central Obs'y	23.12	587.2	30.30	769.6	47.3	8.5	86	Calm	0	0	.....	.....	10pk	.....	.....	0	0	Overcast....	The Staff.
Morelia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Fena, M. D.
Pabellon, Aguascalientes	23.95	608.4	30.05	763.2	52.2	11.2	86	Calm	.....	.....	.....	2c	5k	.....	.....	Inap.	Inap.	Cloudy.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.36	593.2	30.21	767.4	46.2	7.9	45	Calm	0	0	.....	0	1	.....	E	0	0	Fine.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barreda, M. D.
Tlacotalpam	30.04	762.9	30.05	763.2	69.8	21.0	93	N	5.2	2.3	.....	.....	10	.....	N	0.004	0.1	Overcast....	Prof. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	22.59	573.7	30.35	771.0	44.1	6.7	78	E	0.9	0.4	.....	.....	10n	.....	.....	0	0	Foggy.....	J. A. Bonilla, M. E.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	29.92	760.0	29.92	760.0	38.1	3.4	.....	S	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Groningen	29.91	759.6	29.90	761.0	32.9	0.5	.....	S	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Helder	29.91	759.8	29.91	759.8	34.2	1.2	.....	SSE	.....	.....	1	.....	.....	.....	.....	0.181	4.6	.....	
Hellevoetsluis	29.92	760.0	29.92	760.0	35.8	2.1	87	SE	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Utrecht	29.92	760.0	29.97	761.2	35.1	1.7	96	SW	.....	.....	2	.....	8	.....	.....	0.138	3.5	Very cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Tempera-ture of the Air.		Rel. Hum.	Wind. Direc-tion.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.57	751.1	29.63	752.7	38.1	3.4	93	SSE	2.7	1.2	.....	.....	10	.....	.....	0.012	0.3	.....	
Christiania	29.65	753.2	29.81	757.1	27.0	— 2.8	87	ENE	4	2	.....	.....	10	.....	.....	0.138	3.5	Snowing	
Gjæsvær	29.87	758.8	29.90	759.4	10.8	—11.8	.....	N	.....	.....	4	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.90	759.4	29.95	760.6	12.4	—10.9	65	N	.....	.....	2	.....	1	.....	.....	0	0	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.52	749.7	29.67	753.7	57.4	14.1	91	W	18.6	8.3	.....	.....	5	.....	.....	0.413	10.5	.....	Dr. J. A. Sampaio.
Campo Major	29.14	740.2	30.16	766.1	54.7	12.6	93	W	4.2	1.9	.....	.....	9	.....	.....	0.315	8.0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.10	764.6	30.19	766.9	66.0	18.9	64	WSW	4.9	2.2	.....	.....	6	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.82	757.5	30.19	766.7	59.9	15.5	90	SW	13.6	6.1	.....	.....	10	.....	.....	0.500	12.7	.....	The Staff.
Ponta Delgada, Azores	29.73	755.2	29.80	757.0	60.8	16.0	85	SW	28.6	12.8	.....	.....	10	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.24	742.8	30.43	772.9	11.1	—11.6	57	SE	4	2	.....	.....	3	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.82	757.3	29.84	757.8	17.2	— 8.2	91	SSW	4	2	.....	.....	10	.....	.....	.....	.....	Snowing	Capt. Sseliwerstow.
Astrakhan	30.13	765.3	30.05	763.2	23.5	— 4.7	88	NNW	7	3	.....	.....	10cp	.....	.....	Blank		Heavy cl'ds.	Capt. Wisganow.
Barnaul	30.22	767.5	30.79	782.1	— 6.2	—21.2	77	NE	0	0	.....	.....	1	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.61	752.1	29.86	758.5	32.4	0.2	96	SW	4	2	.....	.....	10n	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	29.19	741.3	30.24	768.0	11.7	—11.3	53	Calm	0	0	.....	10c;ck	.....	.....	.....	.....	.....	Light clouds	Meteorological Obs'y.
Kasan	29.82	757.5	30.12	765.0	13.1	—10.5	82	Calm	0	0	.....	.....	10	.....	.....	.....	.....	.....	Observatory.
Kertch	30.00	762.1	30.02	762.6	36.0	2.2	89	E	7	3	.....	.....	4	.....	.....	.....	.....	.....	Lagorio.
Kieff	29.39	746.6	30.07	763.7	25.5	— 3.6	100	SSE	4	2	.....	.....	10	.....	.....	.....	.....	Foggy	Observatory.
Krotkowo, N. 58°47′, E. 48°34′	29.87	758.7	30.09	764.3	24.8	— 4.0	93	ESE	2	1	.....	.....	10	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.48	748.7	30.05	763.5	25.2	— 3.8	82	S	4	2	.....	.....	10s	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	27.94	709.6	30.60	777.2	—16.6	—27.0	79	Calm	0	0	.....	.....	1	.....	.....	.....	.....	Light clouds	Meteorological Obs'y.
Nertchinsk	29.94	760.4	30.01	762.2	33.1	0.6	100	NE	13	6	.....	.....	10n	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	29.78	756.4	29.87	758.6	— 6.2	—21.2	58	W	4	2	.....	.....	1k	.....	.....	.....	.....	.....	1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.77	756.1	30.00	762.1	52.5	11.4	55	Calm	0	0	.....	.....	9ks	.....	.....	.....	.....	.....	Lieut. Iwanow.
Nukuss	30.23	767.7	30.37	771.3	20.5	— 6.4	45	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Dr. Dobrochotow.
Pekin, China	29.78	756.5	29.80	756.9	30.9	— 0.6	88	SSW	9	4	.....	.....	10n	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	28.53	724.7	30.11	764.8	55.8	13.2	60	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.48	723.3	29.89	759.2	54.9	12.7	63	Calm	0	0	.....	.....	10ks	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	29.62	752.3	30.06	763.5	32.0	0.0	98	Calm	0	0	.....	.....	10	.....	.....	.....	.....	Foggy	Physical Observatory.
Warsaw	29.58	751.3	30.02	762.4	32.2	0.1	94	SW	2	1	.....	.....	10	.....	.....	.....	.....	Heavy clouds	Astronomical Obs'y.
Wilna	30.51	774.9	30.85	783.6	—18.9	—28.3	80	SW	4	2	.....	.....	2	.....	.....	.....	.....	.....	Berg, Assistant.
Yeniseisk	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. O. Marks.
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.71	754.6	37.2	2.9	91	SE	.....	.....	2	.....	10k	.....	.....	0	0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.63	752.6	42	5.6	91	SE	.....	.....	4	5	5	E	.....	0	0	D. clouds	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.62	752.3	.....	.....	.....	NE	.....	.....	4	.....	7	.....	.....	Blank		.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.93	760.1	30.03	762.8	57.6	14.2	54	SW	0.7	0.3	.....	.....	0	.....	.....	0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.99	761.8	30.05	763.2	65.7	18.7	60	SE	2.7	1.2	.....	3	4	NW	.....	0.008	0.2	Cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.11	688.7	.....	.....	49.3	9.6	66	S	5.6	2.5	.....	0	9	.....	.....	0.079	2.0	Almost cov'd	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.91	708.8	30.15	765.9	54.7	12.6	80	SW	12.3	5.5	.....	0	5	.....	.....	0.020	0.5	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.97	761.3	30.12	765.1	63.0	17.2	67	SW	2.0	0.9	.....	0	3	.....	.....	0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.05	738.0	29.96	760.9	55.6	13.1	93	SSW	21.0	9.4	.....	.....	10	.....	.....	0.551	14.0	Raining	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.96	761.0	30.03	762.7	69.1	20.6	91	SE	6.3	2.8	.....	3c	0	W	.....	0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.91	759.8	29.96	761.1	79.0	26.1	81	SW	3.3	1.5	.....	.....	.....	.....	.....	0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.13	765.4	30.23	767.9	62.4	16.9	81	WSW	0	0	.....	.....	10	.....	W	0.011	0.3	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.95	760.8	30.04	763.1	67.6	19.8	96	S	0	0	.....	4k	3k	S	S	0	0	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.88	758.4	30.00	762.1	72.5	22.5	86	NW	4.8	2.2	.....	.....	8	.....	.....	0	0	Fair	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.99	761.8	30.03	762.8	—19.1	—28.4	100	N	.....	.....	2	.....	0	.....	.....	0	0	.....	
Umea	29.96	761.0	30.01	762.3	6.1	—14.2	92	NW	.....	.....	2	.....	9	.....	.....	0	0	.....	
Hernosand	29.93	760.3	29.98	761.6	5.9	—14.5	96	N	.....	.....	2	.....	10	.....	.....	0	0	.....	
Stockholm	29.67	753.6	29.85	758.1	18.0	— 7.8	89	NNE	.....	.....	2	.....	10	.....	.....	0.228	5.8	.....	
Wisby	29.68	753.9	29.74	755.4	32.4	0.2	92	W	.....	.....	2	.....	10	.....	.....	0.047	1.2	.....	
Sub-Series.																			
Upsala	29.77	756.1	29.85	75813	14.5	— 9.7	91	N	9.8	4.4	.....	.....	10	.....	.....	0.067	1.70	.....	Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.63	727.1	30.10	764.5	39.6	4.2	89	WNW	.....	.....	1	.....	10	.....	.....	0.118	3.0	Foggy	The Observatory.
Zurich	28.38	720.9	30.05	763.2	42.4	5.8	87	SE	.....	.....	1	.....	7	.....	.....	0	0	Cloudy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. +0.1 mm.; Ther. +1°.7 cent.; Hum. +14 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.84	757.9	44.6	7.0	94	N	19	8.5	.....	.....	10	.....	N	0.075	1.9	Raining	The Observatory.
Valona	.....	.....	29.70	754.3	58.6	14.8	.....	SW	.....	.....	1	.....	5	.....	.....	0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.87	758.7	68.2	20.1	56	SW	.....	.....	2	.....	8cs	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.20	767.1	30.30	769.6	— 3	—19.4	81	NW	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Alpena, Michigan	29.85	758.2	30.64	778.2	—25	—31.7	54	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Atlanta, Georgia	28.94	735.1	30.14	765.5	32	0.0	79	NW	15	6.7	.....	2k	8s	Calm	Calm	0.71	18.0	Cloudy	
Atlantic City, New Jersey	30.22	767.6	30.23	767.8	1	—17.2	70	N	14	6.3	.....	Haze	0	Calm	.....	0.95	24.1	Clear	
Attou Id., Alaska ‡	30.02	762.5	.....	.....	32	0.0	100	NE	11	4.9	.....	.....	10n		E	0.03	0.8	Cloudy	
Augusta, Georgia	29.98	761.5	30.19	766.8	39	3.9	73	E	.....	.....	2	0	5s	.....	NE	0.46	11.7	Fair	
Baltimore, Maryland	30.28	769.1	30.34	770.6	6	—14.4	76	NW	10	4.5	.....	0	0	.....	.....	0.10	2.5	Clear	
Barnegat, New Jersey	30.19	766.8	30.21	767.3	0	—17.8	70	N	27	12.1	.....	0	0	.....	.....	0.13	3.3	Clear	
Benton, Montana	26.91	683.5	.....	.....	45	7.2	84	W	11	4.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Bismarck, Dakota	27.88	708.1	29.74	755.4	10	—12.2	79	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Boise City, Idaho	27.14	689.3	30.10	764.5	38	3.3	91	SE	4	1.8	.....	.....	10n	.....	Calm	0.80	20.3	Light rain	
Boston, Massachusetts	29.89	759.2	30.06	763.5	— 3	—19.4	66	NW	18	8.0	.....	0	0	.....	.....	0	0	Clear	
Brackettville, Texas	29.01	736.8	30.14	765.5	32	0.0	89	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Brownsville, Texas	30.14	765.5	30.29	766.8	48	8.9	93	NW	4	1.8	.....	8cs	0	Calm	.....	0.03	0.8	Fair	
Buffalo, New York	29.67	753.6	30.47	773.9	2	—16.7	72	N	3	1.3	.....	.....	10n	.....	Calm	0.01	0.3	Light snow	
Burlington, Vermont	30.03	762.7	30.37	771.4	—13	—25.0	47	NE	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Cairo, Illinois	29.98	761.5	30.41	772.4	26	— 3.3	75	NE	3	1.3	.....	.....	10s	.....	NE	Inap.	Inap.	Threatening	
Campo, California	27.51	698.7	30.08	764.0	36	2.2	80	E	1	0.4	.....	2c	0	W	.....	0	0	Fair	
Camp Thomas, Arizona	27.41	696.2	.....	.....	30	- 1.1	78	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	30.13	765.3	30.15	765.8	20	— 6.7	70	N	39	17.4	.....	0	2ks	.....	NW	0.75	19.0	Clear	
Cape May, New Jersey	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Castroville, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Cedar Keys, Florida	29.98	761.5	30.00	762.0	61	16.1	94	NW	8	3.6	.....	.....	10s	.....	NE	Inap.	Inap.	Threatening	
Champaign, Illinois	29.50	749.3	30.39	771.9	13	—10.6	62	E	3	1.3	.....	.....	10s	.....	E	Inap.	Inap.	Cloudy	
Charleston, S. Carolina	30.09	764.3	30.15	765.8	38	3.3	63	N	12	5.4	.....	0	2s	.....	N	0.08	2.0	Clear	
Charlotte, N. Carolina	29.32	744.7	30.19	766.8	28	— 2.2	77	NE	6	2.7	.....	5cs	Fog	Calm	Calm	0.31	7.9	Fair	
Chattanooga, Tennessee	29.42	747.3	30.28	769.1	27	— 2.8	88	N	12	5.4	.....	.....	10s	.....	N	0.24	6.1	Cloudy	
Cheyenne, Wyoming	23.95	608.3	29.89	759.2	46	7.8	33	W	24	10.7	.....	0	0	.....	.....	0	0	Clear	
Chicago, Illinois	29.66	753.4	30.43	772.9	11	—11.7	80	S	6	2.7	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Chincoteague, Virginia	30.23	767.8	30.25	768.3	7	—13.9	54	NW	18	8.0	.....	1k	0	NW	.....	0.39	9.9	Clear	
Cincinnati, Ohio	29.75	755.6	30.48	774.2	14	—10.0	82	NE	6	2.7	.....	.....	10ks	.....	N	0.01	0.3	Cloudy	
Cleveland, Ohio	29.68	753.9	30.52	775.2	— 2	—18.9	84	NE	4	1.8	.....	0	0	.....	.....	0.10	2.5	Clear	
Coleman City, Texas	28.38	720.8	30.16	766.1	27	— 2.8	76	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Columbus, Ohio	29.55	750.6	30.51	774.9	0	—17.8	70	N	2	0.9	.....	0	0	.....	.....	0.08	2.0	Clear	
Concho, Texas	28.21	716.5	29.99	761.7	28	— 2.2	77	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Corsicana, Texas	29.76	755.9	30.26	768.6	30	— 1.1	78	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Davenport, Iowa	29.64	752.8	30.35	770.9	12	—11.1	80	E	8	3.6	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Dayton, Washington T'y	28 10	713.7	29.75	755.6	47	8.3	85	S	12	5.4	.....	.....	10s	.....	Calm	0.48	12.2	Cloudy	
Deadwood, Dakota	25.21	640.3	.....	.....	46	7.8	47	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Decatur, Texas	28.96	735.6	30.22	767.6	25	— 3.9	87	SE	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Delaware Breakwater, Del.	30.26	768.6	30.28	769.1	7	—13.9	77	NW	34	15.2	.....	0	0	.....	.....	0.16	4.1	Clear	
Denison, Texas	29.37	746.0	30.22	767.6	27	— 2.8	88	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Denver, Colorado	24.74	628.4	29.96	761.0	41	5.0	65	SW	3	1.3	.....	0	8s	.....	Calm	0	0	Fair	
Des Moines, Iowa	29.29	744.0	30.24	768.1	18	— 7.8	84	S	4	1.8	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Detroit, Michigan	29.76	755.9	30.54	775.7	— 5	—20.6	100	N	5	2.2	.....	0	0	.....	.....	0.62	15.7	Clear	
Dodge City, Kansas	27.33	694.2	29.71	754.6	28	— 2.2	54	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Dubuque, Iowa	29.61	752.1	30.38	771.6	12	—11.1	80	E	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Duluth, Minnesota	29.63	752.6	30.39	771.9	6	—14.4	88	NE	18	8.0	.....	0	9s	.....	NE	0.05	1.3	Cloudy	
Eagle Pass, Texas	29.44	747.8	30.22	767.6	37	2.8	81	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Eagle Rock, Texas	25.36	644.1	30.01	762.2	39	3.9	91	SW	18	8.0	.....	.....	10s	.....	S	0	0	Cloudy	
Eastport, Maine	29.74	755.4	29.82	757.4	— 4	—20.0	65	NW	27	12.1	.....	.....	10s	.....	NW	0	0	Cloudy	
Edinburg, Texas	.....	.....	.....	.....	49	9.4	78	S	.....	.....	1	0	5ks	.....	Calm	0.10	2.5	Fair	
El Paso, Texas	26 35	669.3	.....	.....	40	4.4	39	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Erie, Pennsylvania	29.67	753.6	30.48	774.2	— 1	—18.3	68	NE	4	1.8	.....	5ck	0	Calm	.....	0.04	1.0	Fair	
Escanaba, Michigan	29.81	757.2	30.59	777.0	—17	—27.2	100	N	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Florence, Arizona	28.60	726.4	30.20	767.1	46	7 8	54	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Apache, New Mexico	25.14	638.5	30.59	777.0	25	— 3.9	50	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Assinniboine, Montana	26.84	681.7	.....	.....	44	6.7	84	SW	22	9.8	.....	.....	10s	.....	SW	0	0	Cloudy	
Fort Bennett, Dakota	28.20	716.3	.....	.....	20	— 6.7	70	Calm	0	0	.....	10cs	0	Calm	.....	0	0	Cloudy	
Fort Buford, Dakota	27.65	702.3	29.48	748.8	38	3.3	91	W	17	7.6	.....	0	0	.....	.....	0.02	0.5	Clear	
Fort Custer, Montana	26.64	676.6	.....	.....	43	6.1	75	SW	10	4.5	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Davis, Texas	25.24	641.1	30.20	767.1	34	1.1	70	W	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort Elliott, Texas	27.23	691.6	29.60	751.8	28	— 2.2	66	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Gibson, Indian T'y	29.65	753.1	30.24	768.1	23	— 5.0	86	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Grant, Arizona	25.29	642.4	30.09	764.3	48	8.9	29	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Fort Griffin, Texas	28.81	731.8	30.17	766.3	25	— 3.9	87	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Keogh, Montana	27.23	691.6	.....	.....	40	4.4	82	SW	12	5.4	.....	0	5s	.....	Calm	0	0	Fair	
Fort McKavett, Texas	27.84	707.1	29.89	759.2	25	— 3.3	75	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Fort Macon, North Carolina	30.14	765.5	30.16	766.1	24	— 4.4	61	N	28	12.5	.....	.....	10s	.....	N	0.45	11.4	Cloudy	
Fort St. Michaels	29.77	756.1	29.81	757.2	— 7	—21.7	100	N	47	21.0	.....	0	0	.....	.....	.....	.....	.....	
Fort Missoula, Montana	26.59	675.4	.....	.....	37	2.8	100	S	3	1.3	.....	.....	10n	.....	S	0.41	10.4	Light rain	
Fort Shaw, Montana	26.10	662.9	.....	.....	42	5.6	66	SW	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Fort Sill, Indian Territory	28.90	734.0	30.08	764.0	25	— 3.9	75	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Stevenson, Dakota	27.88	708.1	.....	.....	12	—11.1	80	E	3	1.3	.....	5cs	0	E	.....	0	0	Fair	
Fort Verde, Arizona	.....	.....	.....	.....	33	0.6	70	NW	.....	.....	1	0	0	.....	.....	0	0	Clear	
Fredericksburg, Texas	28.40	721.3	30.05	763.3	34	1.1	70	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Galveston, Texas	30.13	765.3	30.18	766.6	46	7.8	84	NE	8	3.6	.....	.....	10s	.....	Calm	3.05	77.7	Cloudy	
Grand Haven, Michigan	29.79	756.7	30.55	776.0	— 5	—20.6	100	E	10	4.5	.....	0	2s	.....	Calm	0.01	0.3	Clear	
Hatteras, North Carolina	30.11	764.8	30.13	765.3	25	— 3.9	87	N	27	12.1	.....	.....	10ks	.....	N	1.87	47.5	Cloudy	
Helena, Montana	25.62	650.7	.....	.....	40	4.4	73	SW	4	1.8	.....	8k	0	Calm	.....	0	0	Cloudy	
Henrietta, Texas	29.12	739.6	30.13	765.3	27	— 2.8	64	SE	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Indianapolis, Indiana	29.57	751.1	30.44	773.2	11	—11.7	60	E	6	2.7	.....	2cs	7s	Calm	Calm	Inap.	Inap.	Cloudy	
Indianola, Texas	30.20	767.1	30.23	767.8	46	7.8	69	N	24	10.7	.....	.....	10s	.....	Calm	0.45	11.4	Cloudy	
Jacksboro, Texas	29.00	736.6	30.20	767.1	28	— 2.2	54	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Jacksonville, Florida	30.01	762.2	30.06	763.5	55	12.8	68	N	10	4.5	.....	.....	10s	.....	N	Inap.	Inap.	Cloudy	
Keokuk, Iowa	29.60	751.8	30.31	769.9	19	— 7.2	85	SE	14	6.3	.....	.....	10n	.....	Calm	Inap.	Inap.	Light snow	
Key West, Florida	30.04	763.0	30.07	763.8	70	21.1	85	NW	4	1.8	.....	1c	0	Calm	.....	0	0	Clear	
Kittyhawk, North Carolina	30.18	766.6	30.20	767.1	23	— 5.0	86	N	39	17.4	.....	.....	10n	.....	Calm	0.79	20.1	Light snow	
Knoxville, Tennessee	29.22	742.2	30.30	769.6	25	— 3.9	75	NE	10	4.5	.....	.....	10s	.....	Calm	0.30	7.6	Cloudy	
La Crosse, Wisconsin	29.56	750.8	30.37	771.4	12	—11.1	80	SE	5	2.2	.....	.....	10n	.....	Calm	Inap	Inap.	Light snow	
La Mesilla, New Mexico	26.24	666.5	30.39	771.9	34	1.1	52	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Laredo, Texas	29.79	756.7	30.14	765.5	44	6.7	81	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Leavenworth, Kansas	29.27	743.4	30.17	766.3	25	— 3.9	87	SE	8	3.6	.....	.....	10s	.....	.....	0.01	0.3	Cloudy	
Lewiston, Idaho	29.06	738.1	29.72	754.9	37	2.8	100	E	1	0.4	.....	.....	10n	.....	Calm	0.36	9.1	Light rain	
Little Rock, Arkansas	29.96	761.0	30.30	769.6	29	— 1.7	78	NE	8	3.6	.....	2cs	0	Calm	.....	0	0	Fair	
Los Angeles, California	29.71	754.6	30.08	764.0	52	11.1	79	N	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Louisville, Kentucky	29.76	755.9	30.38	771.6	16	— 8.9	83	NE	9	4.0	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Lynchburg, Virginia	29.51	749.5	30 25	768.3	19	— 7.2	69	NE	3	1.3	.....	10cs	0	Calm	.....	0.02	0.5	Cloudy	
Madison, Wisconsin	29.32	744.7	30.43	772.9	5	—15.0	75	SE	2	0.9	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Marquette, Michigan	29.75	755.6	30.58	776.7	—14	—25.6	45	Calm	0	0	.....	0	5s	.....	NW	0	0	Fair	
Mason, Texas	28.49	723.6	30.37	771.4	28	— 2.2	77	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.97	761,2	30.34	770.6	28	— 2.2	77	NE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Milwaukee, Wisconsin	29.64	752.8	30.44	773.2	17	— 8.3	83	W	1	0.4	.....	.....	10s	.....	Calm	0.13	3.3	Cloudy	
Mobile, Alabama	30.06	763.5	30.14	765.5	41	5.0	74	N	12	5.4	.....	.....	10s	.....	NW	0.04	1.0	Cloudy	
Montgomery, Alabama	29.95	760.7	30.20	767.1	36	2.2	62	N	9	4.0	.....	.....	10s	.....	N	0.09	2.3	Cloudy	
Moorhead, Minnesota	28.93	734.8	29.96	761.0	12	—11.1	90	SE	40	17.9	.....	.....	10n	.....	SE	0.04	1.0	Light snow.	
Morgantown, W. Virginia	29.35	745.5	30.48	774.2	— 1	—18.3	68	Calm	0	0	.....	2cs	8s	NW	Calm	0.15	3.8	Fair	
Mt. Washington, N. H.	23.95	585.5	29.41	747.0	—20	—28.9	63	NW	88	39.3	.....	0	2s	.....	NW	0	0	Clear	
Nashville, Tennessee	29.80	756.9	30.38	771.6	25	— 3.9	75	N	4	1.8	.....	.....	10ks;sn	.....	N;C	0	0	Cloudy	
New Haven, Connecticut	30.02	762.5	30.15	765.8	0	—17.8	85	N	8	3.6	.....	0	0	.....	.....	0.01	0.3	Clear	
New London, Connecticut	30.06	763.5	30.12	765.0	2	—16.7	72	N	8	3.6	.....	0	0	.....	.....	Inap.	Inap.	Clear	
New Orleans, Louisiana	30.08	764.0	30.14	765.5	44	6.7	84	N	12	5.4	.....	.....	10s	.....	N	0.25	6.3	Cloudy	
Newport, Rhode Island	30.00	762.0	30.05	763.3	0	—17.8	70	NW	19	8.5	.....	0	0	.....	.....	Inap.	Inap.	Clear	
New River, N. Carolina	.....	.....	.....	.....	21	— 6.1	85	N	.....	.....	4	2k	2ks	N	Calm	.....	.....	Fair	
New Shoreham, Rhode I'd.	30.04	763.0	30.07	763.8	4	—15.6	74	NE	34	15.2	.....	0	0	.....	.....	0.04	1.0	Clear	
New York, New York	30.00	762.0	30.21	767 3	2	—16.7	100	NW	13	5.8	.....	0	0	.....	.....	0.37	9.4	Clear	
Norfolk, Virginia	30.16	766.1	30.23	767.8	13	—10.6	81	N	20	8.9	.....	.....	10ks	.....	N	0.43	10.9	Cloudy	
North Platte, Nebraska	26.97	685.0	29.66	753.4	22	— 5.6	72	W	8	3.6	.....	0	2s	.....	Calm	0	0	Clear	
Olympia, Washington T'y	29.64	752.8	29.68	753.9	48.0	8.9	93	S	8	3.6	.....	.....	10s	.....	Calm	1.32	33.5	Cloudy	
Omaha, Nebraska	28.92	734.6	30.09	764.3	21	— 6.1	86	S	14	6.3	.....	.....	10n	.....	Calm	Inap.	Inap.	Light snow.	
Oswego, New York	30.06	763.5	30.42	772.7	— 2	—18.9	67	N	11	4.9	.....	.....	10s	.....	N	0	0	Cloudy	
Pensacola, Florida	30.12	765.0	30.15	765.8	44	6.7	76	N	6	2.7	.....	4ck	0	NW	.....	0.09	2.3	Fair	
Philadelphia, Pa.	30.22	767.6	30.28	769.1	0.	—17.8	70	N	14	6.3	.....	0	0	.....	.....	0.43	10.9	Clear.	
Phœnix, Arizona	28.99	736.3	30.86	783.8	43	6.1	67	E	2	0.9	.....	2c	0	W	.....	0	0	Fair	
Pike's Peak, Colorado	17.79	451.9	30.00	762.0	17	— 8.3	67	NW	54	24.1	.....	5cs	0	NW	.....	0	0	Fair	
Pilot Point, Texas	29.39	746.5	30.30	769.6	27	— 2.8	88	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Pioche, Nevada	24.17	613.9	29.94	766.5	38	3.3	81	SW	2	0.9	.....	0	7ks	.....	Calm	0	0	Fair	
Pittsburg, Pennsylvania	29.57	751.1	30.50	774.7	— 2	—18.9	84	NW	2	0.9	.....	.....	10s	.....	NW	0.44	11.2	Cloudy	
Port Huron, Michigan	29.77	756.1	30.54	775.7	— 6	—21.1	61	NE	8	3.6	.....	0	0	.....	.....	0.08	2.0	Clear	
Portland, Maine	29.94	760.5	30.00	762.0	1	—17.2	42	NW	10	4.5	.....	0	2s	.....	Calm	0	0	Clear	
Portland, Oregon	29.71	754.6	29.78	756.4	54.5	12.5	97	S	8	3.6	.....	.....	10n	.....	S	1.33	33.8	Light rain	
Portsmouth, N. Carolina	.....	.....	.....	.....	25	— 3.9	62	NE	38	17.0	.....	10k	0	NE	.....	1.22	31.0	Cloudy	
Prescott, Arizona	24.91	632.7	30.27	768.8	31	— 0.6	69	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	30.00	762.0	30.02	762.5	65	18.3	84	SW	6	2.7	.....	1c	0	Calm	.....	0	0	Clear	
Red Bluff, California	29.73	755.1	30.08	764.0	57.0	13.9	91	S	12	5.4	.....	.....	10s	.....	S	0.12	3.0	Cloudy	
Rio Grande City, Texas	30.04	763.0	30.27	768.8	47	8.3	70	N	5	2.2	.....	.....	10s	.....	Calm	0.91	23.1	Cloudy	
Rochester, New York	29.75	755.6	30.45	773.4	1	—17.2	85	NW	7	3.1	.....	.....	10n	.....	Calm	0.08	2.0	Light snow.	
Roseburg, Oregon	29.31	744.5	29.86	758.4	55.5	13.1	93	Calm	0	0	.....	.....	10n	.....	Calm	1.46	37.1	Light rain.	
Sacramento, California	30.09	764.3	30.16	766.1	57	13.9	87	SE	6	2.7	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy	
St. Louis, Missouri	29.71	754.6	30.33	770.4	23	— 5.0	73	E	11	4.9	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
St. Paul, Minnesota	29.34	745.2	30.25	768.3	10	—12.2	90	SE	18	8.0	.....	.....	10n	.....	SE	0.04	1.0	Light snow.	
Salt Lake City, Utah	25.72	653.3	30.04	763.0	45	7.2	68	S	2	0.9	.....	.....	10s	.....	Calm	Inap.	Inap.	Threatening	
San Antonio, Texas	29.52	749.8	30.28	769.1	37	2.8	63	N	3	1.3	.....	0	0	.....	.....	0	0	Clear	
San Diego, California	30.01	762.2	30.09	764.3	50	10.0	86	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Sandusky, Ohio	29.74	755.4	30.51	774.9	3	—16.1	73	N	6	2.7	.....	0	0	.....	.....	0.22	5.6	Clear	
Sandy Hook, New Jersey	30.15	765.8	30.19	766.8	1	—17.2	71	N	17	7.6	.....	0	0	.....	.....	0.62	15.7	Clear	
San Francisco, California	30.10	764.5	30.16	766.1	58	14.4	91	SE	5	2.2	.....	.....	9s;fg	.....	S;SW	0.01	0.3	Threatening	
Santa Fé, New Mexico	23.34	592.8	29.88	758.9	36	2.2	53	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	29.94	760.5	30.15	765.8	44	6.7	68	NE	12	5.4	.....	.....	10ks	.....	NE	Inap	Inap.	Cloudy	
Shreveport, Louisiana	29.99	761.7	30.25	768.3	32	0.0	79	NE	4	1.8	.....	0	5s	.....	Calm	0	0	Fair	
Silver City, New Mexico	24.39	619.5	30.76	781.3	35	1.7	53	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Smithville, North Carolina	30.14	765.5	30.18	766.6	25	— 3.9	75	N	18	8.0	.....	0	1ks	.....	Calm	0.14	3.6	Clear	
Socorro, New Mexico	25.58	649.7	29.64	752.8	36	2.2	51	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.63	752.6	30.36	771.1	21	— 6.1	78	E	9	4.0	.....	.....	10n	.....	.....	0.01	0.3	Heavy snow	
Springfield, Massachusetts	30.01	762.2	30.15	765.8	0	—17.8	39	N	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Stockton, Texas	27.04	686.8	30.04	763.0	29	— 1.7	78	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.12	739.6	29.97	761,2	10	—12.2	100	SE	16	7.2	.....	.....	10n	.....	Calm	0.02	0.5	Light snow.	
Thatcher's Island, Mass.	29.98	761.5	30.04	763.0	2	—16.7	44	NW	28	12.5	.....	0	2s	.....	N	0	0	Clear	
Toledo, Ohio	29.74	755.4	30.52	775.2	— 1	—18.4	70	N	7	3.1	.....	0	0	.....	.....	0.03	0.8	Clear	
Tucson, Arizona	27.62	701.5	30.17	766.3	43	6.1	43	SW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.52	749.8	30.02	762.5	37.5	3.1	95	E	5	2.2	.....	.....	10n	.....	Calm	0.32	8.1	Light rain	
Uvalde, Texas	29.23	742.4	30.08	764.0	44	0.7	60	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Vicksburg, Mississippi	29.98	761.5	30.25	768.3	37	2.8	81	NE	4	1.8	.....	.....	10s	.....	Calm	0.18	4.6	Cloudy	
Visalia, California	29.80	756.9	30.18	766.6	52	11.1	89	NE	1	0.4	.....	0	1s	.....	Calm	0	0	Clear	
Washington, D. C.	30.22	767.6	30.36	771.1	3	—16.1	73	NW	6	2.7	.....	2cs	0	Calm	.....	0.10	2.5	Fair	
Wickenburg, Arizona	.....	.....	.....	.....	40	4.4	56	NW	.....	.....	1	2c	1s	Calm	Calm	0	0	Clear	
Wilmington, N. Carolina	30.12	765.0	30.18	766.6	25	— 3.9	75	NE	13	5.8	.....	5c	0	Calm	.....	0.19	4.8	Fair	
Winnemucca, Nevada	25.70	652.8	30.06	763.5	50	10.0	79	SW	10	4.5	.....	.....	10s	.....	SW	0.06	1.5	Cloudy	
Wood's Holl, Mass.	29.99	761.7	30.03	762.7	— 1	—18.3	68	N	25	11.2	.....	0	0	.....	.....	0.04	1.0	Clear	
Yankton, Dakota	28.66	728.0	30.04	763.0	16	— 8.9	83	S	16	7.2	.....	0	0	.....	.....	0.01	0.3	Clear	
Yuma, Arizona	29.90	759.4	30.05	763.3	57	13.9	52	NE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.04	559.8	.....	.....	54.5	12.5	77	Calm	0	0	.....	8cs;k	0	.....	.....	0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica	29.82	757.4	30.14	765.5	68	20.0	84	E	.....	.....	.....	5c	2k	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.99	761.7	30.04	763.0	73	22.8	81	Calm	0	0	.....	4cs	0	SW	.....	0	0	Foggy	Charles Hasselbrink.
Jakobshavn, Greenland	30.21	767.2	30.26	768.7	0.7	—17.4	.....	S	.....	.....	2	.....	0	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I.	30.00	762.0	30.01	762.2	70.5	21.4	81	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	Robert Johnstone.
Navassa, W. I.	29.83	757.7	29.91	759.7	75	23.9	79	NE	6.2	2.8	.....	5k	5s	E	NE	0.35	8.9	Fair	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	77	25.0	91	E	.....	.....	3	.....	10n	E	.....	0.50	12.7	Rainy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.35	745.5	30.04	763.0	70	21.4	100	Calm	.....	.....	0	.....	10n	.....	Calm	.....	.....	Raining	Francesco J. Cisneros
Rivas, Nicaragua	.....	.....	.....	.....	75.2	24	.....	SE	.....	.....	4	5c	1ks	NW	SE	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.00	762.0	30.03	762.7	77	25.0	82	Calm	0	0	.....	8cs	0	.....	.....	0	0	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	30.31	769.8	30.37	771.4	— 9.4	—23.	.....	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	K. Elberg.
York Factory, B. A.	30.81	782.6	30.87	784.1	—16.0	—26.7	70	NW	12	5.4	.....	4k	5s	N	N	0.01	0.3	Cloudy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.76	755.9	59.8	15.4	73	NW			2-3		1	NNW						Squally	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 37′, E 58° 36′	30.10	764.5	75	23.9	77	NNW			1		2	NW						D. clouds	Comm. G. W. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.80	756.9	81	27.2	78	SE			1		4	SE				3	ENE	D. clouds	Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 24° 28′, E. 118° 03′	29.85	758.2	60	15.6	94	SE			1		0							Misty	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.72	754.9	69	20.6	80	SW			6-7		1	SW						Blue sky	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.90	759.4	79	26.1	65	NW			2-3		8							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 8′ 20°, W. 79° 50′	29.89	759.2	70.5	21.4	95	SSE			1		8					2	S	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.16	740.7				W			1									Overcast	Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 149° 57′	29.94	760.5	67	19.4	89	Calm			0		0							Blue sky	Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Zanzibar, Africa	29.92	760.0	83	28.3	83	Calm			0		6	NE				1	NE	Showery	Capt. C. J. Brownrigg.
H. M. S. Magpie																			Capt. R. H. Napier.
H. M. S. Malabar, Suez Canal	29.89	759.2	70	21.1	80	SE			1		4	NE						D. clouds	Capt. J. F. G. Grant.
H. M. S. Minatour, Vigo, Spain	30.03	762.7	59.5	15.3	91	SW			4		10	SW						D. clouds	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Barbadoes, W. I.	29.98	761.5	77	25.0	82	E			2		3	E						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby																			Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Spain	30.18	766.6	61	16.1	88	SW			1–2		9							Overcast	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 42′, E. 49° 35′	29.64	752.8	78	25.6	78	SE			1		0					1	ESE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Callao Bay, Peru	29.88	758.9	66	18.9	97	SSE			2		9	SSE						Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.00	762.0	75	23.9		NNE			1–2		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, Palestine	29.94	760.5	69.5	20.8	66	S			2–3		4	S						D. clouds	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm G. W. Pollar
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Bulama, Senegambia	29.91	759.6	80.6	27.0	90	NW			2		4							D. clouds	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando, Africa	29.84	758.0	82.4	28.0	76	S			3		5					2	S	D. clouds	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.26	768.6	45	7.2	68	N	2	0.9			0			0	0			Clear	
N. Yard, Portsmouth, N. H.	30.03	762.7			100	NW	18	8.0			0			0	0			Clear	
Naval Hospital, Yokohama, Japan	29.89	759.2	41	5.0	57	Calm			0		2		W	0	0			Hazy	
Adams, Callao, Peru	29.93	760.2	68	20.0	95	SSE			1-2		10					Sm'h	SW	Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.10	764.5	55	12.8	93	Calm			0		10		W	0	0			Cloudy	
Alert, Hong-Kong, China *.	29.86	758.4	68	20.0	90	Calm			0		0			0	0	Sm'h		Clear	
Alliance, Havanna, Cuba	30.05	763.3	73	22.8	90	Calm			0		2			0	0	Sm'h		Clear	
Ashuelot, Tientsin, China	30.29	769.4	26	— 3.3	100	NNW			6		0							Squally	
Colorado, New York, N. Y.	30.20	767.1	0	—17.8	?	NNW	17	7.6			0			0	0			Clear	
Constitution, N. Yard, League I'd., Pa			1	—17.6		NNW	1	0.4			0							Clear	
Franklin, Norfolk, Va	30.12	765.0	17	— 8.3		NNW	26.4	11.8			10			0.55	14.0			Cloudy	
Galena, Villafranca, France	29.91	759.7	60	15.6	71	Calm			0		0					Sm'h		Clear	
Independence, N. Yard, Mare I'd, Cal.	30.15	765.8	56	13.3	94	N	13.2	5.9			10		N	0.02	0.5			Overcast	
Jamestown, Sitka, Alaska *	29.16	740.7	26	— 3.3		NE			2		5			0.02	0.5			Fair	
Kearsarge, N. 19° 55′, W. 83° 15′	30.03	762.7	78	25.6	82	NE			2		8		NE			Mod.	E	Fair	
Lackawanna, S. 9° 12′, W. 78° 38′. †	30.03	762.7	69	20.6	95	S			1		10		SE	0	0			Cloudy	
Marion, Sandy P't, Terra del Fuego	29.83	757.7	53	11.7	85	W			1		8		WSW			Mod.	S	Cloudy	
Michigan, Erie, Pennsylvania	30.44	773.2	3	—16.1		E	1	0.4			8		E					Fair	
Minnesota, New York, N. Y.	30.20	767.1	4	—15.6		N			4		0							Hazy	
Monocacy, Shanghai, China	30.21	767.3	35	1.7	90	NNE			2		10		Calm					Snowing	
New Hampshire, Port Royal, S. C.	30.11	764 8	46	7.8	77	NE	22	9.8			10		Calm	0	0			Overcast	
Nipsic, Marseilles, France	29.97	761.2	52	11.1	66	N			1		2					Sm'h		D. clouds	
Onward, S. 11°?, W. 78°? †	29.90	759.4	68	20.0	95	SSE			1		10					Long	N;W	Cloudy	
Palos, Shanghai, China	30.26	768.6	32	0.0	100	NNE			2		10		Calm					Overcast	
Passaic, Washington, D. C.	30.36	771.1	5	—15.0	?	NW			2		0							Clear	
Pensacola, N. 15° 07′, W. 95° 47′	29.90	759.4	79	26.1	78	NE			5-6		8			0	0	Long	NE	Cloudy	
Portsmouth, Washington, D. C.	30.35	770.9	4	—15.6	100	NNW			2		2							Clear	
Powhatan, New York, N. Y.	30.19	766.8	1	—17.6	?	N			3		10							Cloudy	
Quinnebaug, Naples, Italy	29.75	755.6	57	13.9	52	NE			1		2		NE			Sm'h		Fair	
Richmond, Hong-Kong, China	29.98	761.5	69	20.6	90	Calm			0		0			0	0			Clear	
Saratoga, Baltimore, Md	30.20?	767.1?	5	—15.0	100	NNW			1		2		Calm	He	avy			Clear	
Shenandoah, Montevideo, Uruguay *	30.25	768.3	61	16.1	71	NNW			3		2		NNW			Sm'h		Fair	
St. Louis, League Island, Pa	30.28	769.1	— 1	—18.3	100	NNW	4	1.8			0			0	0			Clear	
Swatara, Nagasaki, Japan †	29.90	759.4	55	12.8	87	WSW			1		2		SW			Sm'h		D. clouds	
Tennessee, N. 17° 45′, W. 78° 18′	30.03	762.7	80	26.7	96	NE	9	4.0			2		Calm	0	0	Sm'h		Clear	
Ticonderoga, N. Yard, Mare Id., Cal.	30.16	766.1	57	13.9	100	SW			1		10		SW	0.04	1.0			Overcast	
Trenton, Villafranca, France *	29.89	759.2	64	17.8	58	Calm			0		0			0	0	Sm'h		Clear	
Vandalia, †* Bridgetown, Barbadoes, W. I	30.15	765.8	78	25.6	82	ENE			1		2		ENE					Fair	
Wabash, Boston, Massachusetts	30.08	764.0	— 3	—19.4	100	NW	16	7.2			2		Calm	0	0			Hazy	
Wachusetts, Panama, Panama *.	29.49	749.0	77	25.0	91	NNW			2		2		N			Sm'h		Fair	
Wyoming, Villafranca, France	29.92	760.0	63	17.2	57	Calm			0		2		S			Mod.	S	Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Asturte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
S. 15° 21′, W. 6° 04′	29.86	758.4	80.4	26.9	72	NE			2		4							D. clouds	Capt. C. J Russell.
S. S. Bateshire,																			Capt. John Arbuckle
Barque Belleisle,																			
N. 27° 25′, W. 21° 03′	30.16	766.1	67.5	19.7	70	NNE			3		5							D. clouds	Capt. A. J. Brown.
Ship Blychswood.																			Capt. E. Heggum.
British Merchant ‡																			Capt. E. J. Molony.
Chin Yang, ‡																			
N. 18° 58′, W. 30° 11′	30.04	763.0	72.5	22.5	76	NE			5		4							D. clouds	Capt. H. Youlden.
S. S. Cipero.																			Capt W. N. Lalley.
City of Agra. ‡																			Capt. T. Young.
Barque Commewyne, ‡																			
N. 24° 51′, W. 64° 45′	30.10	764.5	74.3	23.5	59	S			3		9							Overcast	Capt. W. Scott.
Barque Coppename,																			
N. 6° 43′, W. 51° 29′	29.94	760.5	80.3	26.8	75	NE			6		10							Overcast	Capt. A. Buchan.
Denbigshire.																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 24° 50′, E. 3° 56′	30.11	764.8	74	23.3	64	ESE			5		7							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart,																			
N. 20° 00′, E. 89° 10′	29.98	761.5	77.0	25.0	63	NW			2		2							Misty	Capt. J. E. C. Patterson.
Barque Elissa.																			Capt. A. Watson.
S. S. Ethiopia. ‡																			Capt. A. Campbell.
S. S. Fleurs Castle.																			Capt J. Kidder.
Barque Gem.																			Capt. H. Park.
S. S. Gordon Castle,																			Capt. W. Waring.
Barque Harvest Home.																			Capt. H. H. Williams.
Ship Iron Cross.																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith.																			Capt. Alex. Wilson.
S. S. Lamperts.																			Capt. G. H. Jones.
Laomene,																			Capt. W. P. Hughes.
Ship Lochee. ‡																			Capt. J. Raeburn, R. N. F.
S. S. Lusitania.																			Capt. C. A. F. Powell.
Majestic.																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 18° 57′, W. 36° 13′	30.15	765.8	74.5	23.6	86	NE			5		4					4–5	NNW	Misty	Capt. H. W. Dyke.
Barque Mertola,																			
N. 47° 29′, W. 12° 37′	29.57	751.1	53.8	12.1	100	SSW			6		10							Misty	Capt. E. W. Turner.
Nairnshire.																			Capt. W. Niven.
S. S. Nizam.																			Capt. G. W. Brady.
Queen of Cambria.																			Capt. M. Parry.
S. S. Richmond.																			Capt. W. H. Stuart.
S. S. Scotia.																			Capt. R. Cato.
Barque Shun Lee, ‡																			
N. 13° 08, W. 21° 26′	29.91	759.7	76.5	24.7	88	NNE			4		0							NE	Blue sky
S. S. Seine.																			Capt. John M. Gray.
S. S. Strathleven. ‡																			Capt. H. Manning.
Schr. Traveller.																			Capt. C. W. Pearson.
S. S. Wyberton, ‡																			Capt. A. Simpson.
N. 39° 27′, W. 9° 26′	30.10	764.5	63	17.2	91	SSW			3		8							D. clouds	Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian.																			Capt. F. Archer.
S. S. Nova Scotian,																			
N. 46° 49′, W. 36° 39′	29.40	746.7	42	5.6		Var.			1		5		NNE			Sl't	N	Showery	Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			
S. S. Bothnia.																			Capt. W. Watson.
S. S. Scythia.																			
WHITE STAR LINE. *Ismay, Imrie & Co.*																			Capt. W. H. P. Hains.
S. S. Adriatic,																			
N. 42° 20′, W. 49° 00′ †	29.55	750.6	36	2.2		SE			6		10		NW			Long	NE	Raining	Capt. J. W. Jennings.
S. S. Baltic,																			
N. 42° 15′, W. 62° 06′	29.48	748.8	27	— 2.8		Var.			2–3		10					Sm'h		Snowing	Capt. H. Parsell.
S. S. Britanic.																			Capt. H. Perry.
S. S. Celtic.																			Capt. Benj. Gleadell.
S. S. Germanic,																			
Liverpool, England †	29.61	752.1	46	7.8		SE			2		8		S	0	0			Hazy	Capt. Ch. W. Kennedy.
S. S. Republic, *†																			
New York, N. Y	30.06	763.5	18	— 7.8	68	NW			2		2			0	0			Fair	Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann,																			
N. 37° 55′, W 70° 05′	29.81	757.2	39.2	4.0		N			7		10		N			Cross	N	Hailing	Capt. H. Baur.
S. S. Köln.																			
S. S. Leipzig, ‡																			
N. 39° 19′, W. 65° 33′	29.59	751.6	41.0	5.0	91	NNW			6		10		NNW	9 hours		Cross	N	Drizzling	Capt. F. Pfeiffer.
S. S. Ohio.																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			Capt. Albert Fredholm.
Ship Peru. ‡																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 41° 06′, W. 58° 08′	29.31	744.5	47	8.3	92	E			7		10		E			R'gh	E	Raining	Capt. J. W. Shackford
S. S. Indiana, ‡ Liverpool, England †‡	29.88	758.9	42	5.6	83	E			3		8		E	Mode	rate				Capt. R. W. Sargent. Wm. Shackford, 1st Off'r.
S. S. Ohio,																			
S. S. Pennsylvania, N. 47° 37′, W. 43° 15′ †	29.60	751.8	36	2.2	?	W			3		10		WNW	0	0	Mod.	WNW	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 24° 28′, E. 118° 06′ †	30.03	762.7	61	16.1	66	NE			4		10		NE	0	0	Mod.	NE	Overcast	Capt. H. Davison.
S. S. Gaelic, N. 37° 20′, E. 176° 48′ *†	29.83	757.7	55	12.8	68	NW			5		2		NW			Mod.	NW	Fair	Capt. W. H. Kidley.
S. S. Oceanic, San Francisco, Cal.	30.18	766.6	58	14.4	88	SE			3		8		SE	0	0			Cloudy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 46° 08′, W. 124° 14′ †	29.68	753.9	51	10.6	93	SSW			6		10		S			Mod.	SW	Raining	Capt. Fred. Bolles
S. S. Oregon, Portland, Oregon †	29.79	756.7	55.0	12.8	100	SE			1		10		SE					Rainy	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Pedro, Cal †	30.05	763.3	54	12.2	93	Calm			0		0					Mod.	SW	Foggy	Capt. J. N. Ingalls.
S. S. Idaho, N. 39° 16′, W. 124° 25′ †	30.08	764.0	57	13.9	94	SE			3		8		SE			Mod.	SE	Raining	C. E. Lyons, 1st Officer.
S. S. Orizaba.																			
S. S. Senator, San Francisco, Cal †	30.26	768.6	57	13.9	87	S			1		10							Hazy	Thos. Wallace.
S. S. State of California, San Francisco, Cal †	30.19	766.8	56	13.3	?	Calm			0		10			0	0			Foggy	Capt. G. Debney.
S. S. Victoria, N. 40° 50′, W. 124° 40′ †	29.84	757.9	54	12.2	93	SSE			4		10		SE			H'vy	SE	Drizzling	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 33° 02′, E. 177° 25′	30.16	766.1	68	20.0	84	ENE			4		8		NE			Long	ENE	Cloudy	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W. †	30.04	763.0	74	23.3	90	NE			2		10		NE	0	0			Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 12° 31′, W. 88° 01′ †	30.00	762.0	79	26.1	74	E			4		8		SW	0	0	Sm'll	SSE	Cloudy	Capt. D. S. Austin.
S. S. City of Peking, N. 34° 07′, E. 137° 53′ †	29.93	760.2	59	15.0	88	SSE			5		8		S	0	0	Sm'h		Cloudy	Capt. G. G. Berry. Capt. H. C. Dearborn.
S. S. City of Sidney																			
S. S. City of Tokio, N. 37° 06′, W. 164° 03′ †	29.59	751.6	57	13.9	52	W			5		5		W			Mod.	NE	Fair	A. L. Ritchie, 2d Officer.
S. S. Colima ‡																			Capt. R. R. Searle. Capt. D. E. Griffiths.
S. S. Dakota																			
S. S. Granada, N. 7° 56′, W. 83° 00′ †	29.74	755.4	84	28.9	83	N			1		k		NNW	0	0	Sm'll	SSW	Clear	
S. S. Zealandia, S. 8° 03′, W. 169° 11′ †	29.94	760.5	81	27.2	74	ESE			5		0					Sm'h	E	Clear	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland, ‡ Antwerp, Belgium	29.85	758.2	42	5.6	83	SW			1		10		SW			Sm'h		Hazy	Capt. Sam'l Jackson.
S. S. Nederland, N. 42° 32′, W. 49° 46′ †	29.72	754.9	4	—15.6		Var.			5		10		NW;SE	3 ho	urs	Mod.	NW;SE	Squally	Capt. S. Stokes.
S. S. Rhynland, ‡ Terneuze, Netherlands	29.92	760.0	42	5.6		S			3		10		S	0	0			Hazy	Capt. W. Geo. Randle.
S. S. Vaderland ‡																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, N. 32° 57′, W. 79° 08′ †	30.09	764.3	40	4.4		NNE			9		10			½ ho	ur	Long	NE	Threatening	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va	30.18	766.6	17	— 8.3	83	NNW	9	4.0		8ck		SW		0.32	8.1			Cloudy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, N. 26° 00′, W. 60° 24′ †	30.03	762.7	74	23.3		SW			5		2		SW	Sho	wers	Mod.	NE	Clear	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 37° 58′, E. 7° 00′ †*	30.20	767.1	60	15.6		NW			5		0					R'gh	NNW	Clear	Capt B. F. Woodbury.
Brigantine George, ‡ Ponce, Porto Rico †	30.24	768.1	75	23.9		NNE			2		0			0	0	Sm'h		Fine	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	30.14	765.5	17	— 8.3		NW	5	2.2		5k	5k			0.07	1.8			Clear	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Portugal †	30.12	765.0	62	16.7	100	SW			6		8		W	Li	ght			Cloudy	Capt. Jos. Hand.

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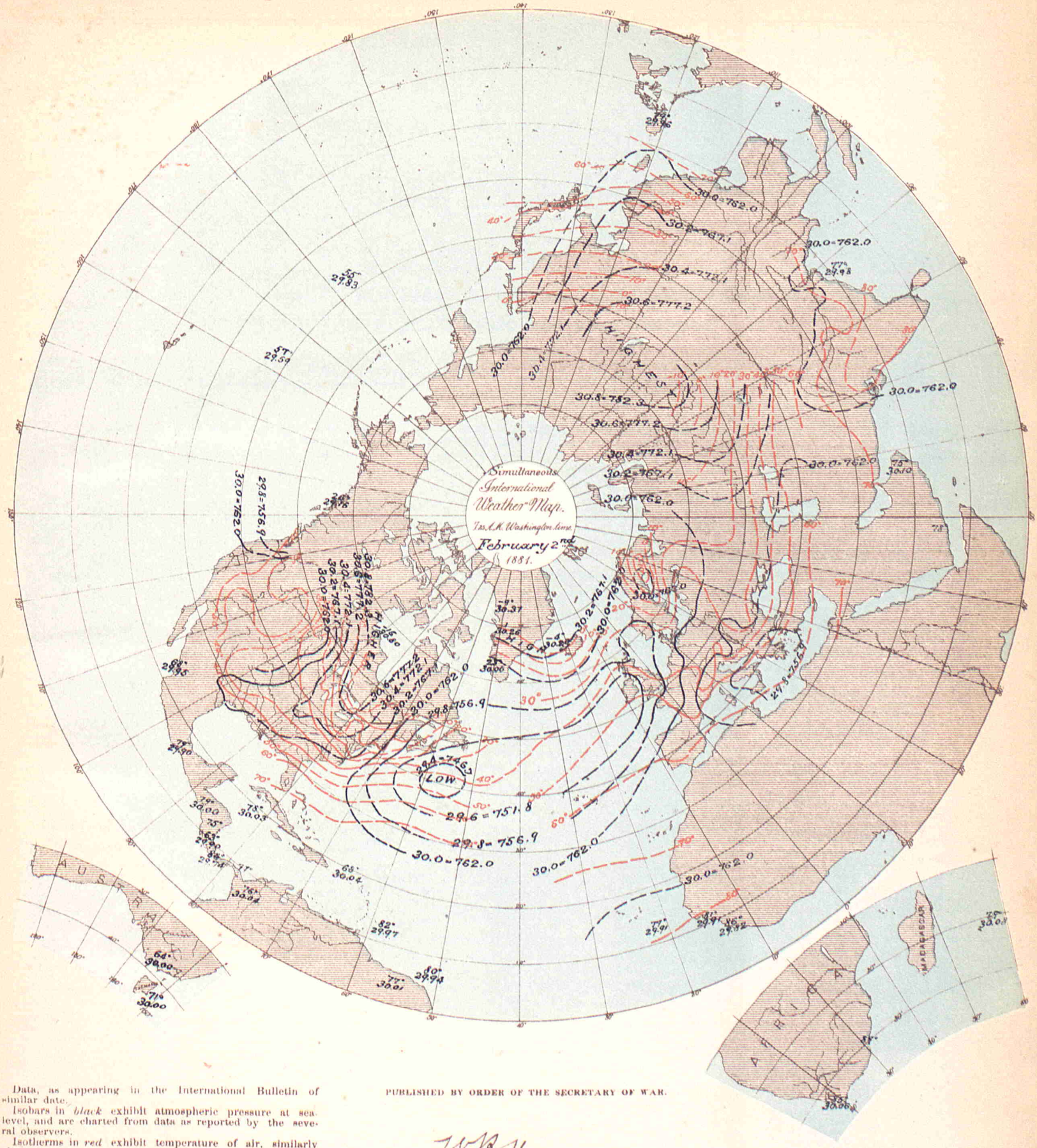
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.

CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 3, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direc-tion.	Velocity.		Force	Clouds. Amount and kind.		Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.15	765.7	66.7	19.3	85	NE			3		3			0	0	Pretty fair..	Dr. Ollive.
Nemours			30.05	763.5	67.3	19.6	72	W			5		0			0	0	Clear	Raynard.
Algiers			30.13	765.2	61.2	16.2	79	Calm			0		9			0	0	Covered	Nicolas.
La Calle			30.08	763.9	64.0	17.8	84	NNW			2		4			0	0	Fair	Fonfrède.
Tunis			30.00	761.9															Jacques.
Sfax			30.10	764.5															Gau.
Saida			30.14	755.5	56.3	13.5	82	S			3		3			Inap.	Inap.	Pretty fair..	Dumas.
Tebessa			30.09	764.3	54.7	12.6	46	NNW			1		9			0	0	Covered	Watrin.
Geriville																			Lonchamp.
Laghouat			30.17	766.4	63.7	17.6	61	SSW			2		4			0	0	Fair	Herbin.
Biskra			30.16	766.1															Baudassé.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.09	764.3	30.18	766.6	58.0	14.4	80	SSE	5	2.2			10			0.02	0.5	Light rain	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			30.00	762.0	69	20.6		NW			2		6kn			0.01	0.3		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.56	750.8	30.13	765.3	40.5	4.7	81	Calm			0		0			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.32	744.8	30.12	765.1	34.9	1.6	93	ENE	3.8	1.7			10			0	0		Dr. Wiersbicki.
Eperies	29.15	740.3	30.05	763.3	41.0	5.0	61	Calm			0		0s			0	0		Julius Mikolik.
Gratz‡	28.87	733.2	30.17	766.2	38.5	3.6	74	S			2		0			0	0		Andreas Rospini.
Hermannstadt	28.59	726.1	30.08	764.0	34.2	1.2	83	S			1		10			0.049	1.25	Snowing	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.69	728.7	30.08	764.0	37.4	3.0	99	Calm			0		10			0	0		The Staff.
Lemberg	29.06	738.1	30.10	764.4	31.8	— 0.1	83	NW			2		10			0	0		Dr. T. Stanecki.
Pola	29.92	759.9	30.03	762.8	50.4	10.2	55	NE			2		3			0	0		I. R. HydrographicOffice
Szathmar	29.69	754.0	30.14	765.5	32.7	0.4	90	NW			2		10			0	0	Foggy	Beicht Peter, S. J.
Szegedin	29.80	757.0	30.10	764.5	32.2	0.1	100	Calm			0		10			0	0		Karl Stancel.
Trieste	29.98	761.5	30.08	764.1	49.1	9.5	55	E			2		0			0	0	Clear	P. Busin.
Vienna	29.38	746.2	30.12	765.1	37.6	3.1	90	Calm			0		9			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.62	752.4	29.82	757.5	48.2	9.0	96	S			3	1	9	SW	SSW	0	0		Royal Observatory.
Furnes	29.75	755.6	29.77	756.2	47.7	8.7	92	SSW			4		10			0	0		M. E. de Cae.
Maeseyck	29.76	756.0	29.89	759.2	45.9	7.7	87	SW			2		10			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 7, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.44	747.8	29.54	750.3	39.3	4.1	97	E	24	10.7			10			0.490	12.45	Raining	W. Boswell.
Armagh, Observatory	29.07	738.4	29.30	744.2	49.3	9.6	91	SSE	17	7.6			10					Overcast	S. Call.
Bidston, Liverpool Obs'y			29.45	748.0	48.3	9.1	93	SE	17	7.6			10					Misty	John Hartnup.
Bolton, Sharples	28.94	735.1	29.47	748.5	48.4	9.1	94	S	1	0.4			10					Raining	Thomas Mackereth.
Bradford, Yorkshire	29.09	738.9	29.49	749.0	47.1	8.4	92	SE			1		9			0.18	4.6	Overcast	J McLandsborough, F.R.S
Bridgetown, Barbadoes	29.89	759.2	29.92	760.0	83	28.3	75	NE			2		3					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			29.60	751.8	50.0	10.0	97	S			0.4		10					Overcast	John McLaren.
Chatham, School M. E.	29.57	751.1	29.70	754.4	49.1	9.5	94	S			3		10					Gloomy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.20	741.7	29.43	747.5	49.9	9.9	94	S			5		10					Raining	The Staff.
Fort Napier, Natal	27.71	703.8	30.02	762.5	63.2	17.3	90	NE			1		8					Overcast	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	85	29.4	92	SW			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			29.14	740.1	48	8.9	92	S			2		10					Raining	J. O'Donaghadue.
Gibraltar, Mediterranean	30.04	763.0	30.09	764.3	62.5	16.9	94	SW			3		5					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.19	741.4	29.40	746.7	38.3	3.5	96	NE			5		k					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.48	748.8	29.65	753.1	51.2	10.7	92	SSW			2		10					Overcast	The Staff.
Guernsey	29.36	745.7	29.58	751.3	50	10.0	89	SE			4		8					Squally	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.62	752.3	29.65	753.1	51.0	10.6	84	S	16	7.2			10					Threatening	The Met'g'l Office.
Leicester, Museum	29.32	744.7	29.58	751.3	47.6	8.7	90	SW			4		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.86	758.4	29.94	760.5	61	16.1	66	NW			2		3					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			29.92	760.0	69.5	20.8	95	NW			1		7			Blank		D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.02	737.1	29.54	750.3	48.7	9.3	96	SSE			3		10					Drizzling	Robert Pate.
Oxford, Radcliffe Obs'y	29.35	745.5	29.60	751.8	50.8	10.4	97	SSE			5		10					Showery	The Staff.
Plymouth	29.42	747.3	29.50	749.3	50.2	10.1	98	SSE			5		10					Raining	John Merrifield.
Sandwick Manse, Orkneys			29.67	753.6	35.1	1.7	71	E	36	16.1			10					Overcast	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.76	755.9	29.83	757.7	42.0	5.6	93	NE			3		10					Raining	Serg't W. H. Lyne.
Sheffield	29.23	742.4	29.51	749.5	48.1	8.9	100	S			1		10			0.08	2.0	Misty	W. F. Cooper.
Siloth Rectory	29.39	746.5	29.42	747.3	48.6	9.2	92	Calm			0		10			0.240	6.10	Overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.50	749.3	47.9	8.8	93	S	16	7.2			10					Threatening	Rev. S. J. Perry.
Strathfield Turgiss	29.41	747.0	29.62	752.3	51.2	10.7	92	SW			3		10					Raining	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	29.32	744.7	29.38	746.2	51	10.6	93	S			6		10					Raining	W. Newcombe.
Valencia, Observatory	29.16	740.7	29.19	741.4	49.6	9.8	94	SE	22	9.8			10					Raining	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	29.66	753.4	29.70	754.4	27.7	— 2.4		N	5	2.2			10n			1.00	25.4	Snowing	Hon. J. Ferguson.
Chatham, N. B.*	29.57	751.1	29.63	752.6	25	— 3.9	95	N	12	5.4			10n		N	0.14	3.6	Light snow	G. A. Blair.
Charlottetown, P. E. Island	29.45	748.0	29.49	749.0	26	— 3.3	100	Calm	0	0			10n			0.150	3.81	Light snow	H. J. Cundall, C. E.
Chicontime, Quebec					— 2.1	—18.9		NW			2	0	9s			0.04	1.0	Clearing	Rev. V. A. Huart.
Cornwall, Ontario	30.02	762.5	30.24	768.1	— 6.5	—21.4	100	SW			1		10s			0	0	Cloudy	James Smith, M. A.
Dalhousie, N. B	29.68	753.9	29.71	754.6	24.0	— 4.4		W			1		10ks			0.20	5.1	Cloudy	H. A. Johnson.
Father Point, Quebec*	29.86	758.4	29.88	758.9	9	—12.8	65	NW	5	2.2			10n			0.30	7.6	Cloudy	J. McWilliams.
Fredericton, N. B	29.61	752.1	29.68	753.9	9.1	—12.7	98	NW	18	8.0			10n			0.350	8.89	Snowing	Prof. Harrison
Fort Garry, Manitoba*	29.51	749.5	30.44	773.2	— 2	—18.9	94	SE	8	3.6		Fog	Haze	SE	SE	0.260	6.60	Hazy	James Stewart.
Granton, Ontario	29.25	742.9	30.54	775.7	—15.1	—25.2	19	Calm			0	10s	0			Inap.	Inap	Clear	James Grant.
Halifax, N. S.*	29.42	747.3	29.55	750.6	21	— 6.1	93	NW	4	1.8			Haze			0.450	11.43	Hazy	A. Allison.
Hamilton, Ontario	30.00	762.0	30.46	773.7	—11.2	—24.0	91	SW			1	4c	0			0	0	Fair	Geo. Dickson, B. A.
Kingston, Ontario*	29.96	761.0	30.34	770.6	— 7	—21.7	69	W	2	0.9		10cs	0	Calm		0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	29.43	747.5	29.47	748.5	29.0	— 1.7	97	Calm	0	0			10n			0.20	5.1	Snowing	C. H. Rigby.
Montreal, Quebec*	29.97	761.2	30.20	767.1	— 4	—20.0	86	N	7	3.1			10s			Inap.	Inap.	Light snow	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.67	753.6	30.49	774.4	—13	—25.0	79	W	4	1.8		0	5ks		W	0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.55	750.6	30.42	772.7	—11.3	—24.1		NW			1	0	0			0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.65	753.1	30.45	773.4	—10	—23.3	100	NW	5	2.2		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	29.74	755.4	30.51	774.9	—18	—27.8	84	NW	6	2.7		0	5ks		W	0	0	Fair	M. Payne.
Quebec, Quebec*	29.68	753.9	30.03	762.7	— 3	—19.4	66	W			1		10s		W	0.02	0.5	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.95	760.7	30.48	774.2	— 3	—19.4	86	NW	6	2.7		0	2s		NW	0	0	Fair	W. H. McIntyre.
St. Andrews	29.62	752.3	29.67	753.6	7	—13.9	88	NE	16	7.2			10n			0.67	17.0	Cloudy	
St. John's, N. B	29.45	748.0	29.63	752.6	10.0	—12.2	100	N	8	3.6			10ks			0	0	Cloudy	G. Murdock, C. E.
Saugeen, Ontario*	29.69	754.1	30.52	775.2	—10	—23.3	65	NE	3	1.3		0	0			0	0	Clear	K. Stewart.
Stratford, Ontario	29.00	736.6	30.51	774.9	—16.4	—26.9	94	Calm	0	0		0	0			0	0	Clear	C. J. Macgregor, M. A.
Sydney, C. B*	29.42	747.3	29.46	748.3	26	— 3.3	98	SW	2	0.9			10n			0.37	9.4	Light snow	T. C. Hill, C. E.
Toronto, Ontario*	29.99	761.7	30.43	772.9	— 6	—21.1	100	NW	10	4.5		0	0			0	0	Clear	Magnetic Observatory.
Windsor, N. S	29.42	747.3	29.52	749.8	19.5	— 6.9	92	NW	3	1.3			10n			0.10	2.5	Overcast	
Woodstock, Ontario	29.22	742.2	30.48	774.2	—19.2	—28.4	87	W	6	2.7		0	0			0	0	Clear	Prof. Wolverton.
Yarmouth, N. S.*	29.56	750.8	29.63	752.6	17	— 8.3	66	NW	12	5.4			10s			0.23	5.8	Light snow	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.15	740.4	29.40	746.7	29	— 1.7	100	N	2	0.9			10			0.30	7.6	Overcast	John Delany.
St. Pierre, N. F			29.32	744.7	28.8	— 1.8		NE			2					0	0		N. F. Land, Comd't.

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

CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	30.11	764.8	30.15	765.8	77.2	25.1	47	SSW	28.5	12.7		0	2s			0	0	Hazy	The Staff, for D. Gill.
Cape St. Francis Lt. House	30.25	768.3			66.6	19.2	79	SW	32.1	14.3			10s			0	0	Overcast	John Duthie.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.45	773.4	30.47	774.0	34.7	1.5	72	NNE	1.3	0.6			10			0	0	Covered	M. Marc Dechevrens, S J.

STATIONS.	BAROMETER. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.

COSTA RICA SERIES.

By authority of the MINISTER OF FOREIGN AFFAIRS.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	25.21	665.7	29.93	750 2	63.5	17.5	85	NE			2	9d		NE	0	0	Cloudy	Federico Maison.

DANISH SERIES.

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

Copenhagen	29.88	759.0	29.93	760.2	32.7	0.4	92	SSE	13	6		10							Oversergent Fischer.
Fanöe	29.78	756.4	29.80	756.9	33.1	0.6	100	SSE			4	10					Rain & fog		Overloerer Lauridsen.
Godthaab, Greenland	29.94	760.4	29.98	761.5	21.6	—5.8	74	NE			4	1							S. Kleinschmidt.
Stykkisholm, Iceland	30.24	768.1	30.28	769.1	— 5.8	—21.0	86	E			7	0							A. O. Thorlacius.
Thorshavn,	29.91	759.6	29.94	760.5	33.8	1.0	81	ENE	27	12		7							Overloerer Bergh.
Vestervig	29.71	751.7	29.81	757.1	32.5	0.3		ESE			2	10					Snowing		Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.18	741.1	29.83	757.7	49.6	9.8	79	SSE			1	ck		NE	0.020	0.5			M. Labroue, Director.
Alençon	29.30	744.2	29.85	758.2	48.9	9.4	97	S			1	2kn			0.12	3.	Slightly cl'dy		M. Nicot, Director.
Arras, Engineer School	29.74	755.3	30.00	761.9	46.2	7.9	97	SW	13.0	5.8									M. Klein, Commandant.
Avignon, Normal School	29.95	760.8	29.99	761.8	52.7	11.5	61	NNE			1	0			0	0	Very clear		M. Giraud, Director.
Bar-sur-Seine	29.36	745.8	29.92	760.0	49.8	9.9	73	S			1	5cu			0	0	Cloudy		M. Saillard, Director.
Beauvais, Normal School	29.58	751.2	29.84	758.0	48.7	9.3	92	SSE			1	10			0.059	1.75	Covered		M. Frère Eugene Marie.
Besançon, Normal School	29.09	738.8	30.00	761.9	46.4	8	81	SSE			1	0			0	0	Clear		M. Gobin, Director.
Bordeaux, Observatory	29.51	749.5	29.77	756.1	55.6	13.1	67	S			2	8			0	0	Very cloudy		M. Rayet, Director.
Bourges, Normal School	29.28	743.6	29.84	757.8	45.5	7.5	80	ESE			1	8		ESE	0.43	11.			M. Postel, Director.
Brest, Naval Observatory	29.34	745.1	29.58	751.3	51.4	10.8	97	S			3	9		SW	0.591	15.00			M. de Rermaree, Dir.
Caen, Normal School	29.56	750.9	29.64	752.9	54.7	12.6	87	SE			2	10			0	0	Covered		M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.54	750.2	29.85	758.3	48.9	9.4	89	S			1	8			0.098	2.5	Very cloudy		M. Jadot, Director.
Charleville, Normal School	29.37	745.9	29.91	759.8	46.0	7.8	72	S			1	10			0	0	Covered		M. Grimard.
Clermont-Ferrand Obs'y	28.54	725.0	29.90	759.4	53.8	12.1	58	S			1	5			0	0	½ covered		M. Allnard, Director.
Cluny, Normal School	29.15	740.4	30.00	761.9	51.8	11	73	NW			2	1			0	0			M. de Villemontée, Dir.
Commercy, Normal School	29.09	738.9	29.98	761.5	43.0	6.1	91	SE			1	n		SE	0.063	1.6			Dr. Coulet, Director.
Gap, Normal School	27.48	698.1	30.08	764.1	41.0	5.0	69	NW			2				0	0			M. Jeangirard, Director.
Gréasque, du. Rhone	28.94	735.1	30.08	764.1	56.7	13.7	45	NE			1	2		NE	0	0	¼ covered		M. Kina, Director.
Grenoble, Normal School	29.26	743.3	30.04	763.1	46.8	8.2	79	NE			1	s			0	0			M. Ablard, Director.
Guéret, Normal School	28.31	719.0	29.87	758.6	57.2	14	78	SE			1	5c		NW	0	0	Cloudy		M. Rivoir, Director.
Lamballe, Normal School	29.35	745.6	29.65	753.0	55.8	13.2	76	SE			2	n		SE	0.047	1.2			M. Ollitrault, Director.
Lescar, Normal School	29.20	741.6	29.85	758.3	54.9	15.2	75	ENE			1	2		W	0	0	Slightly cl'y		M. Chauvin, Director.
Lorient, Naval Observatory	29.56	750.9	29.67	753.5	49.6	9.8	10b	SSE			3	10			0.110	2.8	Covered		Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.92	734.6	29.95	760.8	50.0	10.0	56	S			1	8cs	NNW	SSE	0	0	Very cloudy		M. André, Director.
Mans, Normal School	29.50	749.3	29.81	757.2	52.3	11.3	86	SSW			3	8		S	0.205	5.2	Very cloudy		M. Piboon, Director.
Marseille, Observatory	29.74	755.5	30.02	762.4	59.5	15.3	58	S			1	2		NW	0	0			M. Stephan, Director.
Montlouis l'Institutour	24.76	628.9	30.00	761.9	37.8	3.2	73	SW	11.2	5.0		5		NW	0	0			M. Cave, for Dr. Fines.
Montpellier, Normal School	29.85	758.3	29.97	761.1	53.6	12	57	N			2	5		NW	0	0	Cloudy		M. Galzin, Director.
Nancy, Normal School	29.22	742.3	30.00	761.9	42.1	5.6	91	SSW			1	10nk		S	0	0	Covered		M. Hasse.
Nantes, Observatory	29.56	750.9	29.72	755.0	54.3	12.4	78	ESE			2	8n		W	0.055	1.4			M. Lætocque, Director.
Nice	30.02	762.5	30.06	763.4	56.5	13.6	71	SE			3	2	SE	SE	0	0	Slightly cl'dy		Capt. Boissière, Director.
Perpignan, Observatory	29.83	757.7	29.94	760.4	53.6	12.0	66	SE	7.4	3.3		3	NW		0	0			Dr. Fines.
Pic-du-Midi, Plantade	22.38	568.4			33.8	1.0						10		W	0.035	0.9	Snowy		M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.99	736.3	30.07	763.8	49.1	9.5	79	N			1	1	N	N	0	0	Clear		M. Taillen.
Puy de Dôme Obs'y, Summit	25.02	635.6			37.0	2.8	94	S			2	5		W	0.094	2.4	Foggy		M. Allnard, Director.
Rochefort, Naval Obs'y	29.73	755.1	29.76	755.9	54.7	12.6	76	SW			1	8		SSE	0	0	¾ covered		Lt. E. Decanie, Director.
Roche-sur-Yon, N. School	29.58	751.3	29.80	756.8	52.0	11.1	80	ESE			2	5		SW	0.031	0.8	Cloudy		M. Mouillot, Director.
Rodez, Normal School	27.85	707.3	30.01	762 2	50.7	10.4	56	E			1	2c		E	0	0			M. Richard, Director.
Rouen, Normal School	29.69	754.0	29.77	756.1	50.7	10.4	40	SSE			1	0			0.16	4.	Clear		M. Platrier, Director.
Saint Lô, Normal School	29.54	750.3	29.70	754.3	54.5	12.5	75	SSW			1	8		SW	0.28	7.	Very cloudy		M. Delaplanche, Dir.
Saint Maur, Observatory	29.69	754.0	29.85	758.2	50.4	10.2	87	S			1	10		SW	0.020	0.5			M. Renou, Director.
Toulouse, Observatory	29.18	741.1	29.90	759.4	56.3	13.5	81	SSE			3	0			0	0	Clear		M. Baillard, Director.
Tours	29.59	751.6	29.79	756.6	55.4	13.0	73	SE			1	5		SW	0.075	1.9	½ covered		M. de Tastes.
Versailles, Observatory	29.34	745.2	29.84	757.8	48.9	9.4	92	S			1				0	0			Dr. A. Bérigny, Director
SUB-SERIES.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

GERMAN SERIES.

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

Bamberg	29.15	740.3	30.01	762.2	40.1	4.5	84	SE			3	2k	SW		0	0			Prof. Dr. Hoh.
Berlin	29.79	756.6	29.97	761.1	42.4	5.8	71	SW			1	9			0	0			Prof. Dr. Arndt.
Breslau	29.55	750.5	30.08	764.0	34.7	1.5	98	SE			1	8	W		0	0			Royal University Obs'y.
Carlsruhe	29.59	751.6	30.02	762.6	45.0	7.2	68	ESE			0	7	SW		0	0			Albert Senx.
Cassel	29.34	745.3	29.95	760.8	42.1	5.6	86	SW			2	8	SW		0	0			Dr. H. Möhl.
Frankfort on the Main	29.70	754.4	30.08	764.0	40.6	4.8	92	S			0	10			0.012	0.3			Physical Society.
Friedrichshafen	28.59	726.1	30.08	764.0	36.3	2.4	89	NW			1	10			0	0	Hazy		Chief Telegrapher Wilhelm.
Hamburg	29.83	757.6	29.90	759.4	38.8	3.8	94	S			2	1c			0.110	2.8			Dr. R. Kleeman.
Kiel	29.86	758.5	29.88	758.9	35.8	2.1	95	Calm			0	1c			0.034	0.87			Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.56	750.8	29.99	761.8	41.9	5.5	76	SW			2	8	SW		0	0			Prof. Dr. Bruhns.
Magdeburg	29.72	754.8	29.95	760.8	38.7	3.7	88	SE			2	8ks	WSW		0.008	0.2	Light fog		Dr. Assmann.
Memel	30.05	763.2	30.10	764.4	32.0	0	98	W			2	10n			0	0			Reinbrecht & Issermann.
Munich	28.18	715.7	30.04	763.0	39.4	4.1	92	Calm			0	2	N		0	0			Central Station.
Neufahrwasser	30.08	764.1	30.10	764.5	32.5	0.3	92	SSW			1	10			0	0			A Lothes.
Neustadt, Palatinate	29.38	746.2	29.90	759.5	43.3	6.3	86	S			1	10			0	0	Light fog		Dickmether.
Stuttgart	29.02	737.2	29.93	760.3	45.5	7.5	66	S			1	1	W		0	0			Prof. Dr. Schoder.
Thorn	29.89	759.1	30.08	763.9	31.8	—0.1	96	SW			2	10			0	0			Dr. O. Cunerth.
Weissenburg, Bavaria	28.49	723.7	30.01	762.3	37.8	3.2	92	SE			2	9			0	0			Prof. Kemlein.
Wustrow	29.90	759.4	29.92	760.0	33.1	0.6	98	SE			2	10s			0	0			Profs. Brandes & Reimer.

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

GREEK SERIES.

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

Athens	29.35	745.4	29.75	755.6	50.7	10.4		NE			1.0		10			Bla	nk	Covered	Schmidt & Wourlisch.

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	29.96	760.8	30.01	762.1	75.5	24.2	87	S	40.0	17.9			0			0	0	Blue sky	
Deesa	29.50	749.3	29.98	761.4	85.2	29.6	15	WNW	7.0	3.1			0			0	0	Misty	
Bombay	29.94	760.5	29.98	761.4	80.6	27.0	60	NW	16.0	7.2			0			0	0	Blue sky	
Poona, Yarrowda	28.10	713.7	29.95	760.6	84.8	29.3	15	WNW	4.0	1.8			2			0	0	D. clouds	
Belgaum	27.41	696.3	29.94	760.4	80.3	26.8	36	WSW	3.0	1.3			3	SW	N	0	0	D. clouds	
Lahore	29.24	742.7	30.00	761.9	72.6	22.6	25	Calm	1.2	0.5			0			0	0	Blue sky	
Roorkee	29.05	737.9	29.97	761.2	70.8	21.6	33	Calm	0.7	0.3			0			0	0		
Agra	29.40	746.9	29.97	761.2	79.3	26.3	25	W	3.0	1.3			0			0	0		
Nagpur	28.91	734.4	29.95	760.8	83.3	28.5	33	S	2.9	1.3			4	SW		0	0	D. clouds	
Jubbulpore	28.61	726.7	30.00	761.9	74.3	23.5	45	NW	2.3	1.0			0			0	0	Blue sky	
Lucknow	29.56	750.9	29.94	760.6	78.2	25.7	38	WNW	1.1	0.5			0			0	0	Blue sky	
Allahabad																			
Patna	29.83	757.6	30.01	762.3	68.6	20.3	55	W	0.7	0.3			0			0	0	Blue sky	
Hazaribagh	27.94	709.6	29.99	761.8	68.6	20.3	29	NW	5.6	2.5			0			0	0	Blue sky	
Cuttack	29.92	760.0	30.01	762.2	78.8	26.0	41	SW	0.2	0.1			0			0	0	Blue sky	
Calcutta, Alipore	29.95	760.8	29.98	761.4	70.7	21.5	46	Calm	0	0			0			0	0	Blue sky	
Goalpara	29.53	749.9	29.94	760.5	68.6	20.3	44	W	1.4	0.6			0			0	0	Blue sky	
Chittagong	29.92	760.0	30.01	762.3	72.8	22.7	60	WSW	2.8	1.2			0			0	0	Blue sky	
Sibsagar	29.65	753.1	30.00	761.9	63.7	17.6	79	SW	3.3	1.5			4			0	0	Blue sky	

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.67	753.6	30.09	764.3	48.2	9.0	53	Calm	0	0			1			0	0		Prof. Giovanni Clodig
Milan	29.55	750.5	30.08	764.1	34.9	1.6	87	SW	1.3	0.6			4			0	0		Prof. Schiaparelli.
Padua	29.95	760.8	30.06	763.6	45.9	7.7	68	NNW	0.7	0.3			1			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.16	740.7	30.10	764.6	33.1	0.6	88	E	0.7	0.3			0			0	0		Prof. P. F. Denza.
Genoa	29.87	758.7	30.06	763.6	54.9	12.7	69	SW	2.5	1.1			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.13	714.5	30.10	764.4	39.9	4.4	54	NNW			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.02	762.4	30.07	763.7	46.4	8.0	75	NW	15.4	6.9			2	SW		0	0		Prof. Luigi Guidi.
Florence	29.78	756.3	30.04	762.9	50.4	10.2	57	NW			2		0			0	0		Cav. F. Meucci.
Leghorn	29.97	761.2	30 05	763.3	52.7	11.5	65	NNE	3.1	1.4			2			0	0		Prof. P. Monte.
Rome	29.80	756.9	29.98	761.4	55.2	12.9	46	NNW	10.5	4.7			1			0	0		Prof. P. S. Ferrari.
Lecce	29.64	752.8	29.89	759.3	51.3	10.7	84	NNW	12.5	5.6			3	N		0	0		Prof. C. de Giorgi.
Cosenza	29.04	737.5	29.93	760.3	51.1	10.6	71	SE	0.7	0.3			9	E		0	0		Prof. D. Conti.
Cagliari	29.82	757.4	30.02	762.4	57.6	14.2	48	NW			2		0			0	0		Prof. A. Pacinotti.
Palermo	29.73	755.1	29.98	761.5	55.2	12.9	67	NW	11.2	5.0			10	NW		0.252	6.4		Prof. G. Cincciatore.
Syracuse	29.84	758.0	29.89	759.1	57.6	14.2	63	WSW	6.3	2.8			9	WSW		0	0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.42	747.3	29.95	760.8	53.2	11.8	58	NNE	3.1	1.4			1	E		0	0		Prof. F. Brioschi.
Stelvio	22.13	562.0			19.4	— 7.0	70	S			2		1cs			0	0	Clear.	P. F. Denza.
Valdobbia	22.10	561.2			21.4	— 5.9	69	NNW			2	1c	0			0	0	Clear.	

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	30.21	767.3	30.22	767.6	35.7	2.1	70	NE	4.3	1.9			0			0	0	Clear	K. Sasaki.
Kioto	29.95	760.7	30.13	765.3	36.7	2.6	69					8s;ks,ck			NNW	0.006	0.15	Fair	
Nagasaki, I. M. Obs'y	30.08	764.0	30.30	769.6	37.6	3.1	67	NW	2.2	1.0		1c				0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.70	754.4	29.77	756.1	44.6	7.0	64	NNW	12.1	5.4		1ck				0.715	18.16	Fair	The Staff.
Wakayama	30.09	764.3	30.15	765.8	40.2	4.6	70	N	7.8	3.5		ck	10s			0.110	2.79	Cloudy	S. Iwahashi.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.90	759.4	30.09	764.4	79.3	26.3	58	E	24.0	10.7		2	2	NNW	ESE	0.05	1.3	Squally	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Leon	24.46	621.3	30.23	767.8	53.2	11.8	85	NW			1	7c	0	SW		0	0	Cloudy	Prof. M. Leal.
Mazatlan	29.74	755.3	30.00	761.9	69.8	21.0	87	N	0	0		7cs	0			0	0	Cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.10	586.7	30.33	770.4	50.0	10,0	83	Calm	0	0		0	8ks			0	0	Cloudy	The Staff.
Pabellon, Aguascalientes	23.94	608.0	30.03	762.8	51.1	10.6	83	Calm				0	2ks			Inap.	Inap.	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.37	593.5	30.22	767.5	46.8	8.2	45	Calm	0	0		0	2		E	0	0	Clear	Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam	30.04	763.0	30.05	763.3	68.0	20.0	89	Calm	0	0		2	8	E	SW	0	0	Threatening	Prof. M. Cházaro.
Zacatecas	22.55	572.8	30.28	769.3	46.4	8.0	76					0	8ks			0	0	Very cloudy	J. A. Bonilla, M. E.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	29.80	756.9	29.80	756.9	43.3	6.3		S			4					0.055	1.4		
Groningen	29.78	756.5	29.84	757.9	41.0	5.0		SSW			2					0.224	5.7		
Helder	29.78	756.4	29.78	756.4	41.4	5.2		S			5					0	0		
Hellevoetsluis	29.81	757.1	29.81	757.1	43.5	6.4	96	S			2					0.098	2.5		
Utrecht	29.80	756.9	29.85	758.1	44.2	6.8	90	S			2		10			0.012	0.3	Dull	H. van der Brink

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

NORWEGIAN SERIES.

Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.

Bergen	29.76	755.8	29.82	757.4	34.9	1.6	69	Calm	0	0			6			0	0		
Christiania	29.87	758.8	30.03	762.8	18.0	— 7.8	77	NE	4	2			9			0.051	1.3		
Gjæsvær	29.94	760.4	29.95	761.0	10.2	—12.1		S			2		10						
Lodingen	29.97	761.3	30.02	762.5	9.0	—12.8	84	NNE			2		3			0	0		

PORTUGUESE SERIES.

Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Angra, Azores	29.93	760.1	30.08	764.1	56.5	13.6	86	W	9.8	4.4			2			0.236	6.0		Dr. J. A. Sampaio.
Campo Major	28.87	733.3	29.87	758.8	55.0	12.8	90	SSW	13.6	6.1			10			0.039	1.0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.03	762.7	30.11	764.8	68.0	20.0	69	W	8.7	3.9			2			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.48	748.7	29.84	757.9	55.0	12.8	94	SW	19.2	8.6			10			0.150	3.8		The Staff.
Ponta Delgada, Azores	30.05	763.3	30.12	765.1	62.2	16.8	64	W	2.5	1.1			4			0.024	0.6		

RUSSIAN SERIES.

Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.

Akmolinski	28.90	734.0	30.05	763.2	19.8	— 6.8	75	SE	4	2			10						Capt. Lasarew.
Archangel	29.88	758.9	29.90	759.4	6.4	—14.2	87	N	4	2			6ks						Capt. Sselliwerstow.
Astrakhan	30.28	769.1	30.20	767.0	20.3	— 6.5	97	N	2	1			10cp					Heavy cld's	Capt. Wisganow.
Barnaul	29.92	760.0	30.49	774.5	— 3.6	—19.8	73	Calm	0	0			7					Light clouds	Meteorological Obs'y.
Dorpat	29.71	754.5	29.96	761.0	24.1	— 4.4	91	WNW	7	3			10n						Observatory.
Ekaterinburg	28.94	735.1	29.99	761.7	7.3	—13.7	83	SE	2	1			10					Light clouds	Meteorological Obs'y.
Kasan	29.74	755.3	30.03	762.7	18.1	— 7.7	81	SW	2	1			10						Observatory.
Kertch	29.94	760.5	29.96	761.0	32.0	0.0	92	E	7	3			10						Lagorio.
Kieff	29.41	746.9	30.08	764.0	26.6	— 3.0	100	NW	2	1			10n						Cand. Fatjanow.
Lugan	29.93	760.1	30.14	765.5	29.8	— 1.2	88	ENE	4	2			10						Meteorological Obs'y.
Moscow	29.42	747.2	30.00	762.0	25.2	— 3.8	87	S	4	2			10s						Meteorological Obs'y.
Nertchinsk	27.86	707.6	30.45	773.3	— 6.2	—21.2	72	NW	9	4			10					Light clouds	Meteorological Obs'y.
Nikolaiev	29.99	761.7	30.06	763.5	30.7	— 0.7	100	NE	13	6			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	30.06	763.5	30.15	765.7	—13.4	—25.2	68	W	2	1			10						Lieut. Iwanow.
Nukuss	29.76	756.0	30.01	762.2	37.4	3.0	90	NW	4.5	2.0			5k						Dr. Dobrochotow.
Pekin, China	30.37	771.4	30.51	775.0	18.3	— 7.6	30	Calm	0	0			2cs					Lunar corona	Physical Observatory.
St. Petersburg	29.82	757.5	29.84	757.9	18.7	— 7.4	95	WNW	11	5			10n					Snowing	Central Physical Obs'y.
Tashkend, Laboratory	28.47	723.1	30.04	763.1	55.4	13	62						0			Blank			Teich, A. M.
Tiflis	28.67	728.2	30.13	765.2	42.3	5.7	80	S	4	2			10						Physical Observatory.
Warsaw	29.69	754.0	30.13	765.3	32.7	0.4	98	Calm	0	0			10					Foggy	Astronomical Obs'y.
Wilna	29.66	753.3	30.10	764.4	33.6	0.9	84	WSW	2	1			10					Heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.23	767.9	30.56	776.1	4.1	—15.5	76	Calm	0	0			0						M. O. Marks.

SCOTTISH SERIES.

Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.

Leith, Restalrig Park			29.46	748.3	36.2	2.3	100	E			1		10k			0.43	10.9	Rain & fog..	Andrew Gibb.
Monach Lt. House, Hebrides			29.34	745.2	39	3.9	91	E			4		10			0.5	13.	Overcast	J. Youngclause.
North Unst, Shetland Isl'ds			29.91	759.7				NE			4		10			0	0		Robert Burnet.

SPANISH SERIES.

Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.

Barcelona, Met. Obs'y	29.85	758.4	29.97	761.1	58.6	14.8	71	SSE	2.0	0.9		10				0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.67	753.5	29.72	755.0	59.0	15.0	61	S	3.8	1.7		1	8	W		0	0	Almost cov'd	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.88	682.7			50.9	10.5	71	S	4.9	2.2		0	5			0	0	Cloudy	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.70	703.6	29.94	760.5	53.8	12.1	78	SE	13.0	5.8		0	7			0	0	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.85	758.2	30.00	762.0	62.6	17.0	72	SE	1.1	0.5		5	5	SE		0	0	Covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.64	727.4	29.53	750.1	49.6	9.8	95	SE	12.5	5.6			10			1.799	45.7	Raining	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	29.93	760.2	29.99	761.8	73.4	23.0	80	NNW	9.8	4.4		c	9n		N	0.012	0.3	Cloudy	Benito Vines, S. J.
Manilla, Phillippine Islands	29.98	761.6	30.03	762.9	80.6	27.0	75	SE	2.2	1.0						0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.93	760.3	30.03	762.8	60.3	15.7	87	SW	5.2	2.3			10		WSW	0.136	3.5		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.90	759.4	29.99	761.7	72.0	22.2	88	SW	1.1	0.50		2s	0	SW		0	0	Clear	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.97	761.2	30.12	764 9	72.2	22.3	80	NW	5.7	2.6		2ck		SW		0	0	Fair	José L. Fastovra.

SWEDISH SERIES.

Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.

Haparanda	30.08	763.9	30.11	764.9	—16.2	—25.8	100	N			2		0			0	0		
Umea	30.03	762.7	30.08	764.0	— 2.9	—19.4	50	NW			2		9			0	0		
Hernosand	30.05	763.3	30.10	764.6	5.9	—14.5	87	NNE			2		8			0	0		
Stockholm	29.82	757.4	30.00	761.9	15.4	— 9.2	88	NNE			2		10			0.071	1.8	Snowing	
Wisby	29.85	758.3	29.91	759.8	33.1	0.6	92	WSW			2		10			0.020	0.5		
SUB-SERIES.																			
Upsala	29.91	759.7	30.00	761.9	13.3	—10.4	85	NNE	5.4	2.4			10			0.002	0.05	Snowing	Nils Ekholm.

SWISS SERIES.

Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.

Geneva	28.62	725.9	30.10	764.5	36.7	2.6	86	SW			1		10			0	0	Foggy	The Observatory.
Zurich	28.39	721.1	30.09	764.3	34.9	1.6	89	W			1		7			0	0	Foggy	The Observatory.

At Geneva the corresponding departures from the normal values are: Bar. —0.2 mm.; Ther. +0°.0 cent.; Hum. —11 per cent.

TURKISH SERIES.

Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.

Constantinople			29.87	758.7	40.8	4.9	93	N	19	8.5		10		N		0.181	4.6	Raining	The Observatory.
Valona			29.83	757.6	57.7	14.3		NW			1	5				0	0	Cloudy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.83	757.7	59.5	15.3	77	SW			3	10n		SW		0.07	1.8		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES.																			
By authority of the Secretary of War.																			
Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	30.17	766.3	30.26	768.6	4	—15.6	74	NW	6	2.7		0	0			0	0	Clear	
Alpena, Michigan	29.83	757.7	30.61	777.5	—20	—28.9	64	N	6	2.7		0	0			0	0	Clear	
Atlanta, Georgia	28.95	735.3	30.16	766.1	33	0 6	61	E	6	2.7			10s		Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.21	767.3	30.23	767.8	— 1	—18.3	67	NW	8	3.6		0	0			0	0	Clear	
Atton Id., Alaska‡	30.26	768.6			28	— 2.2	77	N	19	8.5			10s		N	0.09	2.3	Cloudy	
Augusta, Georgia	30.06	763.5	30.27	768.8	28	— 2.2	66	SE	3	1.3		8c;k	0	S;NW		0	0	Fair	
Baltimore, Maryland	30.22	767.6	30.28	769.1	9	—12.8	78	NW	7	3.1		8cs	Fog	NW	Calm	0	0	Fair	
Barnegat, New Jersey	30.16	766.1	30.19	766.8	— 2	—18.9	67	NW	12	5.4		0	0			0	0	Clear	
Benton, Montana	26.86	682.2			46	7.8	62	W	10	4.5			10s		Calm	0	0	Cloudy	
Bismarck, Dakota	28.25	717.5	30.11	764.8	16	— 8.9	83	E	8	3.6			10s		Calm	0	0	Cloudy	
Boise City, Idaho	27.05	687.1	30.01	762.2	40	4.4	91	SE	12	5.4			10n		Calm	0.89	22.6	Light rain	
Boston, Massachusetts	29.80	756.9	29.98	761.5	— 1	—18.3	68	W	15	6.7		0	0			0	0	Clear	
Brackettville, Texas	28.67	728.2	29.84	757.9	46	7.8	84	E	4	1.8		0	0			0	0	Clear	
Brownsville, Texas	29.95	760.7	29.99	761.7	57	13.9	94	Calm	0	0			10s		Calm	0	0	Cloudy	
Buffalo, New York	29.60	751.8	30.42	772.7	— 7	—21.7	59	SW	6	2.7			10s		Calm	Inap.	Inap.	Cloudy	
Burlington, Vermont	29.96	761.0	30.29	769.4	— 2	—18.9	67	E	11	4.9			10s		E	0	0	Cloudy	
Cairo, Illinois	29.78	756.4	30.20	767.1	29	— 1.7	78	Calm	0	0		0	1s		Calm	0	0	Clear	
Campo, California	27.43	696.7	30.00	762.0	37	2.8	81	NW	4	1.8		0	0			0	0	Clear	
Camp Thomas, Arizona	27.28	692.9			36	2.2	71	E			1	0	0			0	0	Clear	
Cape Henry, Virginia	30.23	767.8	30.24	768.1	20	— 6.7	70	NE	10	4.5		0	0			0	0	Clear	
Cape May, New Jersey																			
Castroville, Texas																			
Cedar Keys, Florida	30.06	763.5	30.09	764.3	40	4.4	82	N	8	3.6		8c	0	NE		Inap.	Inap.	Fair	
Champaign, Illinois	29.36	745.7	30.23	767.8	18	— 7.8	68	NE	6	2.7			10n		NE	0.02	0.5	Light snow	
Charleston, S. Carolina	30.15	765.8	30.21	767.3	28	— 2.2	66	N	12	5.4		0	8s		N	0	0	Cloudy	
Charlotte, N. Carolina	29.34	745.2	30.22	767.6	23	— 5.0	73	E	2	0.9		10cs	Sm'e	W	Calm	0	0	Cloudy	
Chattanooga, Tennessee	29.33	745.0	30.16	766.1	33	0.6	79	Calm	0	0		10ck	Sm'e	W	Calm	0	0	Cloudy	
Cheyenne, Wyoming	24.00	609.6	29.94	760.5	40	4.4	56	W	2	0.9		0	0			0	0	Clear	
Chicago, Illinois	29.60	751.8	30.36	771.1	12	—11.1	80	SE	12	5.4			10n		Calm	0.01	0.3	Light snow	
Chincoteague, Virginia	30.23	767.8	30.25	768.3	8	—13.3	78	N	12	5.4		1k	2s	W	Calm	0	0	Fair	
Cincinnati, Ohio	29.62	752.3	30.33	770.4	18	— 7.8	68	NE	7	3.1			10s		Calm	Inap.	Inap.	Cloudy	
Cleveland, Ohio	29.65	753.1	30.48	774.2	— 2	—18.9	84	NE	4	1.8		8ck;cs	Sm'e	W		0	0	Fair	
Coleman City, Texas	28.18	715.8	29.89	759.2	40	4.4	65	SW	8	3.6		0	0			0	0	Clear	
Columbus, Ohio	29.46	748.3	30.40	772.1	8	—13.3	78	NE	8	3.6			10s		Calm	0	0	Cloudy	
Concho, Texas	28.04	712.2	29.75	755.6	41	5.0	82	Calm	0	0		0	0			0	0	Clear	
Corsicana, Texas	29.61	752.1	30.09	764.3	40	4.4	73	Calm	0	0		0	5s		Calm	0	0	Fair	
Davenport, Iowa	29.58	751.3	30.28	769.1	13	—10.6	90	E	13	5.8			10n		Calm	0.08	2.0	Light snow	
Dayton, Washington T'y	27.99	710.9	29.64	752 8	43	6.1	100	Calm	0	0			10n		Calm	0.63	16.0	Light rain	
Deadwood, Dakota	25.24	641.1			33	0.6	70	W	1	0.4		0	0			0	0	Clear	
Decatur, Texas	28.80	731.5	30.01	762.2	38	3.3	72	NE	8	3.6		0	2s		Calm	0	0	Fair	
Delaware Breakwater, Del.	30.20	767.1	30.22	767.6	9	—12.8	78	NW	17	7.6		0	0			0	0	Clear	
Denison, Texas	29.19	741.4	30.01	762.2	40	4.4	82	SE	6	2.7		0	5s		Calm	0	0	Fair	
Denver, Colorado	24.76	628.9	29.98	761.5	40	4.4	73	SE	3	1.3		0	8s		Calm	0	0	Fair	
Des Moines, Iowa	29.29	744.0	30.24	768.1	17	— 8.3	83	SE	8	3.6			10s		Calm	0	0	Cloudy	
Detroit, Michigan	29.72	754.9	30.49	774.4	— 3	—19.4	82	N	5	2.2		10k	0	NE		0	0	Cloudy	
Dodge City, Kansas	27.35	694.7	29.70	754.4	35	1.7	70	W	4	1.8		0	0			0	0	Clear	
Dubuque, Iowa	29.58	751.3	30.35	770.9	14	—10.0	91	E	5	2.2			10n		Calm	0.19	4.8	Light snow	
Duluth, Minnesota	29.79	756.7	30.57	776.5	4	—15.6	87	NE	16	7.2		0	0			0.79	20.1	Clear	
Eagle Pass, Texas	29.20	741.7	29.95	760.7	45	7.2	84	SE	1	0.4		0	0			0	0	Clear	
Eagle Rock, Texas	25.26	641.6	29.92	760.0	42	5.6	83	SW	10	4.5			10s		S	0.04	1.0	Cloudy	
Eastport, Maine	29.61	752.1	29.68	753.9	8	—13.3	78	NW	16	7.2			10s		NW	0.25	6.3	Cloudy	
Edinburg, Texas					55	12.8	87	S			1	0	0			0	0	Clear	
El Paso, Texas	26.25	666.7			42	5.6	42	NW	2	0.9		0	0			0	0	Clear	
Erie, Pennsylvania	29.62	752.3	30.43	772.9	— 8	—22.2	58	SW	5	2.2		Haze	Haze	Calm		0	0	Light haze	
Escanaba, Michigan	29.85	758.2	30.63	778.0	—15	—26.1	100	N	6	2.7		0	0			0	0	Clear	
Florence, Arizona	28.48	723.4	30.08	764.0	49	9.4	71	Calm	0	0		0	0			0	0	Clear	
Fort Apache, New Mexico	25.07	636.8	30.52	775.2	34	1.1	52	NE	3	1.3		0	1s		Calm	0	0	Clear	
Fort Assinniboine, Montana	26.81	681.0			40	4.4	73	SW	2	0.9		5cs	0	Calm		0	0	Fair	
Fort Bennett, Dakota	28.43	722.1			15	— 9.4	65	SE	5	2.2		5cs	0	Calm		0	0	Fair	
Fort Buford, Dakota	27.91	708.9	29.85	758.2	20	— 6.7	85	Calm	0	0		10cs	0	Calm		0	0	Cloudy	
Fort Custer, Montana	26.59	675.4			35	1.7	80	S	6	2.7		0	0			0	0	Clear	
Fort Davis, Texas	25.18	639.6	30.14	765.5	40	4.4	56	Calm	0	0		0	0			0	0	Clear	
Fort Elliott, Texas	27.27	692.6	29.62	752.3	36	2.2	53	NE	8	3.6		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.49	749.0	30.05	763.3	30	— 1.1	89	Calm	0	0		0	0			0	0	Clear	
Fort Grant, Arizona	25.23	640.8	30.03	762.7	53	11.7	36	NE	9	4.0		0	0			0	0	Clear	
Fort Griffin, Texas	28.62	726.9	29.92	760.0	39	3.9	64	NW	4	1.8		0	5s		Calm	0	0	Fair	
Fort Keogh, Montana	27.28	692.9			30	— 1.1	79	Calm	0	0			10s		Calm	0.02	0.5	Cloudy	
Fort McKavett, Texas	27.70	703.6	29.66	753.4	40	4.4	82	W	5	2.2		1cs	0	Calm		0	0	Clear	
Fort Macon, North Carolina	30.22	767.6	30.23	767.8	21	— 6.1	86	N	17	7.6		5c	5s	W	Calm	0	0	Cloudy	
Fort St. Michaels	29.87	758.7	29.91	759.7	—16	—26.7	100	N	40	17.9		0	0						
Fort Missoula, Montana	26.49	672.8			35	1.7	100	S	1	0.4			10n		Calm	0.26	6.6	Light rain	
Fort Shaw, Montana	26.04	661.4			44	6.7	76	SW	14	6.3		0	0			0	0	Clear	
Fort Sill, Indian Territory	28.75	730.2	29.90	759.4	33	0.6	79	N	6	2.7		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.21	715.5			17	— 8.3	83	NE	4	1.8			10ks		NE	0	0	Cloudy	
Fort Verde, Arizona					36	2.2	46	N			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.22	716.8	29.81	757.2	44	6.7	76	NW	1	0.4		0	0			0	0	Clear	
Galveston, Texas	30.01	762.2	30.05	763.3	54	12.2	93	SE	4	1.8			10s		SE	0	0	Cloudy	
Grand Haven, Michigan	29.74	755.4	30.47	773.9	6	—14.4	76	E	10	4.5			10s		NW	0	0	Cloudy	
Hatteras, North Carolina	30.16	766.1	30.19	766.8	25	— 3.9	87	NE	26	11.6		0	0			0	0	Clear	
Helena, Montana	25.66	651.8			41	5.0	76	Calm	0	0		8k	0	Calm		0	0	Cloudy	
Henrietta, Texas	28.98	736.1	29.95	760.7	36	2.2	80	NE	5	2.2		0	5s		Calm	0	0	Fair	
Indianapolis, Indiana	29.44	747.8	30.30	769.6	14	—10.0	73	NE	5	2.2			10s		Calm	0.02	0.5	Cloudy	
Indianola, Texas	30.02	762.5	30.04	763.0	52	11.1	93	SE	4	1.8		0	0			0	0	Clear	
Jacksboro, Texas	28.81	731.8	29.97	761.2	42	5.6	66	Calm	0	0		0	5s		Calm	0	0	Fair	
Jacksonville, Florida	30.09	764.3	30.14	765.5	40	4.4	73	N	8	3.6		2cs	0	Calm		0	0	Clear	
Keokuk, Iowa	29.48	748.8	30.18	766.6	23	— 5.0	73	NE	8	3.6			10s		Calm	0.02	0.5	Cloudy	
Key West, Florida	29.98	761.5	30.02	762.5	67	19.4	79	N	12	5.4		1k	0	N		0	0	Clear	
Kittyhawk, North Carolina	30.19	766.8	30.22	767.6	23	— 5.0	86	N	24	10.7		2c	0	N		0.01	0.3	Clear	
Knoxville, Tennessee	29.11	739.4	30.17	766.3	30	— 1.1	78	NE	3	1.3			10s		Calm	0	0	Cloudy	
La Crosse, Wisconsin	29.59	751.6	30.40	772.1	14	—10.0	64	E	8	3.6			10s		Calm	0.31	7.9	Cloudy	
La Mesilla, New Mexico	26.14	663.9	30.29	769.4	37	2.8	53	N	1	0.4		0	0			0	0	Clear	
Laredo, Texas	29.52	749.8	29.87	758.7	52	11.1	86	Calm	0	0		0	0			0	0	Clear	
Leavenworth, Kansas	29.18	741.1	30.07	763.8	28	— 2.2	88	Calm	0	0			10s			0	0	Cloudy	
Lewiston, Idaho	28.93	734.8	29.58	751.3	36	2.2	100	S	1	0.4			10n		Calm	0.64	16.3	Light rain	
Little Rock, Arkansas	29.78	756.4	30.11	764.8	33	0.6	89	Calm	0	0		5k	Fog	Calm	Calm	0	0	Fair	
Los Angeles, California	29.62	752.3	29.98	761.5	52	11.1	86	E	5	2.2		0	0			0	0	Clear	
Louisville, Kentucky	29.63	752.6	30.23	767.8	22	— 5.6	86	NE	9	4.0			10s		Calm	Inap.	Inap.	Cloudy	
Lynchburg, Virginia	29.55	750.6	30.29	769.4	21	— 6.1	86	Calm	0	0		8ck	0	Calm		0	0	Fair	
Madison, Wisconsin	29.29	744.0	30.37	771.4	14	—10.0	82	E	10	4.5			10n		Calm	0.35	8.9	Light snow	
Marquette, Michigan	29.81	757.2	30.65	778.5	—13	—25.0	47	W	8	3.6		0	0			0	0	Clear	
Mason, Texas	28.35	720.1	30.16	766.1	41	5.0	82	NW	4	1.8		0	0			0	0	Clear	

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
UNITED STATES SERIES—CONTINUED.																			
Memphis, Tennessee	29.79	756.7	30.15	765.8	31	— 0.6	89	Calm	0	0		0	0			0	0	Clear	
Milwaukee, Wisconsin	29.62	752.3	30.43	772.9	14	—10.0	82	E	17	7.6			10s		Calm	0.15	3.8	Cloudy	
Mobile, Alabama	30.05	763.3	30.13	765.3	38	3.3	72	N	8	3.6		5cs	0	N		0	0	Fair	
Montgomery, Alabama	29.94	760.5	30.18	766.6	37	2.8	71	E	3	1.3		0	0			0	0	Clear	
Moorhead, Minnesota	29.25	742.9	30.30	769.6	14	—10.0	91	SE	16	7.2			10s		SE	0.07	1.8	Cloudy	
Morgantown, W. Virginia	29.31	744.5	30.43	772.9	3.5	—15.8	60	Calm	0	0			10s;hz		Calm	0	0	Cloudy	
Mt. Washington, N. H.	23.23	590.0	29.59	751.6	— 5	—20.6	100	NW	22	9.8			Fog		NW	0.02	0.5	Dense fog	
Nashville, Tennessee	29.60	751.8	30.16	766.1	32	0.0	79	E	1	0.4		5ck	Sm'e	W	E	0	0	Fair	
New Haven, Connecticut	29.95	760.7	30.08	764.0	2	—16.7	72	NW	16	7.2		0	0			0	0	Clear	
New London, Connecticut	30.02	762.5	30.07	763.8	2	—16.7	72	NW	7	3.1		0	0			0	0	Clear	
New Orleans, Louisiana	30.03	762.7	30.10	764.5	47	8.3	77	Calm	0	0		5c	Sm'e	Calm		0	0	Fair	
Newport, Rhode Island	29.96	761.0	30.01	762.2	2	—16.7	72	W	16	7.2		0	0			0	0	Clear	
New River, N. Carolina					17	— 8.3	83	N			4	8cs	0	Calm				Cloudy	
New Shoreham, Rhode I'd	30.01	762.2	30.04	763.0	3	—16.1	73	N	28	12.5		0	0			0	0	Clear	
New York, New York	29.97	761.2	30.17	766.3	8	—13.3	78	NW	10	4.5		0	0			0	0	Clear	
Norfolk, Virginia	30.20	767.1	30.27	768.8	16	— 8.9	66	N	9	4.0		0	0			Inap.	Inap.	Clear	
North Platte, Nebraska	27.05	687.1	29.71	754.6	30	— 1.1	89	W	4	1.8		0	0			0	0	Clear	
Olympia, Washington T'y	29.55	750.6	29.59	751.6	49.0	9.4	93	S	2	0.9			10n		Calm	1.54	39.1	Heavy rain	
Omaha, Nebraska	28.92	734.6	30.10	764.5	20	— 6.7	85	E	5	2.2			10s;sm		Calm	Inap.	Inap.	Cloudy	
Oswego, New York	29.97	761.2	30.33	770.4	6	—14.4	76	N	6	2.7			10s		Calm	0	0	Cloudy	
Pensacola, Florida	30.11	764.8	30.14	765.5	41	5.0	82	N	6	2.7		2cs	Haze	W	Calm	0	0	Fair	
Philadelphia, Pa	30.15	765.8	30.21	767.3	4	—15.6	74	NW	16	7.2		0	0			0	0	Clear	
Phœnix, Arizona	28.88	733.5	30.73	780.5	45	7.2	68	E	4	1.8		0	0			0	0	Clear	
Pike's Peak, Colorado	17.87	453.9	30.08	764.0	17	— 8.3	67	NW	30	13.4		0	5s		N	0	0	Fair	
Pilot Point, Texas	29.13	739.9	30.01	762.2	39	3.9	73	SW	6	2.7		0	0			0	0	Clear	
Ploche, Nevada	24.13	612.9	29.90	759.4	45	7.2	53	S	8	3.6		0	1s		Calm	0	0	Clear	
Pittsburg, Pennsylvania	29.51	749.5	30.43	772.9	0	—17.8	70	N	3	1.3		0	0			0	0	Clear	
Port Huron, Michigan	29.72	754.9	30.48	774.2	0	—17.8	70	N	5	2.2		2ck	0	W		0	0	Clear	
Portland, Maine	29.83	757.7	29.89	759.2	4	—15.6	48	NW	8	3.6		2cs	0	Calm		0	0	Clear	
Portland, Oregon	29.59	751.6	29.66	753.4	55	12.8	97	S	6	2.7			10n		Calm	1.92	48.8	Light rain	
Portsmouth, N. Carolina					22	— 5.6	58	NE	28	12.5		2k	0	W		0	0	Clear	
Prescott, Arizona	24.81	630.2	30.17	766.3	37	2.8	63	N	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	30.00	762.0	30.02	762.5	58	14.4	88	N	10	4.5			10ks		N	0.01	0.3	Threatening	
Red Bluff, California	29.49	749.0	29.83	757.7	60.0	15.6	85	SE	18	8.0			10n		Calm	0.29	7.4	Light rain	
Rio Grande City, Texas	29.78	756.4	30.00	762.0	55	12.8	93	SE	8	3.6		0	8s		Calm	0	0	Fair	
Rochester, New York	29.66	753.4	30.35	770.9	5	—15.0	87	W	4	1.8			10s		Calm	0.01	0.3	Cloudy	
Roseburg, Oregon	29.16	740.7	29.71	754.6	54	12.2	97	Calm	0	0			10n		Calm	1.28	32.5	Light rain	
Sacramento, California	29.89	759.2	29.96	761.0	58	14.4	94	SE	8	3.6			10n		Calm	0.53	13.5	Light rain	
St. Louis, Missouri	29.53	750.0	30.14	765.5	25	— 3.9	87	SE	7	3.1		2ck	0	NW		0	0	Fair	
St. Paul, Minnesota	29.46	748.3	30.37	771.4	15	— 9.4	82	E	12	5.4			10s		E	0.54	13.7	Cloudy	
Salt Lake City, Utah	25.59	650.0	29.92	760.0	49	9.4	71	Calm	0	0			10s		Calm	0.04	1.0	Threatening	
San Antonio, Texas	29.33	745.0	30.06	763.5	42	5.6	83	S	1	0.4		0	0			0	0	Clear	
San Diego, California	29.92	760.0	29.99	761.7	48	8.9	93	Calm	0	0			Fog		Calm	0	0	Dense fog	
Sandusky, Ohio	29.71	754.6	30.46	773.7	6	—14.4	76	NE	12	5.4			10s		Calm	0	0	Cloudy	
Sandy Hook, New Jersey	30.12	765.0	30.16	766.1	7	—13.9	54	NW	18	8.0		0	0			0	0	Clear	
San Francisco, California	29.91	759.7	29.98	761.5	59	15.0	94	S	5	2.2			10n		S	0.39	9.9	Light rain	
Santa Fé, New Mexico	23.32	592.3	29.86	758.4	32	0.0	69	N	4	1.8		0	0			0	0	Clear	
Savannah, Georgia	30.10	764.5	30.20	767.1	31	— 0.6	58	NE	10	4.5		5cs	5s	NW	NW	0	0	Cloudy	
Shreveport, Louisiana	29.82	757.4	30.08	764.0	39	3.9	82	Calm	0	0		0	5s		Calm	0	0	Fair	
Silver City, New Mexico	24.33	618.0	30.54	775.7	44	6.7	52	Calm	0	0		0	0			0	0	Clear	
Smithville, North Carolina	30.21	767.3	30 25	768.3	21	— 6.1	86	N	10	4.5		5c	1ks	Calm	Calm	0	0	Fair	
Socorro, New Mexico	25.48	647 2	29.55	750.6	38	3.3	60	NW	4	1.8		0	0			0	0	Clear	
Springfield, Illinois	29.47	748.5	30.18	766.6	29	— 1.7	78	E	6	2.7			10s			Inap.	Inap.	Cloudy	
Springfield, Massachusetts	29.95	760.7	30.10	764.5	2	—16.7	44	NW	2	0.9		0	0			0	0	Clear	
Stockton, Texas	26.92	683.8	29.92	760.0	49	9.4	85	SW	8	3.6		0	1s		Calm	0	0	Clear	
St. Vincent, Minnesota	29.44	747.8	30.34	770.6	4	—15.6	100	SE	12	5.4		0	0			Inap.	Inap.	Clear	
Thatcher's Island, Mass	29.88	758.9	29.94	760.5	— 3	—19.4	66	NW	34	15.2		0	0			0	0	Clear	
Toledo, Ohio	29.69	754.1	30.40	773.7	5	—15.0	76	N	6	2.7			10s		Calm	0	0	Cloudy	
Tucson, Arizona	27.54	699.5	30.09	764.3	49	9.4	37	SW	4	1.8		0	0			0	0	Clear	
Umatilla, Oregon	29.40	746.7	29.90	759.4	36	2.2	95	W	1	0.4			10n		Calm	0.25	6.3	Light rain	
Uvalde, Texas																			
Vicksburg, Mississippi	29.85	758.2	30.12	765.0	38	3.3	81	E	12	5.4		0	Fog		Calm	0	0	Clear	
Visalia, California	29.58	751.3	29.95	760.7	52.5	11.4	89	NW	4	1.8		0	8s		Calm	0	0	Fair	
Washington, D. C.	30.12	765.0	30.25	768.3	8	—13.3	66	NW	4	1.8		2ck	8s	W	Calm	0	0	Cloudy	
Wickenburg, Arizona					45	7.2	76	W			1	0	0			0	0	Clear	
Wilmington, N. Carolina	30.18	766.6	30.24	768.1	21	— 0.1	71	NE	7	3.1		10cs	0	Calm		0	0	Cloudy	
Winnemucca, Nevada	25.53	648.4	29.89	759.2	50	10.0	72	SW	6	2.7			10ks		SW	0.02	0.5	Cloudy	
Wood's Holl, Mass	29.93	760.2	29.98	761.5	1	—17.2	71	NW	22	9.8		0	2s		NW	0	0	Fair	
Yankton, Dakota	28.81	731.8	30.21	767.3	16	— 8.9	83	Calm	0	0			10s		Calm	0	0	Cloudy	
Yuma, Arizona	29.78	756.4	29.93	760.2	53	11.7	54	NE	6	2.7		0	0			0	0	Clear	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.03	559.6			53.0	11.7	71	Calm	0	0		10cs;k	0			0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jam ica.‡	29.79	756.7	30.10	764.5	68	20.0	84	E				0	2c						
Havana, Cuba, W. I	29.97	761.2	30.02	762.5	74	23.3	81	NW	4.8	2.1			10n		NW	0	0	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	30.27	768.8	30.33	770.3	0.3	—17.6		S			2		6			0	0		K. V. Möller.
Kingston, Jamaica, W. I	29.97	761.2	29.98	761.5	68.0	20.0	93	Calm	0	0		8cs;ck	2s	SW		0.10	2.5	Cloudy	Robert Johnstone.
Navassa, W. I	29.89	759.2	29.97	761.2	75	23.9	79	E	4	1.8		5cs	2s	E	E	0	0	Fair	F. M. Everett.
Paramaribo, S. A	30.00	762.0	30.00	762.0	78	25.6	86	E			2	5ck	5k	E		0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.35	745.5	29.91	759.7	79	26.1	85	Calm			0		10s		Calm	1.25	31.7	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					71.6	22		ESE			3	0	0			0	0		Earl Flint.
Santiago de Cuba, W. I	29.95	760.7	29.97	761.2	75	23.9	81	NE	3.6	1.6		8cs	1s	SW	NE	0	0		Robert Mason.
St. Thomas, W. I																			G. O. Gellich.
Upernavik, Greenland	30.31	769.8	30.37	771.4	— 6.7	—21.5		Calm			0		0			0	0		K. Elberg.
York Factory, B. A	30.84	783.3	30.89	784.6	—21.0	—29.4		N	11	4.9		2c	10s	NW	N	0.03	0.8	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.	Force	Amount and kind.		Direction.				Character.	Dir'n from.		
									Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r. Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																		
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																		
H. M. S. Albatros																		Comm. A. J. Errington.
H. M. S. Alert																		Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.97	761.2	59.8	15.4	70	NNW		1		3	NNW						D. clouds	Capt. Lord Walter Kerr
H. M. S. Antelope																		Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																		Comm. R. W. Stopford
H. M. S. Bacchante																		Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 37′, E. 58° 36′	30.07	763.8	76	24.4	73	E		1		1	N						Blue sky	Comm. G. Haud.
H. M. S. Bittern																		Comm. E. B. Pusey.
H. M. S. Blanche																		Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	30.13	765.3	74	23.3	68	SW		7		10	SW				5	SW	Overcast	Capt. F. W. Richards.
H. M. S. Champion																		Capt. G. R. Hope.
H. M. S Cockatrice																		Capt. H. T. Gerfell.
H. M. S. Comus																		Capt. J. W. East.
H. M. S. Condor																		Comm. F. W. Egerton.
H. M. S. Coquette																		Lt. Comm. J. L. Barr
H. M. S. Cruizer																		Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 24° 28′, E. 118° 03′	30.17	766.3	54	12.2	74	NE		3-5		0					1	NE	Squally	Capt. W. H. Cuming.
H. M. S. Danae																		Capt. J. C. Parvis.
H. M. S. Daring																		Capt. F. J. Elliott.
H. M. S. Dido																		Capt, C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.79	756.7	58	14.4	76	NW		3-4		9	NW						Overcast	Capt. J. Moresby.
H. M. S. Dragon																		Capt. Hulton.
H. M. S. Druid, N. 18° 28′, W. 78° 20′	29.98	761.5	81	27.2	83	SSE		1		6	NE				1	E	D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																		Comm. John Hext.
H. M. S. Eclipse																		Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 1° 14′, E. 103° 51′	29.87	758.7	78	25.6		SE		1		3	SE				1	E	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald																		Capt. W. H. Maxwell.
H. M. S. Encounter																		Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.93	760.2	73	22.8	85	NNW		2-3		2							D. clouds	Capt. R. D. King.
H. M. S. Falcon																		Comm. W. H. C. Selby.
H. M. S. Fantome																		Capt. W. C. Karslake.
H. M. S. Fawn																		Capt. P. Aldrich.
H. M. S Flamingo																		Capt. R. N. Castance.
H. M. S. Flying Fish																		Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 7° 20,′ W. 81° 00′	29.92	760.0	73	22.8	85	SE		1		8					2	Sw'l	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.09	738.9				Calm		0									Drizzling	Capt. L. F. Jones.
H. M. S. Griffin																		
H. M. S. Hecla																		Capt. T. L. H. Ward.
H. M. S. Humber																		Capt. J. L. Way.
H. M. S. Inconstant																		Capt. C. C. P. Fitzgerald
H. M. S. Iris,																		Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 149° 57′	30.15	765.8	61.5	16.4	82	E		3-5		10	E				2	E	Misty	Capt. R. E. Tracey.
H. M. S. Kingfisher																		Comm. R. H. Thornton.
H. M. S. Lapwing																		Capt. W. G. Scott.
H. M. S. Lily																		Comm. S. Grove.
H. M. S. London, Zanzibar, Africa	29.95	760.7	81	27.2	87	E		1		3	NE						D. clouds	Capt. C. J. Brownrigg.
H. M. S. Magpie																		Capt. R. H. Napier.
H. M. S. Malabar, N. 31° 43′, E. 31° 44′	29.84	757.9	62	16.7	83	WSW		5-6		5	WNW				4	WSW	Squally	Capt. J. F. G. Grant.
H. M. S. Minotaur, Vigo, Spain	29.63	752.6	55.5	13.1	87	SW		6		10	SW						Drizzling	Capt. H. Rawson.
H. M. S. Modeste																		Capt. J. G. Mead.
H. M. S. Monarch																		Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Barbadoes, W. I.	29.94	760.5	79	26.1	80	ENE			3		2	E						D. clouds	Capt. E. Drummond.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.93	760.2	81	27.2	?	SSE			2-3		5							D. clouds	Capt. C. E. Foot.
H. M. S. Salmis, Lisbon, Portugal	29.82	757.4	55	12.8	100	SW			4-5		10							Raining	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.76	755.9	78	25.6	69	ESE			1-2	10	1					2	SE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Callao Bay, Peru	29.93	760.2	68	20.0	97	SSE			1		10							D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	29.99	761.7	73	22.8		N		1			0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, Palestine	29.93	760.2	74.5	23.6	72	S			5-6		4	S						Squally	Capt. F. Nepham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Bulama, Senegambia	29.90	759.5	80.2	26.8	89	NW			1		6							D' clouds	S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

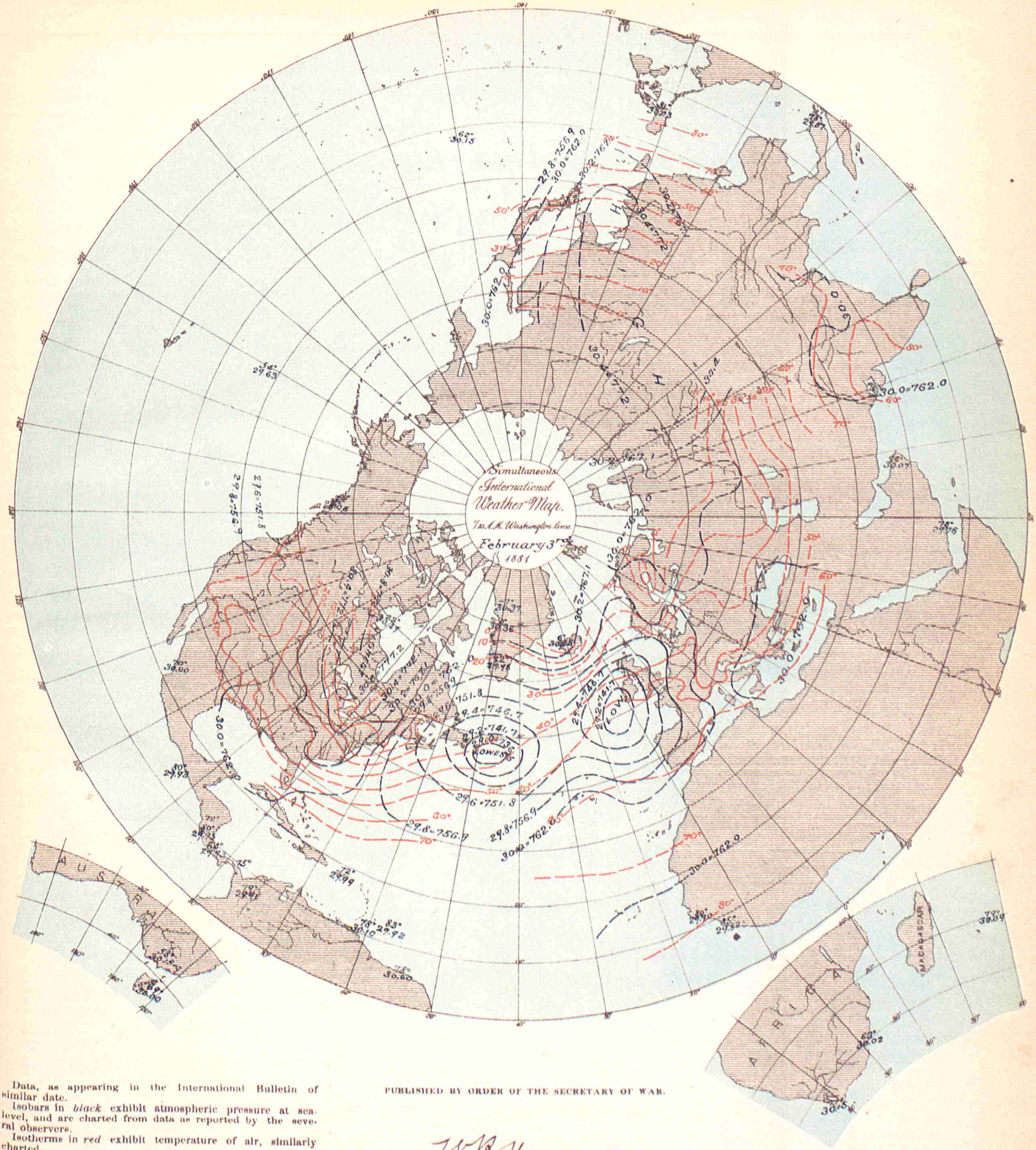
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.19	766.8	50	10.0	86	N	1	0.4			0			0	0			Clear	
N. Yard, Portsmouth, N. H.	29.90	759.4	1	—17.2	100	NW	17	7.6		5c		NW		0	0			Cloudy	
Naval Hospital, Yokohama, Japan	29.61	752.1	47	8.3	51	N			4		2		W	1.03	26.2			Clearing	
Adams, Callao, Peru	29.94	760.5	70	21.1	95	SSE			1		8		SSE			Long	SW	Fair	
Alaska, N. Yard, Mare I'd, Cal.	29.91	759.7	58	14.4	94	SE			2		10		SE	0.45	11.4			Rainy	
Alert, Hong-Kong, China	29.99	761.7	62	16.7	83	E			5		10		E	0	0	Long		Overcast	
Alliance, Havanna, Cuba	30.03	762.7	77	25.0	82	NW			1		8		W	Light		Sm'h		Fair	
Ashuelot, Tientsin, China	30.48	774.2	22	— 5.6	100	NNW			1		2							Fair	
Colorado, New York, N. Y.	30.13	765.3	7	—13.9	100	NW	6	2.7			0			0	0			Clear	
Constitution, N. Yard, League I'd., Pa			4	—15.6		W	1	0.4			2							Clear	
Franklin, Norfolk, Va	30.20	767.1	19	— 7.2		NNW	12	5.4			2		NNW	0	0			Fair	
Galena, Villafranca, France	30.04	763.0	60	15.6	71	ESE			1		0					Sm'h		Clear	
Independence, N. Yard, Mare I'd, Cal.	29.97	761 2	57	13.9	75	SW	6.0	2.7			1		SW	0.06	1.5			Clear	
Jamestown, Sitka, Alaska	29.06	738.1	31	— 0.6		ESE			2		0			0	0	Mod.		Clear	
Kearsarge, N. 21° 40′, W. 85° 20′	30.01	762.2	77	25.0	73	NNE			2		2		NW			Sm'h	E	Fair	
Lackawanna, S. 11° 17′, W. 77° 52′	30.07	763.8	69	20.6	100	SSE			1–2		8		SSE	0	0			Fair	
Marion, Sandy P't, Terra del Fuego	29.36	745.7	55	12.8	74	WNW			2		5		WSW			Sm'h		Fair	
Michigan, Erie, Pennsylvania	30.40	772.1	7	—13.9		SW	1	0.4			5		NE					Fair	
Minnesota, New York, N. Y.	30.17	766.3	16	— 8.9		NW			3–5		0							Squally	
Monocacy, Shanghai, China	30.41	772.4	36	2.2	70	NE			2		8		Calm					Cloudy	
New Hampshire, Port Royal, S. C.	30.14	765.5	30	— 1.1	88	NNE	16	7.2			10		NW	0	0			Cloudy	
Nipsic, Marseilles, France	30.02	762.5	57	13.9	69	S			1		2					Sm'h		D. clouds	
Onward, Callao, Peru †	29.91	759.7	68	20.0	95	SSE			1		10		NNW			Long	N;W	Cloudy	
Palos, Shanghai, China	30.47	773 9	37	2.8	62	NE			1		10		Calm					Overcast	
Passaic, Washington, D. C.	30.31	769.9	10	—12.2	79	NW			1		2		Calm					Fair	
Pensacola, N. 14° 07′, W. 92° 52′	29.93	760.2	80	26.7	78	SE			1–2		2			0	0	Sm'h		Clear	
Portsmouth, Washington, D. C.	30.27	768.8	9	—12.8	100	NW			1		5		N					Fair	
Powhatan, New York, N. Y.	30.16	766.1	8	—13.3	78	NNW			4		0							Clear	
Quinnebaug, Naples, Italy	29.95	760.7	56	13.3	51	NE			2		2		NE			Sm'h		Fair	
Richmond, Hong-Kong, China	30.16	766.1	63	17.2	83	E			5		0			0	0			Misty	
Saratoga, Baltimore, Md.	30.26	768.6	7	—13.9	100	NW			1		8		Calm	0	0			Clearing	
Shenandoah, Montevideo, Uruguay	29.84	757.9	69	20.6	75	NNW			3		0					Sm'h		Clear	
St. Louis, League Island, Pa	30.26	768.6	3	—16.1	73	W	8	3.6			2			0	0			Clear	
Swatara, Nagasaki, Japan †	30.18	766.6	44	6.7	68	N			1		0					Sm'h		Blue sky	
Tennessee, N. 17° 52′, W. 78° 40′	29.99	761.7	79	25.1	95	NNW	1	0.4			8		Calm	0	0	Sm'h		Fair	
Ticonderoga, N. Yard, Mare Id., Cal.	29.98	761.5	59	15.0	?	Calm			0		10		Calm	0.42	10.7			Rainy	
Trenton, Villafranca, France *	30.02	762.5	65	18.3	58	SE			1–2		0			0	0	Sm'h		Clear	
Vandalia, N. 11° 55′, W. 60° 12′ †*	30.10	764.5	78	25.6	95	ESE			4		5		ESE			Long	ESE	Fair	
Wabash, Boston, Massachusetts	30.00	762.0	— 1	—18.3	100	NW	13	5.8			2		NW	0	0			Hazy	
Wachusetts, Panama, Panama *	29.51	749.5	75	23.9	90	NW			2		2		N			Sm'h		Clear	
Wyoming, Villafranca, France	30.06	763.5	57	13.9	69	E			1		0					Sm'h		Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
S. 14° 55′, W. 60° 54′	29.98	761.5	78.7	25.9	72	E			3		5							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 26° 03′, W. 23° 06′	30.16	766.1	68.0	20.0	74	NE			6		4							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang, ‡																			
N. 17° 50′, W. 32° 23′	30.05	763.3	74	23.3	72	NE			6		3							D. clouds	Capt. H. Youlden.
S. S. Cipero																			W. N. Lailey.
City of Agra, ‡																			
S. 31° 46′, W. 23° 25′	30.11	764.8	78.5	25.8	80	Var.			3		4							D. clouds	Capt. T. Young.
Barque Commewyne, ‡																			
N. 26° 16′, W. 63° 28′	29.92	760.0	72	22.2	85	SW			4		8							Showery	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 23° 32′, E. 1° 40′	30.11	764.8	75	23.9	63	ESE			6		10							Overcast	Capt. H. Spalding.
Ship Ellen Stuart, ‡																			
N. 19° 36′, E. 89° 40′	30.03	762.7	76.5	24.7	69	W			1		0							Misty	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope ‡																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 18° 50′, W. 39° 56′	30.10	764.5	76.3	24.6	83	NE			5		5					4	NNW	Misty	Capt. H. W. Dyke.
Barque Mertola,																			
N. 47° 57′, W. 12° 44′	29.18	741.2	52.4	11.3	92	SW			6		8							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee, ‡																			
N. 11° 26′, W. 21° 53′	29.91	759.7	77.5	25.3	91	NNE			4		3					Swell	NW	D. clouds	Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven																			Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡																			
N. 36° 24′, W. 7° 16′	29.98	761.5	65	18.3	84	SW			4		7							D. clouds	Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, ‡																			
N. 48° 37′, W. 30° 12′	29.54	750.3	49	9.4		Var.			1		8		SSE			Mod.	NE	Fair	Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, ‡																			
N. 44° 52′, W. 42° 24′ †	29.11	739.4	47	8.3		W			7		10		W			H'vy	W	Misty	Capt. J. W. Jennings.
S. S. Baltic, ‡																			
N. 40° 28′, W. 68° 59′	29.83	757.7	12	—11.1		NW to NNW			4–5		8		NW			Sl't	NW	Snowing	Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, ‡																			
Liverpool, England †	29.42	747.3	45	7.2		S			3		8		S	0	0			Hazy	Capt. Ch. W. Kennedy.
S. S. Republic,																			
N. 40° 28′, W. 67° 22′ *†	29.72	754.9	24	— 4.4	100	WNW			4		10		NW	0	0	Mod.	NW	Cloudy	Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, ‡																			
N. 36° 55′, W. 75° 41′	30.19	766.8	21.2	— 6.0		NW			5		10		NW	0	0	Mod.	NW	Fair	Capt. H. Baur.
S. S. Köln																			
S. S. Leipzig,																			
N. 39° 57′, W. 60° 01′	29.69	754.1	42.0	5.6	74	NNW			5		8		NNW	0	0	Mod.	NNW	Cloudy	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm †																			Capt. Albert Fredholm.
Ship Peru †																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, ‡ N. 41° 45′, W. 51° 28′	29.47	748.5	46	7.8	92	NW			6		8		NW			R'gh	NW	Cloudy	Capt. J. W. Shackford.
S. S. Indiana, ‡ Liverpool, England †‡	29.41	747.0	44	6.7	76	SW			3		8		SW	0	0			Foggy	Capt. R. W. Sargent.
S. S. Ohio.																			Wm. Shakford, 1st Off'r
S. S. Pennsylvania, N. 45° 32′, W. 49° 18′ †	28.83	732.3	33	0.6	89	W			6		10		W	1.	25.40	R'gh	W	Overcast	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 26° 36′, E. 121° 30′ †	30.27	768.8	59	15.0	76	NNE			6		10		NE	0	0	Mod.	NE	Overcast	Capt. H. Davison.
S. S. Gaelic, N. 37° 14′, E. 172° 24′ †*	30.16	766.1	51.0	10.6	72	NW			5		2		NW			Mod.	NW	Squally	Capt. W. H. Kidley.
S. S. Oceanic, San Francisco, Cal	29.93	760.2	58	14.4	88	S			3		5		SE					Raining	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 46° 10′, W. 124° 06′ †	29.58	751.3	51	10.6	96	S			5		10		S			Mod.	S	Dense mist	Capt. Fred. Bolles.
S. S. Oregon, Astoria, Oregon †	29.61	752.1	53.5	11.9	?	SSE			1		10		SE					Rainy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Diego, Cal †	29.93	760.2	53	11.7	93	Calm			0		0							Foggy	Capt. J. N. Ingalls.
S. S. Idaho, ‡ N. 43° 12′, W. 125° 06′ †	29.63	752.6	52	11.1	93	S			3		10		SE			Light	SE	Raining	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, N. 35° 40′, W. 121° 40′ †	29.96	761.0	57	13.9	94	NW			2		5		W			Mod.	SW	Cloudy	Thos. Wallace.
S. S. State of California, San Francisco, Cal †.	29.99	761.7	56	13.3	?	SE			3		8		SE	Ra	in			Raining	Capt. G. Debney.
S. S. Victoria, N. 38° 10′, W. 123° 00′ †	29.72	754.9	53	11.7	93	SSE			4		10		SE			H'vy	SE	Drizzling	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 29° 11′, W. 179° 40′	29.47	748.5	70	21.1	90	ENE			6		10					Cross	E	Threatening	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W. †	30.09	764.3	80	26.7	66	E			2		0			0	0			Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 9° 38′, W. 85° 27′ †	29.95	760.7	79	26.1	78	ENE			2		0			0	0	Mod.	SSE	Clear	Capt. D. S. Austin.
S. S. City of Peking, N. 33° 40′, E. 134° 00′ †	30.03	762.7	51	10.6	86	NW			3		0			0	0	Sm'h		Clear	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 37° 19′, W. 158° 40′ †	29.63	752.6	54	12.2	74	Calm			0		10		SW			Mod.	NE	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima																			Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, Punta Arenas, Costa Rica †	29.76	755.9	80	26.7	82	Calm			0		0			0	0			Hazy	
S. S. Zealandia, S. 12° 50′, W. 170° 34′	29.97	761.2	82	27.8	75	SE			4		0					Sm'h	W	Clear	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland, ‡ Antwerp, Belgium †	29.74	755.4	48	8.9	70	SW			2		10		WSW			Sm'h		Hazy	Capt. Sam'l Jackson.
S. S. Nederland, ‡ N. 43° 59′, W. 44° 51′ †	29.26	743.2	48	8.9		W			9		8		W	0	0	High	W	Threatening	Capt. S. Stokes.
S. S. Rhynland, ‡ Antwerp, Belgium	29.80	756.9	48	8.9		S			3		10		S	0	0			Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, ‡ N. 30° 36′, W. 81° 15′ †	30.11	764.8	60	15.6		NNE			5		5		NE	0	0	Long	NE	Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va	30.22	767.6	18	— 7.8	68	NNW	7	3.1			2s			0	0			Clear	Capt J. Jorgensen.
Sch'r Annie R. Lewis, N. 25° 06′, W. 58° 35′ †	29.93	760.2	77	25.0		SSW			5		8		SW	0	0	Cross R'gh	NE;S	Cloudy	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 37° 51′, E. 6° 15′ †*	30.24	768.1	62	16.7		Calm			0		0					Sm'h	NNW	Clear	Capt. B. F. Woodbury.
Brigantine George, ‡ N. 18° 12′, W. 67° 30′ †	30.22	767.6	81	27.2		SE			2		2			0	0	Long h'vy	NE	Fine	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va. †	30.19	766.8	21	— 6.1		NNW	3	1.3		2c	2k			0	0			Clear	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Spain †	29.82	757.4	60	15.6	100	W			6		10		W	Hea	vy			Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.

CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 4, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.19	766.8	66.6	19.2	75	NE			3		2			0	0	Fair	Dr. Ollive.
Nemours			30.00	762.1	60.4	15.8	91	W			8		1			0.248	6.3	Very fair	Raynard.
Algiers			30.01	762.3	61.9	16.6	73	W			7		4			Inap.	Inap.	Cloudy	Nicolas.
La Calle			29.97	761.3	64.0	17.8	78	NW			2		2			0.102	2.6	Fair	Fonfrède.
Tunis			29.99	761.7															Jacques.
Sfax			30.12	765.0															Gau.
Saida			30.06	763.6	53.4	11.9	59	W			6		5			0	0	Cloudy	Dumas.
Tebessa			30.06	763.6	67.6	19.8	20	SSW			3		3			Inap.	Inap.	Pretty fair	Watrin.
Geriville																			Lonchamp.
Laghouat			30.11	764.8	59.4	15.2	54	SSW			5		3			0	0	Pretty fair	Herbin.
Biskra			30.10	764.6															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.92	759.9	30.01	762.2	60.0	15.6	71	SE	15	6.7			10			0.08	2.0	Dull	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			30.00	762.0	70	21.1		SW			2		5kn			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.47	748.6	30.06	763.4	27.3	— 2.6	100	Ca'm			0		10			0	0	Foggy	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.25	742.9	30.06	763.4	29.8	— 1.2	92	ENE	5.6	2.5			10			0.012	0.3		Dr. Wiersbicki.
Eperies	29.16	740.6	30.09	764.2	28.8	— 1.8	90	Calm			0		Fog			0	0		Julius Mikolik.
Gratz‡	28.71	729.3	30.01	762.3	35.2	1.8	77	SW			1		5			0	0		Andreas Rospini.
Hermannstadt	28.61	726.8	30.12	765.1	29.8	— 1.2	88	S			1		10			0	0		Prof. A. Gottschling.
Kromsmunster, Obs'y	28.48	723.4	29.88	759.0	30.2	— 1.0	98	ENE			1		10			0	0		The Staff.
Lemberg	29.07	738.4	30.11	764.9	28.8	— 1.8	80	SE			1		5			0	0		Dr. T. Stanecki.
Pola	29.83	757.7	29.95	760.6	48.0	8.9	67	W			1		0			0	0		I. R. HydrographicOffice
Szathmar	29.70	754.4	30.16	766.0	31.8	— 0.1	96	SE			2		10			0	0		Belcht Peter, S. J.
Szegedin	29.79	756.7	30.09	764.2	32.7	0.4	100	Calm			0		10			0	0		Karl Stancel.
Trieste	29.85	758.3	29.96	760.9	45.9	7.7	71	Calm			0		0			0	0	Clear	P. Busin.
Vienna	29.26	743.3	30.02	762.6	28.0	— 2.2	100	SE			3		10			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.39	746.4	29.58	751.4	50.2	10.1	70	S			2	7		SSW		0.055	1.4		Royal Observatory
Furnes	29.50	749.4	29.53	750.0	49.6	9.8	81	SW			2		10			0.016	0.4		M. E. de Cae.
Mueseyck	29.52	749.7	29.64	752.9	48.7	9.3	75	SW			2		7			0.091	2.3		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 7, 1882.

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

BRITISH SERIES.

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

Aberdeen	29.12	739.6	29.22	742.2	42.9	6.1	89	SW	9	4.0			9			0.035	0.89	Misty	W. Boswell.
Armagh, Observatory	29.01	736.8	29.24	742.7	46.2	7.9	96	SSW	11	4.9			10					Overcast	S. Call.
Bidston, Liverpool Obs'y			29.29	744.0	49.4	9.7	82	S	12	5.4			9					Overcast	John Hartnup.
Bolton, Sharples	28.77	730.7	29.30	744.2	47.8	8.8	92	SW	4	1.8			10					Overcast	Thomas Mackereth.
Bradford, Yorkshire	28.90	734.0	29.30	744.2	50.4	10.2	84	SW			3		10			0.08	2.0	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.91	759.7	29.94	760.5	82	27.8	75	NE			2		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			29.37	746.0	50.0	10.0	88	S			0.6		9					Overcast	John McLaren.
Chatham, School M. E.	29.35	745.5	29.48	748.8	48.1	8.9	94	SW			1		9			Blank		Gloomy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.23	742.4	29.45	748.0	49.8	9.9	83	W			5		7					Overcast	The Staff.
Fort Napier, Natal	27.89	708.4	30.11	764.8	68.3	20.2	65	NE			1		5?					Overcast ?	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	86	30.0	92	SE			1		4?					Overcast ?	C. E. Keane.
Galway, Queen's College			29.21	741.9	47	8.3	92	SW			2		8					Gloomy	J. O'Donaghadue.
Gibraltar, Mediterranean	30.20	767.1	30.25	768.3	61.8	16.6	93	SW			3		3					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.00	736.6	29.20	741.7	46.4	8.0	90	SW			2		10			Blank		Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.27	743.4	29.44	747.8	48.3	9.1	95	SSW			1		10					Drizzling	The Staff.
Guernsey	29.30	744.2	29.52	749.8	50.5	10.3	82	SW			3		3					Squally	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.42	747.3	29.45	748.0	49.6	9.8	83	SSW	20	8.9			10					Gloomy	The Met'g'l Office.
Leicester, Museum	29.06	738.1	29.32	744.7	47.2	8.4	97	SW			3		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.86	758.4	29.94	760.5	63	17.2	71	SW			2		3					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			29.92	760.0	68.0	20.0	81	NE			1		5					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.84	732.5	29.36	745.7	47.7	8.7	91	SSW			3		10					Overcast	Robert Pate.
Oxford, Radcliffe Obs'y	29.18	741.1	29.44	747.8	48.5	9.2	90	SSE			2		10					Showery	The Staff.
Plymouth	29.35	745.5	29.43	747.5	49.5	9.7	96	WSW			4		10					Raining	John Merrifield.
Sandwick Manse, Orkneys			29.26	743.2	33.2	0.7	87	ENE	36	16.1			10					Snowing	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.87	758.7	29.94	760.5	40.4	4.7	97	N			3		10					Raining	Serg't W. H. Lyne.
Sheffield	29.07	738.4	29.34	745.2	49.0	9.4	91	SSW			2		9			0.03	0.8	Overcast	W. F. Cooper.
Silloth Rectory	29.21	741.9	29.24	742.7	47.6	8.7	94	W			1		10			0.143	3.64	Raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.31	744.5	48.4	9.1	86	S	18	8.0			10					Overcast	Rev. S. J. Perry.
Strathfield Turgiss	29.24	742.7	29.46	748.3	49.0	9.4	90	SW			1		9					D. clouds	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	29.40	746.7	29.45	748.0	51	10.6	93	W			6		10					Raining	W. Newcombe.
Valencia, Observatory	29.32	744.7	29.35	745.5	47.6	8.7	91	W	23	10.3			4			Blank		D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B	29.87	758.7	29.91	759.7	21.7	— 5.7		NW	4	1.8			1on			0	0	Cloudy	Hon. J. Ferguson.
Chatham, N. B.*	29.74	755.4	29.81	757.2	21	— 6.1	84	NW	18	8.0			10ks		NW	0.12	3.0	Cloudy	G. A. Blair.
Charlottetown, P. E. Island	29.63	752.6	29.68	753.9	24	— 4.4	100	NW	14	6.3			1on			0.350	8.89	Sleeting	H. J. Cundall, C. E.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario	30.09	764.3	30.30	769.6	2.3	—16.5	100	W			1		10s			Inap.	Inap.	Cloudy	James Smith, M. A.
Dalhousie, N. B	29.87	758.7	29.91	759.7	20.5	— 6.4		NW			1		10s			0	0	Cloudy	H. A. Johnson.
Father Point, Quebec*	30.03	762.7	30.06	763.5	19	— 7.2	69	N	2	0.9		2k	5ks		Calm	0	0	Fair	J. McWilliams.
Fredericton, N. B	29.83	757.7	29.90	759.4	17.0	— 8.3	83	NW	9	4.0		1ck	0			0.150	3.81	Clear	Prof. Harrison.
Fort Garry, Manitoba*	29.38	746.2	30.28	769.1	12	—11.1	100	SE	22	9.8			1on		SE	0.060	1.52	Light snow	James Stewart.
Granton, Ontario	29.33	745.0	30.58	776.7	0.7	—17.4	80	N			1	2cs	0	W		0	0	Clear	James Grant.
Halifax, N. S.*	29.59	751.6	29.73	755.1	25	— 3.9	81	NW	12	5.4			1on			0.020	0.51	Cloudy	A. Allison.
Hamilton, Ontario	30.09	764.3	30.53	775.4	1.8	—16.8	89	SW			1	1ocs	0	W		0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	30.00	762.0	30.38	771.6	2	—16.7	86	W	3	1.3		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S	29.49	749.0	29.53	750.0	28.5	— 1.9	94	NE	2	0.9			1on			0.20	5.1	Snowing	C. H. Rigby.
Montreal, Quebec*	30.04	763.0	30.26	768.6	7	—13.9	70	NW	15	6.7		8k	2s	NE		Inap.	Inap.	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.76	755.9	30.55	776.0	0	—17.8	88	N	8	3.6		0	2ks		N	0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.64	752.8	30.49	774.4	— 3.2	—19.6	83	W			1	0	0			0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.73	755.1	30.53	775.4	— 5	—20.6	100	NW	3	1.3			1on			0	0	Hazy	H. Morgan.
Port Stanley, Ontario	29.80	756.9	30.54	775.7	— 1	—18.3	100	N	3	1.3			1on			0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.79	756.7	30.15	765.8	2	—16.7	72	W			1	Haze	8s		W	0	0	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.95	760.7	30.48	774.2	— 1	—18.3	85	NW	6	2.7		0	0			0	0	Clear	W. H. McIntyre.
St. Andrews	29.79	756.7	29.85	758.2	18	— 7.8	81	NW	6	2.7		0	0			0.04	1.0	Clear	
St. John's, N. B	29.65	753.1	29.83	757.7	18.0	— 7.8	100	NW	17	7.6		0	0			0	0	Clear	G. Murdock, C. E.
Saugeen, Ontario*	29.76	755.9	30.57	776.5	5	—15.0	90	N	10	4.5			10ks			0	0	Cloudy	K. Stewart.
Stratford, Ontario	29.11	739.4	30.57	776.5	—0.7	—18.2	90	Calm	0	0			10s			0	0	Cloudy	C. J. Macgregor, M. A.
Sydney, C. B*	29.46	748.3	29.50	749.3	28	— 2.2	97	N	8	3.6			1on			1.01	25.7	Light snow	T. C. Hill, C. E.
Toronto, Ontario*	30.09	764.3	30.52	775.2	2	—16.7	95	N	7	3.1		2k	2s	NW		0	0	Cloudy	Magnetic Observatory.
Windsor, N. S	29.62	752.3	29.72	754.9	25.0	— 3.9	87	NW	14	6.3		0	9n			0.10	2.5	Overcast	
Woodstock, Ontario	29.32	744.7	30.52	775.2	1.8	—16.8	91	NW	7	3.1		0	9s			0	0	Cloudy	Prof. Wolverton.
Yarmouth, N. S.*	29.76	755.9	29.83	757.7	26	— 3.3	79	N	10	4.5		10k	0	N		0.09	2.3	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.50	749.3	29.75	755.6	27	— 2.8	100	S	1	0.4			10			0.15	3.8	Overcast	John Delany.
St. Pierre, N. F			29.42	747.3	24.8	— 4.0		W			2					0	0		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony												0	0			0	0	Clear	The Staff, for D. Gill.
Cape Town, C. G. H. Obs'y	30.00	762.0	30.04	763.0	86.5	30.3	55	S	14.5	6.5		0	0			0	0	Fine	John Duthie.
Cape St. Francis Lt. House	30.17	766.3			68.0	20.0	84	SE	13.0	5.8									

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.53	775.5	30.56	776.1	39.7	4.3	83	NE	2.5	1.1			10			0	0	Covered	M. Marc Dechevrens, S J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force o—10	Clouds. Amount and kind. Up'er o—10	Lo'er o—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.19	665.2	29.91	759.7	59.4	15.2	78	NE			1	10				0	0	Misty	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.68	753.8	29.72	755.0	32.9	0.5	98	SSE	18	8		10						Foggy	Oversergent Fischer.
Fanöe	29.57	751.1	29.59	751.6	38.3	3.5	87	S			4	1							Overloorer Lauridsen.
Godthaab, Greenland	29.94	760.5	29.98	761.6	20.1	— 6.6	65	NE			4	0							S. Kleinschmidt.
Stykkisholm, Iceland	29.95	760.7	29.99	761.8	6.4	—14.2	92	E			4	10						Snowing	A. O. Thorlacius.
Thorshavn	29.74	755.3	29.77	756.2	31.3	— 0.4	65	NE	40	18		10							Overloorer Bergh.
Vestervig	29.48	748.8	29.58	751.2	36.1	2.3		Calm			0	5							Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.13	740.0	29.79	756.6	48.6	9.2	100	WNW			3		nk		SE	0.028	0.7		M. Labroue, Director.
Alençon	29.13	739.8	29.68	753.8	45.3	7.4	97	SW			1		10n			0.016	0.4	Covered	M. Nicot, Director.
Arras, Engineer School	29.32	744.6	29.58	751.2	50.0	10.0	79	SW	10.1	4.5			n						M. Klein, Commandant.
Avignon, Normal School	29.72	754.9	29.80	756.9	55.2	12.9	47	N			1		10		SE	0	0	Covered	M. Giraud, Director.
Bar-sur-Seine	29.15	740.5	29.71	754.6	51.6	10.9	79	S			1		10		SW	0	0	Covered	M. Saillard, Director.
Beauvais, Normal School	29.35	745.6	29.62	752.4	50.9	10.5	81	S			2		8		SW	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	28.91	734 4	29.83	757.7	41.2	5.1	91	SSW			1		cn		SE	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.52	749.7	29.78	756.3	56.1	13.4	70	WNW			2		8		W	0.358	9.1	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.12	739.6	29.70	754.3	48.2	9	86	S			1		n		S	0	0		M. Postel, Director.
Brest, Naval Observatory	29.42	747.2	29.66	753.4	52.2	11.2	90	W			2		6		W	2.225	56.50		M. de Kermaree, Dir.
Caen, Normal School	29.44	747.7	29.52	749.7	54.7	12.6	93	S			2		5		NE	0	0	Cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.40	746.8	29.72	755.0	50.0	10.0	79	S			2		10		SSW	0	0	Covered	M. Jadot, Director.
Charleville, Normal School	29.15	740.5	29.69	754.2	48.2	9.0	63	SW			1		10			0	0	Covered	M. Grimard.
Clermont-Ferrand Obs'y	28.37	720.6	29.72	755.0	50.7	10.4	61	S			1		10			0	0	Covered	M. Allnard, Director.
Cluny, Normal School	29.00	736.6	29.84	758.0	46.4	8	95	S			1		7		NE	0.008	0.2		M. de Villemontée, Dir.
Commercy, Normal School	28.87	733.2	29.74	755.4	46.6	8.1	59	SW			1		kn	SW	SW	0	0		Dr. Coulet, Director.
Gap, Normal School	27.26	692.5	29.82	757.5	44.6	7	57	NW			3		5		E	0	0	¼ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.68	728.5	29.82	757.5	49.5	9.7	56	E			4		10		E	0	0	Covered	M. Kina, Director.
Grenoble, Normal School	29.04	737.6	29.82	757.4	42.3	5.7	75	ENE			1		ck			0	0		M. Ablard, Director.
Guéret, Normal School	28.15	715.0	29.73	755.1	49.6	9.8	64	SW			4		10		NE	0.071	1.8	Light rain	M. Rivoir, Director.
Lamballe, Normal School	29.36	745.8	29.65	753.2	51.8	11	77	SW			6		n		SW	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.30	744.1	29.98	761.5	46.4	8	83	W			1		10		W	0.47	12.	Covered	M. Chauvin, Director.
Lorient, Naval Observatory	29.57	751.1	29.67	753.7	53.2	11.8	98	W			4		8		W	0.16	4.	¾ covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.71	729.3	29.73	755.1	54.3	12.4	50	SSE			1	5ck		WSW	ENE	0	0	Cloudy	M. André, Director.
Mans, Normal School	29.35	745.4	29.74	755.3	49.5	9.7	92	WSW			3		8		SW	0.035	0.9	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.48	748.7	29.75	755.6	54.5	12.5	69	ESE			3		10		WSW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.50	622.4	29.74	755.4	32.4	0.2	88	NE	13.0	5.8			10		NE	0.213	5.4		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.66	753.4	29.77	756.2	52.5	11.4	75	NE			3		10			0	0	Covered	M. Galzin, Director.
Nancy, Normal School	28.99	736.3	29.76	755.0	46.4	8.0	89	SSW			2	ck	2n		SE	0	0	Slightly cl'dy	M. Hasse.
Nantes, Observatory	29.54	750.4	29.71	754.6	54.7	12.6	86	W			2		10n		W	0.012	0.3		M. Larocque, Director.
Nice	29.81	757.2	29.84	758.0	54.7	12.6	57	E			4		10	E	E	0	0	Covered	Capt. Boissière, Director.
Perpignan, Observatory	29.60	751.8	29.71	754.5	49.6	9.8	73	N	24.2	10.8			10		NW	0.736	18.7		Dr. Fines.
Pic-du-Midi, Plantade	22.26	565.4			25.3	— 3.7							10		NW	1.528	38.8	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.73	729.8	29.81	757.1	48.9	9.4	71	S			3		10n	N	S	0	0	Covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.85	631.1			33.3	0.7	91	SSW			6		10			0.004	0.1	Rain & fog	M. Allnard, Director
Rochefort, Naval Obs'y	29.72	754.8	29.75	755.6	54.9	12.7	83	W			1		5		W	0.63	16.	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.55	750.5	29.76	755.9	53.8	12.1	81	SSW			1		5		S	0.028	0.7	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.74	704.6	29.93	760.1	43.2	6.2	91	S			2		8		S	0.020	0.5	Raining	M. Richard, Director.
Rouen, Normal School	29.50	749.4	29.59	751.5	53.6	12	22	SE			1		2		NW	0	0	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	29.48	748.7	29.03	752.7	50.9	10.5	76	W			3		10		SE			Raining	M. Delaplanche, Dir.
Saint Maur, Observatory	29.49	749.1	29.66	753.3	50.2	10.1	81	SSW			1		10		SW	0	0		M. Renou, Director.
Toulouse, Observatory	29.10	739.0	29.82	757.3	47.1	8.4	100	W			1		10			1.457	37.0	Raining	M. Baillaud, Director.
Tours	29.53	750.0	29.72	755.0	51.3	10.7	86	NW			1		10		SW	0	0	Covered	M. de Tastes.
Versailles, Observatory	29.15	740.5	29.65	753.0	48.6	9.2	89	SW			2		10			0.011	0.28	Covered	Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.94	735.0	29.80	756.8	41.5	5.3	60	SE			3		3ks			0	0		Prof. Dr. Hoh.
Berlin	29.67	753.5	29.84	758.0	43.3	6.3	63	SE			3		0			0	0		Prof. Dr. Arndt.
Breslau	29.43	747.4	29.95	760.8	37.4	3.0	83	SE			2		0			0	0		Royal University Obs'y.
Carlsruhe	29.42	747.2	29.85	758.2	38.8	3.8	80	S			0		5	SW		0.024	0.6	Raining	Albert Senz.
Cassel	29.13	740.0	29.75	755.0	45.0	7.2	65	SW			2		4	SW		0	0		Dr. H. Möll.
Frankfort on the Main	29.49	749.1	29.87	758.6	41.7	5.4	71	SE			1		1			0	0		Physical Society.
Friedrichshafen	28.41	721.6	29.91	759.6	31.3	—0.4	89	W			3		10			0	0	Hazy	Chief Telegrapher Wilhelm.
Hamburg	29.61	752.2	29.69	754.0	40.6	4.8	79	SSE			1		0			0.020	0.5		Dr. R. Kleeman.
Kiel	29.66	753.4	29.68	753.8	39.6	4.2	86	SSW			2		1			0.016	0.40		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.40	740.7	29.83	757.6	42.4	5.8	75	S			1		0			0	0		Prof. Dr. Bruhns.
Magdeburg	29.58	751.2	29.80	757.0	38.8	3.8	83	SE			4		0			0.004	0.1	Light fog	Dr. Assmann.
Memel	29.97	761.2	30.02	762.4	30.9	—0.6	90	S			3		10n					Snowing	Reinbrecht & Issermann.
Munich	27.97	710.4	29.82	757.3	38.8	3.8	64	NNE			2		1			0	0		Central Station.
Neufahrwasser	29.96	761.0	29.98	761.4	33.1	0.6	92	S			3		10			0	0		A Lothes.
Neustadt, Palatinate	29.20	741.6	29.72	754.8	41.5	5.3	75						7			0	0		Dicknether.
Stuttgart	28.83	732.3	29.74	755.3	45.1	7.3	61	NE			1		0			0	0		Prof. Dr. Schoder.
Thorn	29.75	755.7	29.94	760 5	36.3	2.4	80	S			2		1			0	0		Dr. O. Cumerth.
Weissenburg, Bavaria	28.30	718.7	29.80	757.0	43.5	6.4	94	NE			2		1	SW		0	0		Prof. Kemlein.
Wustrow	29.72	755.0	29.75	755.6	38.5	3.6	82	SSE			4		3s			0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.55	750.6	29.95	760.7	51.4	10.8		NE			1.5		5					½ Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.00	762.0	30.05	763.3	76.2	24.6	90	SW	20.0	8.9			0			0	0	Blue sky	
Deesa	29.52	749.7	29.99	761.7	86.4	30.2	10	NW	6.0	2.7			0			0	0	Blue sky	
Bombay	29.96	761.1	30.00	762.1	82.3	27.9	60	NNW	18.0	8.0			0			0	0	Blue sky	
Poona, Yarrowda	28.13	714.5	29.97	761.2	85.5	29.7	16	W	5.0	2.2			0			0	0	Blue sky	
Belgaum	27.43	696.7	29.95	760.6	82.6	28.1	28	SSW	5.0	2.2			4		NW	0	0	D. clouds	
Lahore	29.28	743.8	30.04	763.0	74.8	23.8	26	Calm	0.9	0.4			3			0	0	Gloomy	
Roorkee	29.12	739.5	30.04	763.0	70.2	21.2	31	W	1.1	0.5			3			0	0		
Agra	29.46	748.4	30.04	762.9	79.3	26.3	25	W	3.5	1.6			0			0	0		
Nagpur	28.96	735.4	29.99	761.8	85.9	29.9	34	SW	3.8	1.7			7		SW	0	0	D. clouds	
Jubbulpore	28.66	728.0	30.05	763.3	73.8	23.2	37	Calm	1.5	0.7			0			0	0	Blue sky	
Lucknow	29.62	752.5	30.00	762.1	80.2	26.8	30	WNW	0.9	0.4			0			0	0	Blue sky	
Allahabad	29.70	754.4	30.02	762.5	76.6	24.8	36	Calm	1.2	0.5			0			0	0	Blue sky	
Patna	29.82	757.5	30.01	762.3	70.6	21.4	53	W	1.0	0.4			0			0	0	Blue sky	
Hazaribagh	28.01	713.0	30.06	763.5	70.8	21.6	20	WNW	6.8	3.0			0			0	0	Blue sky	
Cuttack	29.94	760.5	30.02	762.6	81.0	27.2	44	W	0.3	0.1			0			0	0	Blue sky	
Calcutta, Alipore	30.03	762.7	30.05	763.3	72.7	22.6	67	ESE	0.5	0.2			0			0	0	Blue sky	
Goalpara	29.63	752.6	30.05	763.2	71.5	21.9	36	NW	2.4	1.1			0			0	0	Blue sky	
Chittagong	29.98	761.6	30.08	763.9	73.3	22.9	74	W	2.5	1.1			0			0	0	Blue sky	
Sibsagar	29.74	755.3	30.09	764.2	63.0	17.2	82	NE	1.7	0.8			0			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.53	750.1	29.95	760.8	46.9	8.3	42	Calm	0	0			0			0	0		Prof. Giovanni Clodig
Milan	29.43	747.6	29.97	761.2	34.2	1.2	83	SW	1.8	0.8			8			0	0		Prof. Schiaparelli.
Padua	29.88	759.0	29.99	761.8	41.7	5.4	78	Calm	0	0			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.04	737.6	29.98	761.5	33.6	0.9	80	E	1.3	0.6			9			0	0		Prof. P. F. Denza.
Genoa	29.73	755.1	29.92	760.0	50.9	10.5	40	N	2.0	0.9			10			0	0		Prof. G. M. Garibaldi.
Mondovì	28.01	711.5	29.98	761.4	42.3	5.7	55	W			2		9			0	0		Prof. D. C. Bruno.
Pesaro	29.93	760.1	29.98	761.4	39.6	4.2	87	NW	13.6	6.1			4		W	0	0		Prof. Luigi Guidi.
Florence	29.65	753.1	29.91	759.7	47.3	8.5	60	NW			2		2		SE	0	0		Cav. F. Meucci.
Leghorn	29.81	757.1	29.89	759.2	48.9	9.4	67	NE	4.3	1.9			10			0	0		Prof. P. Monte.
Rome	29.74	755.4	29.92	759.9	54.7	12.6	64	E	4.9	2.2			10			0	0		Prof. P. S. Ferrari.
Lecce	29.71	754.5	29.96	761.0	54.1	12.3	64	NNW	8.1	3.6			3		N	0.055	1.4		Prof. C. de Giorgi.
Cosenza	29.06	738.1	29.96	760.9	53.6	12.0	74	NNW	7.4	3.3			4		WNW	0	0		Prof. D. Conti.
Cagliari	29.61	752.0	29.80	757.0	59.4	15.2	69	SE			4		10			0	0		Prof. A. Pacinotti.
Palermo	29.67	753.6	29.92	760.0	56.3	13.5	64	NE	0.7	0.3			5			0	0		Prof. G. Ciaccialatore.
Syracuse	29.93	760.1	29.97	761.2	58.6	14.8	69	SE	7.4	3.3			5		SW	0.280	7.1		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.44	747.8	29.97	761.2	53.1	11.7	72	S	0	0			7		WNW	0	0		Prof. F. Brioschi.
Stelvio	22.01	559.1			21.6	— 5.8	50	SW			6		10s			0	0	Clear	P. F. Denza.
Valdobbia	21.97	558.1			22.8	— 5.1	64	E			1	10c				0	0	Covered	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.42	772.6	30.44	773.2	32.5	0.3	61	NNE	1.9	0.8			8cs			0	0	Cloudy	K. Sasaki.
Kioto	30.21	767.3	30.40	772.1	31.2	— 0.4	62						3s;cs			0	0	Fair	
Nagasaki, I. M. Obs'y	30.26	768.6	30.47	773.9	37.8	3.2	64	N	1.0	0.4			10s			0.020	0.51	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	30.17	766.3	30.24	768.1	37.5	3.1	55	N	5.8	2.6		4cs	0			0	0	Fair	The Staff.
Wakayama	30.33	770.4	30.39	771.9	36.5	2.5	68	E	1.3	0.6			9cs			0	0	Cloudy	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.88	758.9	30.07	763.7	77.1	25.1	79	E	6.5	2.9		2	6	S	ESE	0.05	1.3	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.43	620.4	30.17	766.3	54.5	12.5	83	NW			1	5cs	0	SW		0	0	½ cloudy	Prof. M. Leal.
Mazatlan	29.68	753.8	29.94	760.4	69.6	20.9	85	S	0	0		2cs	0			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.08	586.2	30.27	768.6	49.6	9.8	77	Calm	0	0		0	7kn			0	0	Hazy	The Staff.
Pabellon, Aguascalientes	23.87	606.2	29.95	760.6	52.3	11.3	86	Calm				6c	2s	W	W	0	0	Cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.35	593.0	30.16	766.1	48.7	9.3	55	Calm	0	0		0	6		S	0	0	Cloudy	Prof. P. Spina.
San Luis Potosí																			G. Barroeta, M. D.
Tlacotalpam	29.96	760.9	29.97	761.3	69.6	20.9	94	Calm	0	0		0	0			0	0	Foggy	Prof. M. Cházaro.
Zacatecas	22.35	572.8	30.25	768.4	50.0	10.0	76					3c	0			0	0	Clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.56	750.7	29.56	750.7	43.3	6.3		S			4					0	0		
Groningen	29.54	750.3	29 60	751.7	41.5	5.3		S			2					0	0		
Helder	29.54	750.2	29.54	750.2	41.9	5.5		S			4					0.028	0.7		
Hellevoetsluis	29.55	750.6	29.55	750.6	43.9	6.6	88	SSE			3					0	0		
Utrecht	29.55	750.6	29.60	751.8	45.5	7.5	77	SSE			2		2			0.031	0.8	Slightly cl'dy	H. van der Brink

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.44	747.7	29.50	749.3	32.4	0.2	92	Calm	0	0	.....	.....	10	.....	.....	0.823	20.9	Snowing...	
Christiania	29.68	753.9	29.84	757.9	12.4	—10.9	90	NNE	18	8	.....	.....	10	.....	.....	0.028	0.7	Snowing.....	
Gjæsvær	29.86	758.4	29.88	759.0	14.5	— 9.7	.....	NW	.....	.....	2	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.89	759.3	29.94	760.5	10.9	—11.7	81	NE	.....	.....	1	.....	0	.....	.....	0	0	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.11	764.9	30.27	768.9	59.5	15.3	98	W	6.3	2.8	.....	.....	3	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.16	740.7	30.19	766.7	52.5	11.4	73	WNW	6.9	3.1	.....	.....	9	.....	.....	0.236	6.0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.26	768.5	30.34	770.7	66.4	19.1	50	WSW	4.9	2.2	.....	.....	1	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.91	759.7	30.28	769.0	56.1	13.4	52	NW	12.5	5.6	.....	.....	4	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.26	768.6	30.33	770.4	62.2	16.8	81	SW	11.2	5.0	.....	.....	3	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.54	725.0	29.67	753.7	22.3	— 5.4	100	SW	13	6	.....	.....	10	.....	.....	Blank		.....	Capt. Lasarew.
Archangel	29.89	759.3	29.91	759.8	—11.9	—24.4	85	N	2	1	.....	.....	10	.....	.....	.....	.....	Light clouds	Capt. Sseliwerstow.
Astrakhan	30.27	768.8	30.19	736.7	27.7	— 2.4	77	ESE	2	1	.....	.....	0	.....	.....	.....	.....	.....	Capt. Wisganow.
Barnaul	29.51	749.5	30.06	763.5	2.8	—16.2	67	Calm	0	0	.....	.....	5	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.87	758.7	30.14	765.6	8.8	—12.9	76	NNE	2	1	.....	.....	10ks;n	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	28.74	730.0	29.75	755.9	17.2	— 8.2	88	W	9	4	.....	.....	10	.....	.....	.....	.....	Snowing.....	Meteorological Obs'y.
Kasan	29.56	750.9	29.85	758.1	26.1	— 3.3	89	WSW	7	3	.....	.....	10	.....	.....	.....	.....	.....	Observatory.
Kertch	29.96	761.0	29.98	761.5	29.3	— 1.5	94	NE	7	3	.....	.....	10	.....	.....	.....	.....	.....	Lagorio.
Kieff	29.46	748.3	30.14	765.5	25.3	— 3.7	95	N	4	2	.....	.....	10ks;n	.....	.....	.....	.....	Light snow.	Cand. Fatjanow.
Lugan	29.84	757.9	30.06	763.5	24.1	— 4.4	86	ESE	18	8	.....	.....	10	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	29.38	746.2	29.95	760.7	30.2	— 1.0	84	S	7.8	3.5	.....	.....	7ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.95	710.0	30.63	778.0	—17.9	—27.7	66	Calm	0	0	.....	.....	4	.....	.....	.....	.....	Light clouds	Meteorological Obs'y.
Nikolaiev	30.03	762.7	30.10	764.5	28.6	— 1.9	94	NE	9	4	.....	.....	10n	.....	.....	.....	.....	.....	1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.69	754.1	29.78	756.3	6.8	—14.0	88	W	20	9	.....	.....	10n	.....	.....	.....	.....	.....	Lieut. Iwanow.
Nukuss	30.00	762.0	30.24	768.2	36.0	2.2	96	N	2.2	1.0	.....	.....	10n	.....	.....	.....	.....	.....	Dr. Dobrochotow.
Pekin, China	30.57	776.4	30.71	780.0	11.3	—11.5	39	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	30.07	763.6	30.08	764.0	— 5.6	—20.9	72	WNW	7	3	.....	.....	0	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.53	724.7	30.10	764.6	57.2	14	75	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.59	726.3	30.04	763.1	43.9	6.6	69	Calm	0	0	.....	.....	10n	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.63	752.5	30.07	763.8	27.1	— 2.7	94	SSE	18	8	.....	.....	10ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.68	753.9	30.12	765.1	30.4	— 0.9	88	SSW	2	1	.....	.....	10	.....	.....	.....	.....	Heavy cld's	Berg, Assistant.
Yeniseisk	30.12	765.1	30.45	773.4	— 5.1	—20.6	77	SE	2	1	.....	.....	0	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.24	742.7	47.9	8.8	85	SW	.....	.....	2	.....	10n	.....	.....	0.34	8.6	Sleeting.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.12	739.6	43.9	6.6	100	NE	.....	.....	8	.....	10	.....	.....	1.0	25.	Sleeting	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.63	752.6	.....	.....	.....	E	.....	.....	7	.....	10	.....	.....	Blank		.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.66	753.4	29.77	756.1	51.4	10.8	86	W	2.2	1.0	.....	.....	10	.....	.....	0.600	15.25	Raining	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.87	758.6	29.92	760.0	56.7	13.7	68	NW	3.8	1.7	.....	.....	10	.....	.....	0.276	7.0	Covered.....	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.98	685.4	.....	.....	45.5	7.5	78	W	4.5	2.0	.....	1	6	NE	.....	0.177	4.5	Cloudy.....	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.76	705.1	30.01	762.2	52.2	11.2	52	NW	21.9	9.8	.....	0	2	.....	.....	0.138	3.5	Cloudy.....	The Staff.
Murcia, Met. Obs'y ‡	29.82	757.4	29.97	761.2	64.4	18.0	41	NW	11.2	5.0	.....	0	4	.....	.....	0	0	Clouds.....	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.12	739.6	30.02	762.6	51.4	10.8	93	WSW	15.0	6.7	.....	.....	10	.....	.....	0.394	10.0	Raining	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.92	760.0	29.99	761.7	67.7	19.8	68	N	3.6	1.6	.....	ck	0	.....	.....	Inap.	Inap.	Clear.....	Benito Vines, S. J.
Manilla, Phillippine Islands	30.05	763.3	30.10	764.6	78.8	26.0	62	ESE	7.7	3.7	.....	.....	.....	.....	.....	0	0	Fair.....	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.18	766.5	30.28	769.0	58.8	14.9	65	WNW	11.2	5.0	.....	0	3	NW	0	0	.....	Capt. C. Pujazon, R. N., Dir.	
San Juan de Porto Rico, W. I	29.89	759.1	29.98	761.4	73.4	23.0	80	SW	0	0	.....	2s	2k	SW	E	0	0	Clear.....	Enrique Gadea, Chief Engineer.
Tugnegarao, Philippine Ids	30.05	763.2	30.19	766.9	73.2	22.9	79	NNW	4.2	1.9	.....	3ck	.....	SW	.....	0	0	Fair	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.11	764.8	30.15	765.8	—17.3	—27.4	100	N	.....	.....	2	.....	5	.....	.....	0	0	.....	
Umea	30.08	764.0	30.13	765.3	—11.9	—24.4	.....	NW	.....	.....	2	.....	7	.....	.....	0	0	.....	
Hernosand	30.08	764.0	30.13	765.3	— 3.5	—19.7	94	Calm	.....	.....	0	.....	10	.....	.....	0.016	0.4	.....	
Stockholm	29.80	756.9	29.98	761.4	12.9	—10.6	86	E	.....	.....	4	.....	10	.....	.....	0.024	0.6	Snowing.....	
Wisby	29.76	756.0	29.82	757.5	29.1	— 1.6	96	ESE	.....	.....	2	.....	10	.....	.....	0.035	0.9	Snowing.....	
SUB-SERIES.																			
Upsala	29.91	759.8	30.00	762.0	10.8	—11.8	85	ENE	7.2	3.2	.....	.....	10	.....	.....	0.150	3.80	Snowing.....	Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.42	721.9	29.91	759.7	34.9	1.6	90	WSW	.....	.....	1	.....	10	.....	.....	0	0	Foggy	The Observatory.
Zurich	28.17	715.6	29.90	759.4	30.6	— 0.8	85	NW	.....	.....	2	.....	7	.....	.....	0	0	Foggy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —5.0 mm.; Ther. —1°.0 cent.; Hum. +15 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.99	761.7	39.7	4.3	96	N	13	6.0	.....	.....	10	.....	N	0.165	4.2	Raining	The Observatory.
Valona	.....	.....	29.90	759.4	57.6	14.2	.....	NW	.....	.....	1	.....	0	.....	.....	0	0	Clear.....	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.88	758.9	51.4	10.8	94	SW	.....	.....	3	.....	10n	.....	SW	2.295	58.29	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.21	767.3	30.30	769.6	11	—1[illegible].7	80	NW	6	2.7			10s		Calm	0	0	Cloudy.	
Alpena, Michigan	29.90	759.4	30.65	778.5	0	—17.8	70	NW	6	2.7			10s		Calm	0	0	Cloudy.	
Atlanta, Georgia	28.98	736.1	30.19	766 8	32	0.0	60	E	6	2.7			10s		Calm	0	0	Cloudy.	
Atlantic City, New Jersey	30.14	765.5	30.16	766.1	11	—11.7	79	N	12	5.4		10k	0	NE		0	0	Cloudy.	
Attou Id., Alaska	30.30	769.6			30	— 1.1	89	S	4	1.8			10s		SW	0	0	Cloudy.	
Augusta, Georgia	30.08	764.0	30.29	769.4	34	1.1	79	E	9	4.0			10s		W	0	0	Cloudy.	
Baltimore, Maryland	30.20	767.1	30.25	768.3	14	—10.0	64	NW	10	4.5		0	0			0	0	Clear.	
Barnegat, New Jersey	30.12	765.0	30.15	765.8	13	—10.6	81	N	24	10.7		10k	0	NE		0	0	Cloudy.	
Benton, Montana	26.86	682.2			35	1.7	90	Calm	0	0.		10k	0	Calm		0.07	1.8	Cloudy.	
Bismarck, Dakota	27.97	710.4	29.83	757.7	18	— 7.8	84	SE	18	8.0			10s		Calm	0	0	Cloudy.	
Boise City, Idaho	26.93	684.0	29.89	759.2	37	2.8	90	SE	1	0.4			10s		Calm	0.35	8.9	Cloudy.	
Boston, Massachusetts	29.91	759.7	30.08	764.0	13	—10.6	81	NW	16	7.2		0	0			0	0	Clear.	
Brackettville, Texas	28.73	729.7	29.77	756.1	55	12.8	100	E	11	4.9			10n		E	Inap.	Inap.	Light rain.	
Brownsville, Texas	29.87	758.7	29.92	760.0	63	17.2	100	E	2	0.9			10s		Calm	0	0	Cloudy.	
Buffalo, New York	29.68	753.9	30.47	773.9	6	—14.4	88	SW	5	2.2			10n		Calm	0.02	0.5	Light snow.	
Burlington, Vermont	30.02	762.5	30.34	770.6	10	—12.2	79	NE	7	3.1			10n		NE	0.01	0.3	Light snow.	
Cairo, Illinois	29.99	761.7	30.42	772.7	23	— 5.0	73	N	9	4.0		0	Haze			0	0	Clear.	
Campo, California	27.36	694.9	29.93	760.2	36	2.2	90	S	3	1.3		8k	0	W		0	0	Cloudy.	
Camp Thomas, Arizona	27.16	689.8			35	1.7	70	Calm				0	0			0	0	Clear.	
Cape Henry, Virginia	30.17	766.3	30.19	766.8	20	— 6.7	85	N	32	14.3			10n		Calm	Inap.	Inap.	Light snow.	
Cape May, New Jersey																			
Castroville, Texas	29.14	740.1	29.84	757.9	37	2.8	100	SE	5	2.2			Fog			0	0	Foggy.	
Cedar Keys, Florida	30.08	764.0	30.10	764.5	41	5.0	82	N	9	4.0		5c	0	Calm		0	0	Fair.	
Champaign, Illinois	29.65	753.1	30.56	776.2	4	—15.6	48	NE	7	3.1		0	0			Inap.	Inap.	Clear.	
Charleston, S. Carolina	30.18	766.6	30.24	768.1	33	0.6	51	N	10	4.5		0	5s		N	0	0	Fair.	
Charlotte, N. Carolina	29.36	745.7	30.24	768.1	22	— 5.6	72	N	10	4.5		2c	Sm'e	Calm	Calm	Inap.	Inap.	Fair.	
Chattanooga, Tennessee	29.42	747.3	30.27	768.8	29	— 1.7	78	NE	16	7.2		8cs	2ks	N	NE	0	0	Cloudy.	
Cheyenne, Wyoming	23.76	603.5	29.70	754.4	42	5.6	50	NW	4	1.8			10s		Calm	0	0	Cloudy.	
Chicago, Illinois	29.82	757.4	30.60	777.2	12	—11.1	61	Calm	0	0		0	Fog			0.01	0.3	Clear.	
Chincoteague, Virginia	30.18	766.6	30.20	767.1	9	—12.8	78	NW	18	8.0		1k	0	NW		0	0	Clear.	
Cincinnati, Ohio	29.83	757.7	30.56	776.2	11	—11.7	60	N	6	2.7		0	0			0.01	0.3	Clear.	
Cleveland, Ohio	29.72	754.9	30.54	775.7	9	—12.8	89	N	4	1.8			10n		Calm	Inap.	Inap.	Light snow.	
Coleman City, Texas	28.14	714.7	29.83	757.7	44	6.7	68	S	4	1.8			10s		Calm	0	0	Cloudy.	
Columbus, Ohio	29.60	751.8	30.56	776.2	2	—16.7	72	N	2	0.9			10s		Calm	0	0	Cloudy.	
Concho, Texas	27.98	710.7	29.70	754.4	38	3.3	91	S	2	0.9		0	0			0	0	Clear.	
Corsicana, Texas	29.56	750.8	30.04	763.0	46	7.8	77	SE	8	3.6		0	2s		Calm	0	0	Clear.	
Davenport, Iowa	29.81	757.2	30.54	775.7	0	—17.8	85	E	4	1.8		10cs	0	Calm		Inap.	Inap.	Cloudy.	
Dayton, Washington T'y	27.97	710.4	29.63	752.6	40	4.4	91	N	6	2.7		0	0			0.35	8.9	Clear.	
Deadwood, Dakota	24.99	634.7			40	4.4	73	E	2	0.9		0	0			0	0	Clear.	
Decatur, Texas	28.79	731.3	29.98	761.5	43	6.1	84	E	11	4.9		5c	0	Calm		0	0	Fair.	
Delaware Breakwater, Del.	30.15	765.8	30.17	766.3	11	—11.7	80	NW	25	11.2		0	0			0	0	Clear.	
Denison, Texas	29.23	742.4	30.04	763.0	43	6.1	92	E	8	3.6		0	0			0	0	Clear.	
Denver, Colorado	24.48	621.8	29.70	754.4	41	5.0	65	SW	3	1.3		0	0			0	0	Clear.	
Des Moines, Iowa	29.43	747.5	30.40	772.1	14	—10.0	82	SE	10	4.5			10s		SE	Inap.	Inap.	Cloudy.	
Detroit, Michigan	29.80	756.9	30.56	776.2	3	—16.1	100	N	4	1.8			10s		Calm	0	0	Cloudy.	
Dodge City, Kansas	27.22	691.4	29.53	750.0	36	2.2	71	SE	17	7.6		0	0			0	0	Clear.	
Dubuque, Iowa	29.76	755.9	30.56	776.2	3	—16.1	73	E	1	0.4		0	2s		Calm	0.01	0.3	Clear.	
Duluth, Minnesota	29.81	757.2	30.58	776.7	5	—15.0	87	NE	20	8.9			10s		NE	0	0	Cloudy.	
Eagle Pass, Texas	29.14	740.1	29.87	758.7	58	14.4	94	SE	3	1.3			10n		Calm	Inap.	Inap.	Light rain.	
Eagle Rock, Texas	25.01	635.2	29.66	753.4	41	5.0	100	SW	3	1.3			10n		Calm	1.13	28.7	Heavy rain.	
Eastport, Maine	29.80	756.9	29.87	758.7	20	— 6.7	56	NW	24	10.7		1c	0	N		0.03	0.8	Clear.	
Edinburg, Texas					63	17.2	83	S			1	0	8ks		Calm	0	0	Fair.	
El Paso, Texas	26.14	663.9			52	11.1	35	NW	8	3.6		0	0			0	0	Clear.	
Erie, Pennsylvania	29.70	754.4	30.51	774.9	4	—15.6	74	SW	3	1.3		0	0			0	0	Clear.	
Escanaba, Michigan	29.94	760.5	30.72	780.3	— 8	—22.2	100	Calm	0	0		0	0			0	0	Clear.	
Florence, Arizona	28.34	719.8	29.94	760.5	49	9.4	57	SE	2	0.9		0	0			0	0	Clear.	
Fort Apache, New Mexico	24.95	633.7	30.40	772.1	28	— 2.2	54	E	2	0.9		0	0			0	0	Clear.	
Fort Assinniboine, Montana	26.84	681.7			29	— 1.7	68	Calm	0	0		0	0			Inap.	Inap.	Clear.	
Fort Bennett, Dakota	28.08	713.2			25	— 3.9	75	SE	20	8.9			10s		Calm	0	0	Cloudy.	
Fort Buford, Dakota	27.66	702.6	29.54	750.3	25	— 3.9	87	SE	2	0.9		5cs	0	SW		0.07	1.8	Fair.	
Fort Custer, Montana	26.50	673.1			36	2.2	90	SE	3	1.3		0	0			0	0	Clear.	
Fort Davis, Texas	25.19	639.8	30.05	763.3	43	6.1	59	S	2	0.9		0	0			0	0	Clear.	
Fort Elliott, Texas	27.14	689.3	29.46	748.3	35	1.7	80	SE	4	1.8		0	0			0	0	Clear.	
Fort Gibson, Indian T'y	29.52	749.8	30.07	763.8	43	6.1	51	SE	16	7.2			10s		E	0	0	Cloudy.	
Fort Grant, Arizona	25.13	638.3	29.93	760.2	52	11.1	23	N	8	3.6		0	0			0	0	Clear.	
Fort Griffin, Texas	28.57	725.7	29.87	758.7	40	4.4	82	Calm	0	0		0	0			0	0	Clear.	
Fort Keogh, Montana	27.14	689.3			32	0.0	79	Calm	0	0		10cs	0	Calm		0	0	Cloudy.	
Fort McKavett, Texas	27.66	702.6	29.56	750.8	52	11.1	100	S	4	1.8			10s		Calm	0	0	Cloudy.	
Fort Macon, North Carolina	30.14	765.5	30.16	766.1	25	— 3.9	50	N	27	12.1		0	0			0	0	Clear.	
Fort St. Michaels	29.55	750.6	29.56	750.8	—19	—28.3	100	N	4	1.8		0	0						
Fort Missoula, Montana	26.49	672.8			34	1.1	100	S	1	0.4			10s		Calm	0.14	3.6	Cloudy.	
Fort Shaw, Montana	26.05	661.7			38	3.3	81	W	6	2.7			10s		Calm	0	0	Cloudy.	
Fort Sill, Indian Territory	28.72	729.5	29.85	758.2	41	5.0	74	E	4	1.8		0	0			0	0	Clear.	
Fort Stevenson, Dakota	28.01	711.4			21	— 6.1	86	SE	18	8.0			10n		SE	0.08	2.0	Light sleet.	
Fort Verde, Arizona					40	4.4	65	SE			1		10s		S	0	0	Cloudy.	
Fredericksburg, Texas	28.19	716.0	29.73	755.1	56	13.3	94	NE	3	1.3			10n		Calm	Inap.	Inap.	Light rain.	
Galveston, Texas	29.98	761.5	30.02	762.5	54	12.2	93	E	8	3.6		0	8s		Calm	0	0	Fair.	
Grand Haven, Michigan	29.90	759.4	30.66	778.7	— 9	—22.8	100	NE	5	2.2		0	0			0	0	Clear.	
Hatteras, North Carolina	30.14	765.5	30.16	766.1	23	— 5.0	86	NW	24	10.7		5k	0	NW		0	0	Fair.	
Helena, Montana	25.52	648.2			40	4.4	73	SE	8	3.6			10s		Calm	0	0	Cloudy.	
Henrietta, Texas	28.94	735.1	29.89	759.2	42	5.6	74	SE	8	3.6		0	0			0	0	Clear.	
Indianapolis, Indiana	29.65	753.1	30.54	775.7	3.5	—15.8	73	N	5	2.2		0	0			0.01	0.3	Clear.	
Indianola, Texas	29.96	761.0	29.98	761.5	57	13.9	94	SE	13	5.8			10s		Calm	0	0	Cloudy.	
Jacksboro, Texas	28.78	731.0	29.92	760.0	47	8.3	70	SE	8	3.6			10s		S	0	0	Cloudy.	
Jacksonville, Florida	30.08	764.0	30.13	765.3	38	3.3	72	N	10	4.5		2cs	0	Calm		0	0	Clear.	
Keokuk, Iowa	29.78	756.4	30.52	775.2	10	—12.2	79	E	13	5.8		0	5s		Calm	0	0	Fair.	
Key West, Florida	29.97	761.2	30.01	762.2	64	17.8	78	N	13	5.8		2k	0	N		0	0	Fair.	
Kittyhawk, North Carolina	30.17	766.3	30.20	767.1	21	— 6.1	71	N	36	16.1		0	8ks		NE	0	0	Cloudy.	
Knoxville, Tennessee	29.27	743.4	30.36	771.1	22	— 5.6	86	NE	8	3.6		5cs	0	Calm		Inap.	Inap.	Fair.	
La Crosse, Wisconsin	29.72	754.9	30.54	775.7	11	—11.7	60	SE	6	2.7		0	10s		Calm	0	0	Cloudy.	
La Mesilla, New Mexico	26.02	660.9	30.16	766.1	40	4.4	48	Calm	0	0		0	0			0	0	Clear.	
Laredo, Texas	29.46	748.3	29.80	756.9	61	16.1	94	SE	2	0.9			10s		Calm	0	0	Cloudy.	
Leavenworth, Kansas	29.29	744.0	30.19	766.8	26	— 3.3	75	SE	15	6.7			10s			0	0	Cloudy.	
Lewiston, Idaho	28.95	735.6	29.61	752.1	35	1.7	90	E	1	0.4			Fog			0.42	10.7	Foggy.	
Little Rock, Arkansas	29.87	758.7	30.20	767.1	36	2.2	80	NE	6	2.7		0	0			0	0	Clear.	
Los Angeles, California	29.62	752.3	29.98	761.5	52	11.1	86	NE	7	3.1			10n		Calm	0.11	2.8	Light rain.	
Louisville, Kentucky	29.88	758.9	30.51	774.9	8	—13.3	78	N	9	4.0		0	0			0.02	0.5	Clear.	
Lynchburg, Virginia	29.54	750.3	30.29	769.4	22	— 5.6	72	W	6	2.7		0	0			0	0	Clear.	
Madison, Wisconsin	29.46	748.3	30.58	776.7	5	—15.0	75	NE	7	3.1		5cs	0	NW		Inap.	Inap.	Fair.	
Marquette, Michigan	29.89	759.2	30.72	780.3	— 4	—20.0	28	NW	8	3.6		0	0			0	0	Clear.	
Mason, Texas	28.30	718.8	30.05	763.3	56	13.3	87	SE	3	1.3			10s		Calm	0	0	Cloudy.	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.91	759.7	30.28	769.1	31	— 0.6	69	NE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Milwaukee, Wisconsin	29.79	756.7	30.60	777.2	18	— 7.8	84	E	4	1.8	.....	.....	10s	.....	SE	Inap.	Inap.	Cloudy	
Mobile, Alabama	30.01	762.2	30.09	764.3	40	4.4	100	N	6	2.7	.....	.....	Fog	.....	.....	0	0	Dense fog	
Montgomery, Alabama	29.92	760.0	30.17	766.3	38	3.3	71	E	5	2.2	.....	10cs	0	NW	.....	0	0	Cloudy	
Moorhead, Minnesota	29.14	740.1	30.17	766.3	14	—10.0	91	SE	46	20.6	.....	.....	10s	.....	SE	0	0	Cloudy	
Morgantown, W. Virginia	29.39	746.5	30.50	774.7	7.5	—13.6	66	N	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Mt. Washington, N. H.	23.42	594.9	29.78	756.4	2	—16.7	72	NW	30	13.4	.....	0	8s	.....	NW	0.05	1.3	Clear	
Nashville, Tennessee	29.79	756.7	30.38	771.6	20	— 6.7	70	NE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
New Haven, Connecticut	30.00	762.0	30.13	765.3	10	—12.2	79	N	12	5.4	.....	5cs	0	Calm	.....	0	0	Fair	
New London, Connecticut	30.05	763.3	30.10	764.5	14	—10.0	64	N	7	3.1	.....	1ck	0	Calm	.....	0	0	Clear	
New Orleans, Louisiana	29.99	761.7	30.05	763.3	50	10.0	86	NE	7	3.1	.....	8c	Sm'o	W	.....	0	0	Fair	
Newport, Rhode Island	30.00	762.0	30.06	763.5	15	— 9.4	65	NW	12	5.4	.....	4c	0	NE	.....	0	0	Fair	
New River, N. Carolina	.....	.....	.....	.....	23	— 5.0	88	N	.....	.....	4	2cs	0	Calm	.....	.....	.....	Clear	
New Shoreham, Rhode I'd	30.05	763.3	30.08	764.0	18	— 7.8	84	N	13	5.8	.....	0	0	.....	.....	0	0	Clear	
New York, New York	29.99	761.7	30.19	766.8	15	— 9.4	82	NW	11	4.9	.....	2cs	8s	NW	Calm	0	0	Cloudy	
Norfolk, Virginia	30.17	766.3	30.23	767.8	15	— 9.4	65	N	15	6.7	.....	8k	0	N	.....	0	0	Fair	
North Platte, Nebraska	26.83	681.5	29.42	747.3	34	1.1	84	SE	28	12.5	.....	.....	10s	.....	Calm	0	0	Cloudy	
Olympia, Washington T'y	29.58	751.3	29.62	752.3	44.0	6.7	96	S	1	0.4	.....	.....	10s	.....	Calm	0.60	15.2	Cloudy	
Omaha, Nebraska	28.97	735.8	30.15	765.8	20	— 6.7	78	SE	20	8.9	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Oswego, New York	30.04	763.0	30.39	771.9	10	—12.2	79	N	8	3.6	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Pensacola, Florida	30.06	763.5	30.10	764.5	44	6.7	92	E	3	1.3	.....	2cs	Fog	NW	Calm	0	0	Fair	
Philadelphia, Pa	30.15	765.8	30.20	767.1	12	—11.1	80	N	18	8.0	.....	.....	10s	.....	N	0	0	Cloudy	
Phœnix, Arizona	28.73	729.7	30.56	776.2	44	6.7	76	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.58	446.5	29.79	756.7	18	— 7.8	68	W	56	25.0	.....	0	1s	.....	SW	0	0	Clear	
Pilot Point, Texas	29.23	742.4	30.10	764.5	43	6.1	83	E	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Ploche, Nevada	23.78	604.0	29.56	750.8	42	5.6	66	S	11	4.9	.....	.....	10n	.....	Calm	0.02	0.5	Light rain	
Pittsburg, Pennsylvania	29.60	751.8	30.54	775.7	2	—16.7	86	NW	1	0.4	.....	.....	10s	.....	NW	0.02	0.5	Cloudy	
Port Huron, Michigan	29.79	756.7	30.54	775.7	11	—11.7	80	N	20	8.9	.....	.....	10n	.....	N	0.06	1.5	Light snow	
Portland, Maine	29.98	761.5	30.03	762.7	19	— 7.2	54	NW	10	4.5	.....	0	2s	.....	Calm	0	0	Clear	
Portland, Oregon	29.59	751.6	29.66	753.4	47.5	8.6	96	NE	4	1.8	.....	.....	10s	.....	Calm	0.10	2.5	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	25	— 3.9	50	NW	25	11.2	.....	2k	0	W	.....	0	0	Clear	
Prescott, Arizona	24.63	625.6	29.99	761.7	47	8.3	34	S	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	30.00	762.0	30.02	762.5	52	11.1	79	N	11	4.9	.....	5ck	0	SW	.....	0	0	Fair	
Red Bluff, California	29.45	748.0	29.80	756.9	55.0	12.8	93	S	10	4.5	.....	.....	10s	.....	Calm	0.39	9.9	Cloudy	
Rio Grande City, Texas	29.72	754.9	29.93	760.2	66	18.9	89	SE	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Rochester, New York	29.74	755.4	30.42	772.7	10	—12.2	79	N	8	3.6	.....	.....	10n	.....	Calm	Inap.	Inap.	Light snow	
Roseburg, Oregon	29.16	740.7	29.72	754.9	50	10.0	89	SE	3	1.3	.....	.....	10s	.....	Calm	0.48	12.2	Cloudy	
Sacramento, California	29.80	756.9	29.87	758.7	55	12.8	93	S	11	4.9	.....	.....	10n	.....	Calm	1.45	36.8	Light rain	
St. Louis, Missouri	29.79	756.7	30.43	772.9	15	— 9.4	82	E	5	2.2	.....	1cs	0	Calm	.....	0	0	Clear	
St. Paul, Minnesota	29.51	749.5	30.43	772.9	11	—11.7	80	E	17	7.6	.....	.....	10s	.....	E	0	0	Cloudy	
Salt Lake City, Utah	25.34	643.6	29.67	753.6	47	8.3	85	Calm	0	0	.....	.....	10n	.....	Calm	0.40	10.2	Heavy rain	
San Antonio, Texas	29.26	743.2	29.95	760.7	58	14.4	94	E	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
San Diego, California	29.95	760.7	30.02	762.5	54	12.2	87	E	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Sandusky, Ohio	29.79	756.7	30.54	775.7	10	—12.2	79	N	12	5.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Sandy Hook, New Jersey	30.13	765.3	30.16	766.1	14	—10.0	64	N	22	9.8	.....	10cs	0	Calm	.....	0	0	Cloudy	
San Francisco, California	29.84	757.9	29.90	759.4	50	13.3	90	W	11	4.9	.....	.....	9s	.....	W	0.64	16.3	Light rain	
Santa Fé, New Mexico	23.17	588.5	29.71	754.6	40	4.4	73	E	3	1.3	.....	0	5s	.....	Calm	0	0	Fair	
Savannah, Georgia	30.11	764.8	30.21	767.3	34	1.1	61	NE	12	5.4	.....	2cs	8ks	W	W	0	0	Cloudy	
Shreveport, Louisiana	29.85	758.2	30.10	764.5	43	6.1	83	E	4	1.8	.....	0	2s	.....	Calm	0	0	Fair	
Silver City, New Mexico	24.21	614.9	30.46	773.7	41	5.0	41	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Smithville, North Carolina	30.18	766.0	30.21	767.3	27	— 2.8	88	N	12	5.4	.....	0	1ks	.....	Calm	0	0	Clear	
Socorro, New Mexico	25.32	643.1	29.39	746.5	37	2.8	63	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.76	755.9	30.51	774.9	14	—10.0	73	NE	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Springfield, Massachusetts	30.02	762.5	30.16	766.1	10	—12.2	58	N	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Stockton, Texas	26.82	681.2	29.82	757.4	43	6.1	67	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.26	743.2	30.12	765.0	14	—10.0	100	SE	22	9.8	.....	.....	10n	.....	Calm	0.01	0.3	Light snow	
Thatcher's Island, Mass	29.99	761.7	30.04	763.0	17	— 8.3	67	NW	19	8.5	.....	2k	0	NW	.....	0	0	Clear	
Toledo, Ohio	29.78	756.4	30.50	770.2	7	—13.9	66	N	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Tucson, Arizona	27.46	697.5	30.01	762.2	47	8.3	48	SE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.41	747.0	29.91	759.7	32	0.0	100	W	3	1.3	.....	.....	Fog	.....	Calm	0.19	4.8	Dense fog	
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vicksburg, Mississippi	29.87	758.7	30.14	765.5	42	5.6	66	E	7	3.1	.....	1cs	0	Calm	.....	0	0	Clear	
Visalia, California	29.51	749.5	29.88	758.9	58	14.4	91	W	3	1.3	.....	.....	10n	.....	Calm	0.16	4.1	Light rain	
Washington, D. C.	30.15	765.8	30.28	769.1	8	—13.3	55	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Wickenburg, Arizona	.....	.....	.....	.....	40	4.4	85	NW	.....	.....	1	0	5s	.....	Calm	0	0	Fair	
Wilmington, N. Carolina	30.16	765.1	30.22	767.6	27	— 2.8	61	NE	7	3.1	.....	.....	0	.....	.....	0	0	Clear	
Winnemucca, Nevada	25.39	644.9	29.75	755.6	38	3.3	100	SW	12	5.4	.....	.....	10ks	.....	SW	0.27	6.9	Cloudy	
Wood's Holl, Mass	29.99	761.7	30.03	762.7	16	— 8.9	66	N	16	7.2	.....	.....	10s	.....	NE	0	0	Cloudy	
Yankton, Dakota	28.74	730.0	30.12	765.0	19	— 7.2	85	SE	23	10.3	.....	.....	10n	.....	.....	0.05	1.3	Light snow	
Yuma, Arizona	29.08	753.9	29.83	757.7	51	10.6	65	W	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.05	560.1	.....	.....	51.2	10.7	75	Calm	0	0	.....	2cs;k	0	.....	.....	0	0	Fair	Thomas Herran.
Buff Bay Town, Jamaica	29.76	755.9	30.08	764.0	68	20.0	84	E	.....	.....	.....	2c	0	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.95	760.7	30.00	762.0	70	21.1	60	N	3.6	1.6	.....	0	0	.....	.....	0	0	Clear	Charles Hasselbrink.
Jakobshavn, Greenland	30.24	768.1	30.30	769.6	2.5	—16.4	.....	S	.....	.....	2	.....	7	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I.	29.93	760.2	29.94	760.5	68.3	20.2	85	Calm	0	0	.....	0	2s	.....	.....	0.01	0.3	Fair	Robert Johnstone.
Navassa, W. I.	29.84	757.9	29.92	760.0	75.5	24.2	77	NW	5	2.2	.....	8c	5s	N	NW	0	0	Cloudy	F. M. Everett.
Paramaribo, S. A.	29.99	761.7	29.99	761.7	79	26.1	87	E	.....	.....	3	3c	5k	E	.....	0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.36	745.7	29.92	760.0	78	25.6	80	Calm	.....	.....	0	.....	10s	.....	Calm	0	0	Cloudy	Francesco J. Cisneros
Rivas, Nicaragua	.....	.....	.....	.....	71.6	22	.....	ESE	.....	.....	2	0	1ks	.....	ESE	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	29.93	760.2	29.95	760.7	75	23.9	81	NE	2.4	1.1	.....	0	1s	.....	SW	0	0	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	30.29	769.4	30.35	771.0	—12.3	—24.6	.....	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	K. Elberg.
York Factory, B. A.	30.79	782.1	30.85	783.6	—14.0	—25.6	73	NW	10	4.5	.....	1c	0	W	.....	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	c—10	c—10	c—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.00	762.0	61.5	16.4	68	SW			1		2	SW						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope, N. 36° 07′, E. 18° 51′	29.95	760.7				N			2-3		2	N				3	N	D. clouds	Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 37′, E 58° 36′	30.08	764.0	78	25.6	73	ENE			1		0							Blue sky	Comm. G. W. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	30.27	768.8	76	24.4	64	SE			1-2		2					2	S	D. clouds	Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 24° 18′, E. 118° 29′	30.23	767.8	54	12.2	87	NNE			5		1?	SW				2	NE	Overcast?	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.77	756.1	54	12.2	93	NW			1-2		10	NW						Overcast	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 18° 29′, W. 77° 57′	29.93	760.2	75	23.9	81	SE			1		2							D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J. Garforth.
H. M. S. Egeria, Singapore, Malay Peninsula	29.90	759.4	81	27.2		ENE			2		1	SE				1	ENE	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.92	760.0	81	27.2	62	NNW			3-4		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 6′ 20°, W. 81° 25′	29.93	760.2	72	22.2	90	SE			1		10					1	Swell	Overcast	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.15	740.4				SSW			6									Raining	Capt. L. F. Jones.
H. M. S. Griffin																			Capt. T. L. H. Ward.
H. M. S. Hecla																			Capt. J. L. Way.
H. M. S. Humber																			Capt. C. C. P. Fitzgerald.
H. M. S. Inconstant																			Capt. E. H. Seymour.
H. M. S. Iris, N. 38° 38′, E. 17° 26′	29.97	761.2	57	13.9	94	N			2-3		2	N				2	NNE	D. clouds	Capt. H. F. Cleveland.
H. M. S. Iron Duke, N. 22° 16′, E. 149° 57′	30.22	767.6	61	16.1	88	ENE			1		10					Sm'h		Overcast	Comm. R. H. Thornton.
H. M. S. Kingfisher																			Capt. W. G. Scott.
H. M. S. Lapwing																			Comm. S. Grove.
H. M. S. Lily																			Capt. C. J. Brownrigg.
H. M. S. London, Zanzibar, Zanzibar, Africa.	29.97	761.2	80	26.7	91	Calm			0		8							Raining	Capt. R. H. Napier.
H. M. S. Magpie																			Capt. J. F. G. Grant.
H. M. S. Malabar, N. 32° 57′, E. 28° 00′	29.84	757.9	62	16.7	77	WNW			4		5	NW				3	NW	Squally	Capt. H. Rawson.
H. M. S. Minatour, Vigo, Spain	30.08	764.0	55	12.8	84	NW			6		10	W						Squally	Capt. J. G. Mead.
H. M. S. Modeste																			Capt. G. Tyron, C. B.
H. M. S. Monarch																			

STATIONS AND VESSELS.	Barometer reduced to Sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Off Barbadoes, W. I.	29.93	760.2	78	25.6	83	ESE			3		9	ESE				2	E	D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.98	761.5	81.5	27.5	100	Calm			0		10							Overcast	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Spain	30.25	768.3	59	15.0	48	NNW			2-3		4	NW						D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.75	755.6	78	25.6	65	ESE			1-3		ick					3	SE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Callao Bay, Peru	29.93	760.2	68.5	20.3	95	SSE			1		10							Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																		Blue sky	
H. M. S. Tyne, N. 36° 28′, E. 0° 00′	30.00	762.0	61	16.1		WSW			4		0					1	Sm'h	Blue sky	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	29.93	760.2	74	23.3		NNE			1		0			Blank				Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, Palestine	29.88	758.9	74.5	23.6	52	S			5-6		3							Squally	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm G. W. Pollard

GERMAN NAVAL SERIES.

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

PORTUGUESE NAVAL SERIES.

Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Rio Lima, Bulama, Senegambia	29.89	759.3	78.8	26.0	92	NNW			1		0							Blue sky	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando, Africa	29.86	758.4	82.8	28.2	75	WSW			3		3					1		D. clouds	G. A. de Brito Capello, Comd't
Tamega																			

SWEDISH NAVAL SERIES.

Furnished by the co-operation of E. Mahmberg, Director of the Nautical Meteorological Bureau at Stockholm.

H. M. Frigate Vanadis, ‡ N. 36° 51′, E. 14° 42′	29.96	751.0	63.3	17.4	69	WSW			1		1							Blue sky	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

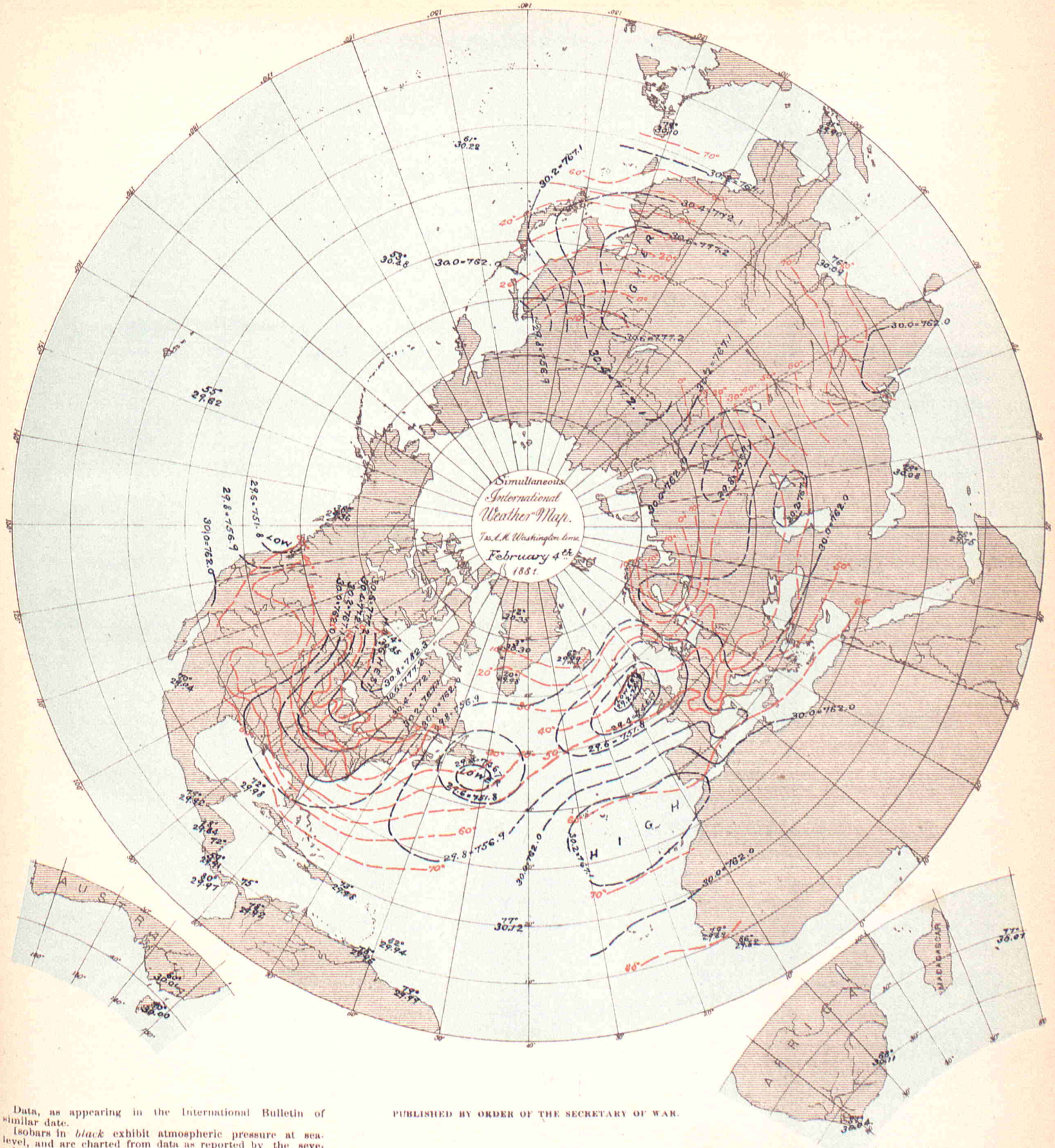
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.		Force	Amount and kind.		Direction							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.18	756.6	53	11.7	73	E	8	3.6			8		NE	0	0			Fair.	
N. Yard, Portsmouth, N. H.	30.01	762.2	11	—11.7	60	NW	7	3.1		2c		NW		0	0			Fair.	
Naval Hospital, Yokohama, Japan	30.05	763.3	40	4.4	39	N			4		5		W	Slight				Fair.	
Adams, Callao, Peru	29.94	760.5	70	21.1	95	SSE			2		10		SSE			Long	SW	Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	29.80	756.9	58	14.4	76	SW			2		10		SW	0.53	13.5			Drizzling	
Alert, Hong-Kong, China	30.10	764.5	62	16.7	83	E			3		10		Calm			Sm'h		Misty	
Alliance, Off Key West, Florida.	29.98	761.5	67	19.4	79	NNW			2		5			0	0	Sm'h		Fair.	
Ashuelot, Tientsin, China	30.67	779.0	15	— 9.4	82	NNW			2		0							Clear	
Colorado, New York, N. Y.	30.18	756.6	14	—10.0		NW	4	1.8			2		Calm	0	0			Fair.	
Constitution, N. Yard, League I'd., Pa			13	—10.6		N	3	1.3			10							Overcast	
Franklin, Norfolk, Va	30.16	766.1	18	— 7.8		N	16.8	7.5			5		N	0	0			Fair.	
Galena, Villafranca, France	29.82	757.4	56	13.3	68	E			1		8					Mod.	S	Cloudy.	
Independence, N. Yard, Mare I'd, Cal.	29.98	761.5	55	12.8	100	SW	3.6	1.6			10		SW	1.98	50.3			Overcast	
Jamestown, Sitka, Alaska	29.36	745 7	38	3.3	90	ESE			5		10			0.04	1.0			Raining	
Kearsarge, N. 24° 50′, W. 86° 10′	29.98	761.5	72	22.2	67	NE			2		5		NE			Sm'h		Fair.	
Lackawanna, Callao, Peru †	30.07	763.8	70	21.1	95	SSE			1-2		10		SE	0	0			Cloudy	
Marion, Sandy P't, Terra del Fuego	29.74	755.4	46	7.8	69	WSW			2		10		Calm	Light		Long	SSE	Cloudy	
Michigan, Erie, Pennsylvania	30.49	774.4	5	—15.0		W	2	0.9			8		W					Cloudy.	
Minnesota, New York, N. Y.	30.19	766.8	16	— 8.9		N			3		9		N					Misty	
Monocacy, Shanghai, China	30.50	774.7	41	5.0	82	E			1		10		Calm					Overcast	
New Hampshire, Port Royal, S. C.	30.20	767.1	36	2.2	61	NNE	10	4.5			10		WNW	0	0			Cloudy	
Nipsic, Marseilles, France	29.74	755.4	57	13.9	47	E			4		10					Sm'h		Overcast	
Onward, Callao, Peru †	29.91	759.7	68	20.0	90	SE			2		10		NW			Long	W	Cloudy	
Palos, Shanghai, China	30.55	776.0	38	3.3	72	NE			1		10		Calm					Overcast	
Passaic, Washington, D. C.	30.33	770.4	10	—12.2	79	NW			1		0							Clear	
Pensacola, N. 13° 39′, W. 91° 09′	29.92	760 0	79	26.1	82	SE			1		0			0	0	Sm'h		Clear	
Portsmouth, Washington, D. C.	30.24	768.1	9	—12.8	100	NW			1		5?							Clear	
Powhatan, New York, N. Y.	30.16	760.1	14	—10.0	100	N			3		10		NE					Overcast	
Quinnebaug, Naples, Italy	29.94	760.5	57	13.9	63	SW			1		8		SW			Sm'h		Fair.	
Richmond, Hong-Kong, China	30.25	768.6	60	15.6	94	ENE			2		10		ENE	0	0			Overcast.	
Saratoga, Baltimore, Md	30.25	768.3	10	—12.2	100	NNW			2		0			0	0			Clear	
Shenandoah, Montevideo, Uruguay	29.72	754.9	75	23.9	72	WNW			2		2					Sm'h		Fair.	
St. Louis, League Island, Pa	30.23	767.8	12	—11.1	80	NW	15	6.7			8			0	0			Cloudy	
Swatara, Nagasaki, Japan †	30.34	770.6	44	6.7	68	Calm			0		10					Sm'h		Overcast	
Tennessee, N. 17° 53′, W. 79° 08′	29.94	760.5	79	26.1	95	NNW	9	4.0			5		Calm	0	0	Sm'h		Fair.	
Ticonderoga, N. Yard, Mare Id., Cal.	29.86	758.4	56	13.3	100	SSW			2		0?			0.12	3.0			Raining	
Trenton, Villafranca, France	29.82	757.4	58	14.4	53	NW			2		10			0	0	Sm'h		Cloudy	
Vandalia. † N. 10° 48′, W. 61° 30′	29.96	761.0	78	25.6	91	SSE			2		2		S					Fair.	
Wabash, Boston, Massachusetts	30.10	764.5	12	—11.1	61	NNW	11	4.9			2		NNW	0	0			Fair.	
Wachusetts, Panama, Panama	29.53	755.1	75	23.9	99	NW			2		5		N			Sm'h		Fair.	
Wyoming, Villafranca, France	29.83	757.7	56	13.3	46	N			1		8		NE			Sm'h		Cloudy.	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
S. 13° 57′, W. 8° 40′	29.98	761.5	80.6	27.0	73	E			4		1							Blue sky	Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 24° 42′, W. 25° 45′	30.19	766.8	70.0	21.1	68	NE			5		5							D. clouds	Capt. A. J. Brown.
British Merchant. ‡																			Capt. E. J. Molony.
Chin Yang, ‡																			
N. 16° 50, W. 34° 27′	30.04	763.0	75	23.9	64	ENE			5		7							D. clouds	Capt. H. Youlden.
S. S. Cipero																			Capt W. N. Lalley.
City of Agra, ‡																			
S. 30° 37′, W. 24° 06′	30.14	765.5	78.5	25.8	82	ENE			3		5							D. clouds	Capt. T. Young.
Barque Commewyne, ‡																			
N. 27° 43′, W. 61° 25′	29.82	757.4	68.9	20.5	91	N			3		10							Misty	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 22° 49′, W. 0° 28′	30.05	763.3	75.5	24.2	70	SE			4		8							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart,																			
N. 18° 56′, E. 90° 10′	30.09	764.3	76.3	24.6	74	NNE			2		2							Misty	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope, ‡																			
S. 4° 30′, W. 36° 10′	29.93	760.2	80.5	26.9	80	SE			4		1							Blue sky	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 18° 55′, W. 42° 57′	30.12	765.0	77.3	25.2	71	E			5		3							Misty	Capt. H. W. Dyke.
Barque Mertola,																			
N. 45° 35′, W. 12° 17′	29.90	759.4	53.4	11.9	99	WSW			6		10							Misty	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee, ‡																			
N. 16° 10′, W. 22° 10′	29.92	760.0	78.0	25.6	86	NNE			3		2					Cof'd	Sw'll	D. clouds	Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven ‡																			Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton,																			
N. 36° 21′, W. 1° 13′	30.06	763.5	65.5	18.6	61	WNW			4		1							Blue sky	Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian,																			
N. 50° 01′, W. 23° 16′	29.43	747.5	52	11.1		W			3		5		SE			High long	NE	Hazy	Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic,																			
N. 47° 10′, W. 34° 55′ †	29.61	752.1	61	10.6		WNW			5		5?		W			Long	W	Clear?	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britanic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic,																			
Queenstown, Ireland †	29.40	746.7	52	11.1		W			3		5?		NW	Showers				Clear?	Capt. Ch. W. Kennedy.
S. S. Republic,																			
N. 41° 21′, W. 59° 54′ *†	29.64	752.8	40	4.4	73	NNW			4		5		N	0	0	Mod.	WNW	Fair	Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Köln, ‡																			
N. 53° 53′, E 7° 07′	29.50	749.3	37.4	3.0		SSW			3		5		SSW	12h'rs	light	Mod.	SSW	Fair	
S. S. Leipzig,																			
N. 40° 40′, W. 54° 52′	29.62	752.3	44.5	6.9	72	NW			4		5		NW	0	0	Mod.	NW	Fair	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 44° 18′, W. 44° 57′	29.51	749.5	47	8.3	92	S			5		5?		S			Long	WNW	Clear?	Capt. J. W. Shackford.
S. S. Indiana, ‡ St. George's Channel...†	29.29	744.0	47	8.3	85	SW			3		8		SW	Light					Capt. R. W. Sargent.
S. S. Ohio ‡																			Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, N. 43° 42′, W. 54° 15′ †	29.35	745.5	31	— 0.6	100	W			5		8		W	Snow		Sm'h	W	Cloudy..	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 28° 05′, E. 125° 59′ †	30.32	770.1	61	16.1	77	NNE			6		10		N	Rain		H'vy	NE	Overcast	Capt. H. Davison.
S. S. Gaelic, N. 37° 09′, E. 167° 21′ *†	30.48	774.2	53	11.7	67	W			1		5?		SW			Sm'h	NW	Clear?	Capt. W. H. Kidley.
S. S. Oceanic, San Francisco, Cal.	29.97	761.2	57	13.9	87	SSE			3		8		SE					Raining	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, Astoria, Oregon †	29.61	752.1	47	8.3	100	SSE			3		10		SSE					Rain & fog..	Capt. Fred. Bolles
S. S. Oregon, nearFt.Stevenson,Col'biaR†	29.59	751.6	47.5	8.6	96	NE			2		10		NE					Rainy	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon. San Pedro, Cal. †	29.95	760.7	57	13.9	94	Calm			0		10		Calm					Rainy	Capt. J. N. Ingalls.
S. S. Idaho, N. 48° 10′, W. 125° 20′ ...†	29.56	750.8	50	10.0	93	S			3		10		SE			Light	SE	Raining	C. E. Lyons, 1st Officer.
S. S. Orizaba..																			
S. S. Senator, N. 34° 05′, W. 119° 10′.. †	30.00	762.0	56	13.3	94	SSE			2		5		W			Mod.	SSW	Raining	Thos. Wallace.
S. S. State of California, San Francisco, Cal. †	29.93	760.2	55	12.8	100	SW			3		10		SW	0	0			Squally	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal. †	29.84	757.9	55	12.8	87	SW			4		10		W					Light rain	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 25° 27′, W. 176° 20′	29.55	750.6	75	23.9	95	WNW			5		0					Long	NW	Clear	A. Bannerman,1st Officer.
S. S. City of New York, Sydney, N. S. W. †	29.97	761.2	68	20.0	100	S			4		10		S	0	0			Cloudy	Wm.H.Hawes,2d Officer.
S. S. City of Panama, N. 7° 14′. W. 82° 06′ †	29.97	761.2	80	26.7	66	NE			4		10		S	3 hours		Sm'll	E	Overcast	Capt. D. S. Austin.
S. S. City of Peking, N. 30° 47′, E. 129° 52′ †	30.32	770.1	49	9.4	71	NNW			5		10		N	0	0	Sm'h		Cloudy	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 37° 32′, W. 153° 09′ †	29.62	752.3	55	12.8	80	SW			6		10		SW			Mod.	SW	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima ‡																			Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, N. 11° 35′, W. 87° 25′ †	29.84	757.9	78	25.6	78	NE			6		0			0	0	R'gh	NE	Hazy	
S. S. Zealandia, S. 17° 38′, W. 172° 01′	29.93	760.2	80	26.7	87	NNW			4		0			0	0	Sm'h	NW	Clear..	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland, ‡ Antwerp, Belgium	29.51	749.5	54	12.2	68	SW			2		2		S			Sm'h		Fair	Capt. Sam'l Jackson.
S. S. Nederland, N. 44° 55′, W. 39° 05′ †	29.84	757.9	59	15.0		WSW			2		8		WSW	0	0	Long	W	Fine	Capt. S. Stokes.
S. S. Rhyniand, ‡ Antwerp, Belgium	29.65	753.1	50	10.0		S			3		5		S	0	0			Fair	Capt. W. Geo. Randle.
S. S. Vaderland ‡																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Jacksonville, Florida...†	30.04	763.0	50	10.0		NE			2		0			0	0			Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va	30.23	767.8	20	— 6.7	85	NNW	8	3.6						0	0			Fair	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, N. 24° 25′, W. 57° 17′ †	29.93	760.2	76	24.4		SSW			5		8		SSW	2oh'rs	very heavy	R'gh Cross	NNE; 8	Cloudy	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 38° 40′, E. 4° 14′ †*	29.96	761.0	62	16.7		W			6		2		W			R'gh	W	Threatening	Capt B. F. Woodbury.
Brigantine George, ‡ N. 19°2 5′, W. 67° 35′ †	30.21	767.3	80	26.7		SW			2		2			0	0	Long H'vy	NE	Fine	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard,Norfolk,Va†	30.15	765.8	20	— 6.7		NW	5	2.2		2c	2k			0	0			Cloudy	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Portugal †	30.22	767.6	57	13.9	100	WNW			6		8		WNW	Light				Clearing	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 5, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather	Observers.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.22	767.5	65.3	18.5	73	NE			6		1			0	0	Very fair	Dr. Ollive.
Nemours			30.08	763.9	61.5	16.4	83	SW			4		1			0	0	Very fair	Raynard.
Algiers			29.80	756.9	60.4	15.8	61	W			5		9			0	0	Covered	Nicolas.
La Calle			29.80	756.9	55.4	13.0	89	N			5		9			0.370	9.4	Covered	Fonfréde.
Tunis			29.80	756.9															Jacques.
Sfax			29.80	756.8															Gau.
Saida			30.11	764.7	51.6	10.9	56	W			5		7			0	0		Dumas.
Tebessa			29.91	759.7	45.0	7.2	94	NW			7		10			0.035	0.9	Very cloudy	Watrin.
Gerivillo																			Lonchamp.
Laghouat			30.05	763.3	54.7	12.6	63	SSW			4		4			0	0	Cloudy	Herbin.
Biskra			30.02	762.6															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.94	760.5	30.03	762.7	59.2	15.1	75	SSE	16	7.2			4			0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			30.00	762.0	70	21.1		SE			2		5k			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.37	745.9	29.95	760.6	30.7	— 0.7	86	Calm			0		10			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.07	738.4	29.87	758.7	30.6	— 0.8	97	ENE	2.5	1.1			0			0	0		Dr. Wiersbicki.
Eperies	29.03	737.3	29.95	760.8	29.1	— 1.6	96	Calm			0		Fog			0	0		Julius Mikolik.
Gratz ‡	28.60	726 5	29.91	759.7	31.1	— 0.5	85	S			2		10			0.004	0.1		Andreas Rospini.
Hermannstadt	28.50	723.9	30.00	762.1	28.6	— 1.9	86	S			2		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.41	721.5	29.81	757.1	29.1	— 1.6	92	ENE			1		10			0	0		The Staff.
Lemberg	28.93	734.8	29.97	761.2	27.8	— 2.4	77	SE			2		2			0	0		Dr. T. Stanecki.
Pola	29.72	754.8	29.83	757.7	48.2	9.0	66	ESE			2		10			0	0		I. R. HydrographicOffice
Szathmar	29.58	751.2	30.04	762.9	31.3	— 0.4	89	SE			2		10			0	0	Foggy	Beicht Peter, S. J.
Szegedin	29.67	753.5	29.96	761.0	30.6	— 0.8		Calm			0		10			0	0		Karl Stancel.
Trieste	29.73	755.2	29.84	757.8	46.4	8.0	68	E			1		0			0	0	Clear	P. Busin.
Vienna	29.15	740.4	29.90	759.4	31.1	— 0.5	83	SE			3		10			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.28	743 7	29.48	748.8	46.6	8.1	82	SSW			2		10		SW	0.157	4.0		Royal Observatory
Furnes	29.41	746.9	29.43	747.5	45.9	7.7	93	WSW			2		10			0.063	1.6		M. E. de Cae.
Maeseyck	29.40	746.7	29.52	749.9	46.9	8.3	82	SW			2		10			0.047	1.2		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 8, 1882.

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

BRITISH SERIES.

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

Aberdeen	29.30	744.2	29.40	746.7	35.7	2.1	85	NNW	26	11.6			7			0.075	1.91	Squally	W. Boswell.
Armagh, Observatory	29.37	746.0	29.60	751.8	39.7	4.3	69	NNW	18	8.0			7					Squally	S. Call.
Bidston, Liverpool Obs'y			29.34	745.2	38.8	3.8	88	WNW	26	11.6			10					Overcast	John Hartnup.
Bolton, Sharples	28.79	731.3	29.32	744.7	38.2	3.4	96	WNW	6	2.7			10					Raining	Thomas Mackereth.
Bradford, Yorkshire	28.86	733.0	29.25	742.9	41.1	5.1	84	W			3		6			0.04	1.0	D. clouds	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.95	760.7	29.98	761.5	83	28.3	73	NE			2		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			29.36	745.7	43.0	6.1	75	NW			1.0		5					D. clouds	John McLaren.
Chatham, School M. E.	29.32	744.7	29.45	748.0	43.1	6.2	69	W			1		10			Bla	nk	Gloomy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.46	748.3	29.68	753.9	44.6	7.0	69	NW			5		7					Overcast	The Staff.
Fort Napier, Natal	27.68	703.1	29.90	759.4	78.3	25.7	100	NE			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.60	751.8	29.82	757.4	86	30.0	88	SW			1		3					D. clouds	C. E. Keane.
Galway, Queen's College			29.72	754.9				WNW			4		5					D. clouds	J. O'Donaghadue.
Gibraltar, Mediterranean	30.18	766.6	30.24	768.1	58.5	14.7	85	W			2		5					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.25	742.9	29.46	748.3	37.8	3.2	62	N			2		10					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.27	743.4	29.44	747.8	43.0	6.1	67	W			3		10					Showery	The Staff.
Guernsey	29.38	746.2	29.60	751.8	45	7.2	96	WNW			5		3					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.42	747.3	29.46	748.3	43.4	6.3	62	W	20	8.9			7					D. clouds	The Met'g'l Office.
Leicester, Museum	29.10	739.1	29.35	745.5	47.6	8.7	79	N			3		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.56	750.8	29.64	752.8	55.2	12.9	92	SW			3		6					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.02	762.5	67.5	19.7	74	NE			5		9					Overcast	C. S. Duncombe.
Oscott, St. Mary's College	28.87	733.3	29.39	746.5	40.8	4.9	74	W			2		5					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	29.21	741.9	29.46	748.3	43.8	6.6	68	W			5		7					D. clouds	The Staff.
Plymouth	29.55	750.6	29.62	752.3	44.3	6.8	82	WNW			4		5					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.53	750.0	33.8	1.0	90	N	35	15.6			10					Snowing	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.92	760.0	29.99	761.7	46.0	7.8	87	NE			2		10					Gloomy	Serg't W. H. Lyne.
Sheffield	29.06	738.1	29.34	745.2	41.8	5.4	92	SW			3		10			0.08	2.0	Threatening	W. F. Cooper.
Silloth Rectory	29.43	747.5	29.46	748.3	36.9	2.7	91	N			1		10			0.170	4.32	Snowing	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.32	744.7	39.3	4.1	91	WNW	13	5.8			10					Overcast	Rev. S. J. Perry.
Strathfield Turgiss	29.26	743.2	29.48	748.8	42.7	5.9	72	W			3		10					Squally	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	29.66	753.4	29.71	754.6	47	8.3	77	N			7		5					D. clouds	W. Newcombe.
Valencia, Observatory	29.81	757.2	29.83	757.7	42.8	6.0	80	N	14	6.3			10			Bla	nk	D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B	30.17	766.3	30.21	767.3	20.7	— 6.3		NW	3	1.3		0	9n			0	0	Cloudy	Hon. J. Ferguson.
Chatham, N. B.*	30.04	763.0	30.11	764.8	20	— 6.7	88	NW	7	3.1		2k	8ks	NW	NW	0	0	Cloudy	G. A. Blair.
Charlottetown, P. E. Island	29.96	761.0	30.01	762.2	25	— 3.9	95	NW	15	6.7			10s			0.050	1.27	Cloudy	H. J. Cundall, C. E.
Chicontime, Quebec					6.7	—14.1		NW			3	0	0			0	0	Clear	Rev. V. A. Huart.
Cornwall, Ontario	30.26	768.6	30.48	774.2	— 3.0	—19.4	100	SW			1	0	1s			0	0	Clear	James Smith, M. A.
Dalhousie, N. B	30.11	764.8	30.14	765.5	19.0	— 7.2		W			1		10s			0	0	Cloudy	H. A. Johnson.
Father Point, Quebec*	30.28	769.1	30.30	769.6	19	— 7.2	69	N	5	2.2		2k	5ks		Calm	0	0	Fair	J. McWilliams.
Fredericton, N. B	30.09	764.3	30.16	766.1	16.0	— 8.9	83	W	0	2.7		0	0			0	0	Clear	Prof. Harrison.
Fort Garry, Manitoba*	29.32	744.7	30.21	767.3	17	— 8.3	100	SE	16	7.2			10n		SE	1.100	25.65	Light snow	James Stewart.
Granton, Ontario	29.39	746.5	30.68	779.3	—10.9	—23.8	61	Calm			0	0	0			0	0	Clear	James Grant.
Halifax, N. S.*	29.87	758.7	30.01	762.2	26	— 3.3	88	NW	10	4.5			8ks			Inap.	Inap.	Cloudy	A. Allison.
Hamilton, Ontario	30.16	766.1	30.61	777.5	— 4.2	—20.1	83	W			1	5c	0			0	0	Fair	Geo. Dickson, B. A.
Kingston, Ontario*	30.14	765.5	30.52	775.2	— 3	—19.4	83	Calm	0	0		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S	29.84	757.9	29.88	758.9	29.5	— 1.4	95	NW	2	0.9			10n			0	0	Cloudy	C. H. Rigby.
Montreal, Quebec*	30.19	766.8	30.41	772.4	15	— 9.4	86	NW	20	8.9		0	2s			0	0	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	29.89	759.2	30.67	779.0	4	—15.6	82	E	5	2.2		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario	29.78	756.4	30.63	778.0	1.4	—17.0	42	Calm			0	0	0			0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.82	757.4	30.62	777.7	— 8	—22.2	100	Calm	0	0		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	29.87	758.7	30.64	778.2	—14	—25.6	100	N	8	3.6		0	0			0	0	Clear	M. Payne.
Quebec, Quebec*	29.99	761.7	30.36	771.1	5	—15.0	75	W			1		8s		W	0	0	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.14	765.5	30.67	779.0	— 4	—20.0	100	Calm	0	0		0	0			0	0	Clear	W. H. McIntyre.
St. Andrews	30.07	763.8	30.12	765.0	18	— 7.8	87	N	2	0.9		0	0			0	0	Clear	
St. John's, N. B	29.95	760.7	30.13	765.3	19.0	— 7.2	92	N	5	2.2		0	0			0	0	Clear	G. Murdock, C. E.
Saugeen, Ontario	29.81	757.2	30.63	778.0	— 4	—20.0	93	Calm	0	0		0	0			0	0	Clear	K. Stewart.
Stratford, Ontario	29.20	741.7	30.73	780.5	—18.3	—27.9	92	Calm	0	0		0	Fog			0	0	Clear	C. J. Macgregor, M. A.
Sydney, C. B*	29.81	757.2	29.85	758.2	29	— 1.7	91	N	19	4.5		8cs	2s	N	N	0.02	0.5	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	30.17	766.3	30.60	777.2	5	—15.0	85	N	10	4.5		2cs	0			0	0	Clear	Magnetic Observatory.
Windsor, N. S	29.92	760.0	30.02	762.5	25.5	— 3.6	87	NW	11	4.9		0	8k			0	0	Overcast	
Woodstock, Ontario	29.41	747.0	30.66	778.7	—13.6	—25.3	95	W	2	0.9		0	0			0	0	Clear	Prof. Wolverton.
Yarmouth, N. S.*	29.98	761.5	30.05	763.3	26	— 3.3	78	NE	2	0.9		2k	0	N		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.39	746.5	29.64	752.8	34	1.1	79	NW	1	0.4		0	0			0.20	5.1	Fair	John Delany.
St. Pierre, N. F.			29.55	750.6	28.4	— 2.0		W			2					0	0		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			
Cape Town, C. G. H. Obs'y	29.94	760.5	29.98	761.5	77.6	25.3	59	SSE	28.9	12.9		0	0			0	0	Clear	The Staff, for D. Gill.
Cape St. Francis Lt. House	30.02	762.5			69.0	20.6	9c	E	18.0	8.0		0	0			0	0	Blue sky	John Duthie.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.59	776.9	30.61	777.5	30.0	— 1.1	84	NE	1.8	0.8			10			0	0	Covered	M. Marc Dechevrens, S. J.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the MINISTER OF FOREIGN AFFAIRS.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.18	665.0	29.90	759.4	62.6	17.0	98	NE			1		2ck			0	0	Clear.	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.42	747.3	29.47	748.5	37.6	3.1	88	S	18	8			10						Oversergent Fischer.
Fanöe	29.32	744.8	29.34	745.3	35.1	1.7	100	SSW			6		10					Raining	Overloerer Lauridsen.
Godthaab, Greenland	29.67	753.7	29.72	754.8	17.2	— 8.2	76	NE			4		0						S. Kleinschmidt.
Stykkisholm, Iceland	29.96	760.9	30.00	762.0	4.6	—15.2	91	E			2		10						A. O. Thorlacius.
Thorshavn	29.80	757.0	29.84	757.9	30.6	— 0.8	68	N	16	7			3						Overloerer Bergh.
Vestervig	29.19	741.5	29.29	743.9	35.1	1.7		SSW			4		10					Foggy	Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.10	739.2	29.75	755.8	50.7	10.4	74	W			1		8		ENE	0.185	4.7	Raining	M. Labroue, Director.
Alençon	29.08	738.7	29.63	752.7	46.4	8	89	NW			3		8kn		SW	0.087	2.2	Very cloudy	M. Nicot, Director.
Arras, Engineer School	29.24	742.6	29.50	749.2	47.8	8.8	78	W	23.7	9.7			kn						M. Klein, Commandant.
Avignon, Normal School	29.70	754.4	29.78	756.4	53.2	11.8	67	N			1		10			0	0	Covered	M. Giraud, Director.
Bar-sur-Seine	29.04	737.5	29.60	751.7	46.2	7.9	88	S			1		10			0.047	1.2	Raining	M. Saillard, Director.
Beauvais, Normal School	29.28	743.6	29.54	750.3	49.5	9.7	75	WSW			2		8		WSW	0.020	0.50	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	28.78	731.1	29.68	753.8	50.2	10.1	68	S			1		cn		S	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.47	748.4	29.72	755.0	52.2	11.2	86	NW			2		8		NW	0.346	8.8	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.13	739.9	29.71	754.6	48.2	9	86	S			4		ton		S	0.177	4.5	Raining	M. Postel, Director.
Brest, Naval Observatory	29.55	750.6	29.79	756.7	47.8	8.8	65	NW			2		4		W	0.08	2.00		M. de Rermaree, Dir.
Caen, Normal School	29.44	747.8	29.52	749.8	46.6	8.1	97	SE			1		10			0.030	0.75	Covered	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.27	743.4	29.59	751.5	46.8	8.2	91	S			2		8		SW	0	0	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.02	737.2	29.57	751.1	44.6	7.0	83	SW			1		10			0.20	5.0	Raining	M. Grimard.
Clermont-Ferrand Obs'y	28.26	717.9	29.62	752.3	47.5	8.6	70	SE			1		10			0.075	1.9	Covered	M. Alluard, Director.
Cluny, Normal School	28.89	733.8	29.73	755.1	54.3	12.4	55	S			1		8		NE	0.088	2.23		M. de Villemontée, Dir.
Commercy, Normal School	28.74	730.1	29.61	752.2	46.0	7.8	86	SW			4		kn	SW	SW	0.016	0.4		Dr. Coulet, Director.
Gap, Normal School	27.27	692.7	29.80	757.0	41.9	5.5	46	SW			2		5		E	0	0	¼ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.71	729.1	29.85	758.1	50.0	10.0	62	NW			2		8		W	0	0	¾ covered	M. Kina, Director.
Grenoble, Normal School	28.96	735.5	29.73	755.2	46.9	7.8	70	NE			1		ck			0	0		M. Ablard, Director.
Guéret, Normal School	27.99	711.9	29.60	751.7	45.7	7.5	85	SW			3		10		NE	0.535	13.6	Raining	M. Rivoir, Director.
Lamballe, Normal School	29.43	747.6	29.71	754.5	47.1	8.4	74	N			3				N	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.33	744.9	30.01	762.2	48.2	9	86	W			1		10			0.87	22.	Covered	M Chauvin, Director.
Lorient, Naval Observatory	29.67	753.6	29.77	756.2	51.1	10.6	90	N			2		8		NW	0.264	6.7	¾ covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.63	727.3	29.66	753.4	46.4	8.0	77	S			1		10		SSW	0.059	1.5	Raining	M. André, Director.
Mans, Normal School	29.32	744.7	29.71	754.5	48.4	9.1	86	NW			3		8		NNW	0.201	5.1	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.52	749.8	29.79	756.6	53.6	12.0	72	WSW			1		8		NW	0.205	5.20		M. Stephan, Director.
Montlouis l'instituteur	24.56	623.7	29.79	756.7	33.8	1.0	71	W	7.4	3.3			10		SSE	0.098	2.5		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.67	753.6	29.78	756.4	51.1	10.6	90	SW			2		10			0.020	0.5	Raining	M. Galzin, Director.
Nancy, Normal School	28.84	732.6	29.61	752.0	46.0	7.8	79	S			1		8kn		S	Inap.	Inap.	Light rain	M. Hasse.
Nantes, Observatory	29.57	751.0	29.73	755.2	50.9	10.5	79	NW			2		3kn		W	0.228	5.8		M. Larocque, Director.
Nice	29.74	755.4	29.77	756.2	55.4	13.0	64	E			3		10	E	E	0	0	Covered	Capt. Boissière, Director.
Perpignan, Observatory	29.68	753.8	29.78	756.5	50.4	10.2	69	Calm	0	0			10			0.008	0.2		Dr. Fines.
Pic-du-Midi, Plantade	22.26	565.4			29.5	—1.4							10		NW	2.035	51.7	Snowy	M. Bayles, for Gen'l de Nansouty.
Privas, Normal School	28.71	729.2	29.77	756.2	48.2	9	88	N			1		10	N	N			Raining	M. Taillen.
Puy de Dôme O. s'y, Summit	24.70	627.4			32.0	0.0	98	WSW			8		10		W	0.154	3.9	Foggy	M. Alluard, Director
Rochefort, Naval Obs'y	29.69	754.2	29.72	755.0	52.3	11.3	84	WNW			2		5		W	0.08	2.	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.52	749.8	29.75	755.2	50.7	10.4	77	W			1		8		NNW	0.126	3.2	Very cloudy	M. Mouillot, Director.
Rodez, Normal School	27.72	704.2	29.91	759.7	42.4	5.8	97	W			1		8		W	0.24	6.	Raining	M. Richard, Director.
Rouen, Normal School	29.46	748.2	29.54	750.4	53.6	12	21	W			2		10		NE	0	0	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.48	748.9	29.64	752.9	47.8	8.8	52	NNW			1		8		SE	0.059	1.5	Very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.38	746.2	29.54	750.4	45.7	7.6	97	WNW			1		10		W	0.122	3.1	Foggy	M. Renou, Director.
Toulouse, Observatory	29.09	738.9	29.81	757.2	48.7	9.3	92	SSW			2		10			0.248	6.3	Covered	M. Baillard, Director.
Tours	29.41	747.0	29.61	752.0	50.0	10.0	72	WNW			3		5		W	0.185	4.7	½ covered	M. de Tastes.
Versailles, Observatory	29.06	738.0	29.55	750.5	45.7	7.6	94	NW			1					0.117	2.97		Dr. A. Bérigny, Director
SUB-SERIES.																			
Paris, Montsouris Obs'y																			M Marié Davy, Director
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.82	731.9	29.67	753.5	36.0	2.2	80	SE			3		7ks					Light rain	Prof. Dr. Hoh.
Berlin	29.45	747.9	29.62	752.3	44.1	6.7	63	SE			2		2			0	0		Prof. Dr. Arndt.
Breslau	29.26	743.1	29.78	756.5	35.4	1.9	75	S			3		0			0	0		Royal University Obs'y.
Carlsruhe	29.24	742.7	29.59	751.5	48.9	9.4	70	SW			2		10	SW		0.177	4.5	Raining	Albert Senz.
Cassel	28.95	735.2	29.54	750.4	46.0	7.8	74	SE			2		8	S		0	0		Dr. H. Möhl.
Frankfort on the Main	29.32	744.8	29.69	754.2	42.4	5.8	83	SW			1		9			0	0		Physical Society.
Friedrichshafen	28.26	717.9	29.73	755.2	37.4	3.0	79	NNW			2		8	W		0.106	2.7		Chief Telegrapher Wilhelm.
Hamburg	29.44	747.8	29.51	749.6	45.0	7.2	74	SW			4		5			0.008	0.2		Dr. R. Kleeman.
Kiel	29.46	748.3	29.48	748.7	42.3	5.7	91	SSW			2		10			0.106	2.71		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.24	742.8	29.67	753.7	38.1	3.4	73	S			3		9	WSW		0	0		Prof. Dr. Bruhns.
Magdeburg	29.38	746.3	29.61	752.1	40.3	4.6	86	SE			2		7cs	W		0	0		Dr. Assmann.
Memel	29.78	756.3	29.81	757.2	28.4	—2.0	92	S			4-5		10n					Foggy	Reinbrecht & Issermann.
Munich	27.87	708 0	29.72	754.8	37.6	3.1	64	N			1		7	N		0	0		Central Station.
Neufahrwasser	29.72	755.0	29.74	755.4	33.6	0.9	87	SSW			2		3			0	0		A Lothes.
Neustadt, Palatinate	29.10	739.0	29.61	752.2	47.8	8.8	80	SE			1		7			0	0	Light fog	Dicknether.
Stuttgart	28.67	728.3	29.57	751.0	46.8	8.2	75	S			1		5	W		0.028	0.7		Prof. Dr. Schoder.
Thorn	29.55	750.5	29.73	755.2	35.8	2.1	77	S			4		1			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	28.18	715.8	29.68	753.8	33.6	0.9	85	SE			4		10			0	0		Prof. Kemlein.
Wustrow	29.52	749.8	29.54	750.4	37.9	3.3	92	S			5		7s			0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.57	751.1	29.97	761.2	52.9	11.6		NE			1.0		10					Covered	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.08	763.9	30.13	765.2	75.1	23.9	84	S	12.0	5.4			0			0	0	Blue sky	
Deesa	29.59	751.5	30.06	763.5	88.2	31.2	11	NNE	6.2	2.8			3	NW		0	0	D. clouds	
Bombay	29.98	761.4	30.02	762.4	83.5	28.6	68	NNW	15.0	6.7			0			0	0	Blue sky	
Poona, Yarrowda	28.15	715.1	30.00	761.9	85.8	29.9	17	ENE	9.0	4.0			0			0	0	Blue sky	
Belgaum	27.45	697.3	29.97	761.2	83.5	28.6	15	NE	8.0	3.6			0			0	0	Blue sky	
Lahore	29.37	745.9	30.13	765.3	74.8	23.8	26	W	1.1	0.5			0			0	0	Blue sky	
Roorkee	29.18	741.1	30.10	764.5	71.8	22.1	34	NW	2.0	0.9			0			0	0		
Agra	29.56	750.9	30.14	765.4	79.3	26.3	25	W	2.8	1.2			0			0	0		
Nagpur	29.01	736.8	30.05	763.4	84.2	29.0	35	Calm	2.6	1.2			2	W		0	0	D. clouds	
Jubbulpore	28.70	728.9	30.10	764.5	71.0	21.7	35	NE	1.5	0.7			0			0	0	Blue sky	
Lucknow	29.72	754.9	30.10	764.6	77.2	25.1	21	WNW	1.6	0.7			0			0	0	Blue sky	
Allahabad	29.77	756.2	30.09	764.4	73.8	23.2	43	Calm	1.5	0.7			0			0	0	Blue sky	
Patna	29.87	758.7	30.06	763.4	71.6	22.0	54	W	0.9	0.4			0			0	0	Blue sky	
Hazaribagh	28.02	711.8	30.08	763.9	70.8	21.6	20	WNW	6.6	3.0			0			0	0	Blue sky	
Cuttack	29.96	761.0	30.04	763.1	83.6	28.7	39	Calm	0.2	0.1			0			0	0	Blue sky	
Calcutta, Alipore	30.04	763.0	30.06	763.6	74.3	23 5	54	WSW	1.0	0.4			0			0	0	Blue sky	
Goalpara	29.67	753.6	30.08	764.1	70.9	21.6	43	Calm	5.3	2.4			0			0	0	Blue sky	
Chittagong	29.90	759.4	29.99	761.8	72.8	22.7	56	WNW	2.5	1.1			0			0	0	Blue sky	
Sibsagar	29.78	756.5	30.14	765.4	62.7	17.1	83	NE	1.8	0.8			0			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.45	748.0	29.87	758.7	44.4	6.9	51	Calm	0	0			2			0	0		Prof. Giovanni Clodig
Milan	29.31	744.4	29.84	758.0	36.7	2.6	81	ESE	3.8	1.7			5			0	0		Prof. Schiaparelli.
Padua	29.74	755.5	29.85	758.3	41.7	5.4	81	NNE	3.1	1.4			2			0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.93	734.8	29.87	758.7	31.1	— 0.5	85	ENE	0.7	0.3			4	SSW		0	0		Prof. P. F. Denza.
Genoa	29.60	751.7	29.79	756.6	51.8	11.0	39	NE	3.8	1.7			2	W		0	0		Prof. G. M. Garibaldi.
Mondovi	27.87	708 0	29.84	757.9	36.5	2.5	63	W			2		0			0	0		Prof. D. C. Bruno.
Pesaro	29.80	756.8	29.85	758.1	41.0	5.0	81	NW	4.9	2.2			10	SE		0	0		Prof. Luigi Guidi.
Florence	29.50	749.3	29.76	755.9	48.9	9.4	53	NE			2		3	W		0	0		Cav. F. Meucci.
Leghorn	29.70	754.3	29.81	757.2	50.0	10.0	55	ENE	5.6	2.5			4			0	0		Prof. P. Monte.
Rome	29.54	750.3	29.71	754.7	55.0	12.8	44	NNE	5.6	2.5			7			0	0		Prof. P. S. Ferrari.
Lecce	29.48	748.7	29.73	755.2	51.8	11.0	82	SE	31.1	13.9			10	E		0.094	2.4		Prof. C. de Giorgi.
Cosenza	28.74	730.0	29.64	752.8	47.7	8.7	70	ESE	0.7	0.3			10	SE		1.169	29.7		Prof. D. Conti.
Cagliari	29.51	749.6	29.71	754.6	56.3	13.5	73	NW			4		8	N		0.252	6.4		Prof. A. Pacinotti.
Palermo	29.41	747.0	29.66	753.4	57.0	13.9	63	W	1.8	0.8			10			0.315	8.0		Prof. G. Ciaccintore.
Syracuse	29.59	751.6	29.63	752.7	56.5	13.6	78	S	7.4	3.3			10	SW.		0	0		Prof. Vincenzo Gulliano
Sub-Series.																			
Naples, S. R.	29.18	741.2	29.71	754.6	50.7	10.4	75	NE	8.7	3.9			10	ENE		0	0		Prof. F. Brioschi.
Stelvio	21.97	558.1			18.7	— 7.4	69	SW			4		10cs			0	0	Misty	P. F. Denza.
Valdobbia	21.84	554.8			26.8	— 2.9	78	E			1		8in		WSW	0	0	Misty	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y	30.36	771.1	30.38	771.6	29.1	— 1.6	44	W	1.7	0.8			0			0	0	Clear	K. Sasaki.
Kioto	30.10	764.5	30.29	769.3	28.3	— 2.1	62						1ck			0	0	Clear	
Nagasaki, I. M. Obs'y	30.22	767.6	30.44	773.2	33.6	0.9	67	N	4.5	2.0			9s			0	0	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	30.00	762.0	30.07	763.8	33.4	0.8	60	NE	2.0	0.9		0	0			0	0	Clear	The Staff.
Wakayama	30.26	768.6	30.32	770.1	33.0	0.6	64	NW	9.3	4.2		9ck	0		W	0	0	Cloudy	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.82	757.4	30.01	762.3	80.9	27.2	58	ESE	16.0	7.2		1	2		ESE	0.33	8.4	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.32	617.6	30.05	763.3	53.0	11.7	88	W			2	7ck	0	SW		0	0	Cloudy	Prof. M. Leal.
Mazatlan	29.62	752.4	29.88	759.0	68.3	20.2	95	ESE	1.6	0.8		3cs	0	SW		0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y	22.97	583.3	30.06	763.5	51.8	11.0	78	Calm	0	0		0	3ks			0	0	Foggy	The Staff.
Pabellon, Aguascalientes	23.76	603.6	29.82	757.3	50.9	10.5	66	Calm				0	0			0	0	Fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.33	592.5	30.07	763.8	55.2	12.9	50	S	0.9	0.4		0	10		S	0	0	Overcast	Prof. P. Spina.
San Luis Potosi	24.17	614.0	30.19	766.7	54.6	12.6	39	SW	3.1	0.4		3	0	W		0	0	Gloomy	G. Barroeta, M. D.
Tlacotalpam	29.74	755.3	29.75	755.6	71.6	22.0	92	Calm	0	0		0	10		SE	0	0	Overcast	Prof. M. Cházaro.
Zacatecas	22.36	568.0	30.05	763.3	44.2	6.8	69	WSW	10.8	4.9		0	0			0	0	Fine	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.45	747.9	29.45	747.9	44.8	7.1		SSW			4					0.028	0.7		
Groningen	29.36	745.7	29.41	747.1	43.9	6.6		SSW			4					0.098	2.5		
Helder	29.36	745.8	29.36	745.8	39.9	4.4		S			5					0.047	1.2		
Hellevoetsluis	29.43	747.4	29.43	747.4	43.0	6.1	92	SSW			3					0.043	1.1		
Utrecht	29.41	746.9	29.45	748.1	45.3	7.4	82	S			4		8			0.063	1.6	Very cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction, Upper.	Clouds. Direction, Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.21	741.8	29.27	743.4	33.4	0.8	85	Calm	0	0			10			0.035	0.9	Light snow.	
Christiania	29.31	744.5	29.47	748.5	15.3	— 9.3	87	NNE	7	3			10			0.165	4.2	Snowing	
Gjæsvær	29.98	761.5	30.03	762.1	15.3	— 9.3		S			2		10						
Lodingen	29.88	759.0	29.93	760.2	13.1	—10.5	60	E			4		3			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.17	766.4	30.33	770.4	60.1	15.6	96	W	6.9	3.1			4			0	0		Dr. J. A. Sampaio.
Campo Major	29.16	740.6	30.18	766.5	54.3	12.4	79	WNW	16.8	7.5			9			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.31	769.9	30.40	772.1	65.7	18.7	54	WSW	3.1	1.4			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.94	760.4	30.30	769.7	57.2	14.0	87	W	12.5	5.6			10			0	0		The Staff.
Ponta Delgada, Azores	30.33	770.4	30.40	772.2	61.2	16.2	89	SW	9.4	4.2			3			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.91	734.3	30.07	763.8	13.6	—10.2	100	SW	40	18			10			Blank			Capt. Lasarew.
Archangel	30.13	765.4	30.15	765.9	—15.2	—26.2	80	Calm	0	0			0						Capt. Sseliwerstow.
Astrakhan	30.36	771.2	30.28	769.1	27.9	— 2.3	85	NNW	2	1			10ks						Capt. Wisganow.
Barnaul	29.42	747.2	29.95	760.8	18.5	— 7.5	79	SW	18	8			10					Snowing	Meteorological Obs'y.
Dorpat	29.74	755.3	30.00	762.1	14.9	— 9.5	87	ESE	16	7			10n						Observatory.
Ekaterinburg	28.45	722.6	29.45	748.1	20.3	— 6.5	87	SW	7	3			ck	8n				Light snow	Meteorological Obs'y.
Kasan	29.58	751.4	29.88	758.9	6.3	—14.3	64	WNW	7	3				8					Observatory.
Kertch	30.10	764.5	30.12	765.0	31.1	— 0.5	92	ENE	7	3				10					Lagorio.
Kieff	29.45	748.1	30.13	765.3	25.5	— 3.6	91	S	2	1				10n					Cand. Fatjanow.
Lugan	29.98	761.5	30.21	767.2	18.3	— 7.6	95	NNE	2	1				10					Meteorological Obs'y.
Moscow	29.55	750.5	30.15	765.7	11.7	—11.3	71	WSW	4	2				10s					Meteorological Obs'y.
Nertchinsk	27.80	706.2	30.42	772.6	—11.2	—24.0	56	Calm	0	0				0					Meteorological Obs'y.
Nikolaiev	30.11	764.9	30.19	766.7	24.1	— 4.4	100	ESE	4	2				10n					1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.00	736.7	29.09	738.9	0.0	—17.8	96	W	25	11				10n					Lieut. Iwanow.
Nukuss																			Dr. Dobrochotow.
Pekin, China	30.26	768.6	30.40	772.2	19.0	— 7.2	67	Calm	0	0				0					Physical Observatory.
St. Petersburg	30.20	767.0	30.21	767.4	1.0	—17.2	79	ESE	11	5				5cs					Central Physical Obs'y.
Tashkend, Laboratory	28.52	724.5	30.10	764.6	55.0	12.8	75							10		Blank			Teich, A. M.
Tiflis	28.56	725.3	29.99	761.7	50.2	10.1	56	NW	4	2				4ks					Physical Observatory.
Warsaw	29.44	747.8	29.88	759.0	28.4	— 2.0	90	SSE	13	6				10ks					Astronomical Obs'y.
Wilna	29.52	749.8	29.96	761.0	25.0	— 3.9	90	SSW	4	2				10				Heavy clouds	Berg, Assistant.
Yeniseisk	29.65	753.1	29.97	761.1	3.9	—15.6	77	SE	7	3				6					M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.44	747.8	38.0	3.3	72	N			2		8k			0.03	0.8	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.71	754.6	38	3.3	81	N			7	5	3	NNE		0.2	5.	D. clouds	J. Youngehause.
North Unst, Shetland Isl'ds			29.37	746.0				NE			6		7			Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.76	756.0	29.87	758.8	55.4	13	83	W	4.9	2.2			7			0.135	3.43	Almost cov'd	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.87	758.7	29.93	760.2	51.6	10.9	95	NW	2.5	1.1			10			1.122	28.5	Raining	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.05	687.1			45.1	7.3	86	SW	4.0	1.8			10			0.256	6.5	Covered	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.78	705 5	30.04	763.1	48.0	8.9	91	SW	22.6	10.1			10			0.047	1.2	Covered	The Staff.
Murcia, Met. Obs'y	29.89	759.3	30.04	763.1	61.7	16.5	55	WSW	1.3	0.6		5	4	SSE		0	0	Almost cov'd	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.10	739.0	30.00	761.9	54.5	12.5	98	W	11.2	5.0			10			1.105	28.1	Raining	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.92	759.9	29.99	761.6	61.7	16.5	67	Calm	0	0		1ck	1k	WNW	NE	0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	30.07	763.8	30.12	765.1	78.7	25.9	71	ESE	4.0	1.8						0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.23	767.8	30.33	770.4	59.2	15.1	73	WNW	13.1	5.9		0	9		WNW	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.91	759.8	30.00	762.1	71.2	21.8	100	SW	0	0		3s	2km	SW	SW	0	0	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	30.05	763.4	30.21	767.1	73.1	22.8	79	NNW	4.3	2.0		6ck		SW		0	0	Partly clear	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.22	767.5	30.25	768.5	—14.4	—25.8	100	NE			2		10			0.126	3.2		
Umea	30.00	762.0	30.05	763.3	—10.1	—23.4	100	NE			4		10			0.512	13.0		
Hernosand	29.79	756.7	29.84	758.0	8.4	—13.1	88	NE			7		10			0.094	2.4		
Stockholm	29.34	745.2	29.52	749.7	31.6	— 0.2	96	S			6		10			0.114	2.9		
Wisby	29.53	750.0	29.59	751.5	33.8	1.0	92	SW			4		10			0.299	7.6		
Sub-Series.																			
Upsala	29.39	746.4	29.47	748.6	30.4	— 0.9	98	SE	9.0	4.0			10			0.271	6.87	Light rain	Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.26	717.9	29.72	754.8	45.5	7.5	78	N			1		9			0	0	Vapory	The Observatory.
Zurich	28.05	712.4	29 74	755.4	38.3	3.5	74	W			1		3			0.157	4.0	Clear	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —9.0 mm.; Ther. +4°.8 cent.; Hum. +4 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.06	763.4	43.7	6.5	87	N	11	5.0			10		N	0	0		The Observatory.
Valona			29.76	755.8	57.0	13.9		E			1		5			0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.98	761.6	57.0	13.9	88	SW			3		10n		SW	1.165	29.59		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instru-m'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	30.34	770.6	30.43	772.9	17	— 8.3	83	N	6	2.7			10s		N	0	0	Cloudy	
Alpena, Michigan	29.94	760.5	30.67	779.0	5	—15.0	75	N	6	2.7		0	0			0	0	Clear	
Atlanta, Georgia	30.09	764.3	30.31	769.9	28	— 2.2	44	E	13	5.8		5ck;k	0	Calm		0	0	Fair	
Atlantic City, New Jersey	30.36	771.1	30.37	771.4	9	—12.8	78	N	10	4.5		0	0			0	0	Clear	
Attou Id., Alaska ‡	30.00	762.0			30	— 1.1	78	Calm	0	0		0	0			0	0	Clear	
Augusta, Georgia	30.20	767.1	30.42	772.7	27	— 2.8	88	Calm	0	0		0	2s;fg		Calm	0	0	Fair	
Baltimore, Maryland	30.42	772.7	30.47	773.9	16	— 8.9	66	NW	10	4.5		0	0			0	0	Clear	
Barnegat, New Jersey	30.33	770.4	30.36	771.1	11	—11.7	80	N	18	8.0		0	0			0	0	Clear	
Benton, Montana	27.02	686.3			33	0 6	79	Calm	0	0		0	0			0	0	Clear	
Bismarck, Dakota	28.02	711.7	29.88	758.9	19	— 7.2	84	E	6	2.7			10n		Calm	0.01	0.3	Light snow	
Boise City, Idaho	27.06	687.3	30.02	762.5	38	3.3	85	NW	3	1.3		2k	0	NW		0	0	Fair	
Boston, Massachusetts	30.11	764.8	30.28	769.1	20	— 6.7	70	NW	13	5.8			10s		Calm	0	0	Cloudy	
Brackettville, Texas	28.42	721.9	29.43	747.5	62	16.7	100	S	8	3.6			10n		S	0.11	2.8	Light rain	
Brownsville, Texas	29.60	751.8	29.64	752.8	67	19.4	95	S	16	7.2			10ks		S	0	0	Cloudy	
Buffalo, New York	29.80	756.9	30.60	777.2	3	—16.1	73	SW	4	1.8		0	0			0.02	0.5	Clear	
Burlington, Vermont	30.18	766.6	30.50	774.7	12	—11.1	80	NE	6	2.7			10s		NE	Inap.	Inap.	Cloudy	
Cairo, Illinois	29.89	759.2	30.31	769.9	30	— 1.1	68	E	16	7.2			10s		Calm	0	0	Cloudy	
Campo, California	27.40	695.0	29.97	761.2	45	7.2	92	W	1	0.4			10s		W	0.23	5.8	Cloudy	
Camp Thomas, Arizona	27.02	686.3			48	8.9	70	NW			2	5k	0	NW		0.01	0.3	Fair	
Cape Henry, Virginia	30.37	771.4	30.39	771.9	20	— 6.7	70	N	28	12.5		0	0			Inap.	Inap.	Clear	
Cape May, New Jersey																			
Castroville, Texas	28.84	732.5	29.52	749.8	62	16.7	94	SE	6	2.7			10s		Calm	0.05	1.3	Threatening	
Cedar Keys, Florida	30.12	765.0	30.15	765.8	42	5.6	66	NE	20	8.9		5ck	0	W		0	0	Fair	
Champaign, Illinois	29.52	749.8	30.40	772.1	17	— 8.3	67	SE	7	3.1			10s		SE	0	0	Cloudy	
Charleston, S. Carolina	30.31	769.9	30.38	771.6	31	— 0.6	69	N	12	5.4		0	0			0	0	Clear	
Charlotte, N. Carolina	29.50	749.3	30.39	771.9	25	— 3.9	62	NE	6	2.7		5c	Sm'c	Calm	Calm	0	0	Fair	
Chattanooga, Tennessee	29.51	749.5	30.37	771.4	26	— 3.3	63	NE	10	4.5		2cs	0	N		0	0	Fair	
Cheyenne, Wyoming	23.60	599.4	29.54	750.3	30	— 1.1	100	N	12	5.4			10n		Calm	0.03	0.8	Light snow	
Chicago, Illinois	29.72	754.9	30.48	774.2	17	— 8.3	67	SE	8	3.6		0	2s		Calm	0	0	Clear	
Chincoteague, Virginia	30.37	771.4	30.39	771.9	12	—11.1	80	NW	17	7.6		1k	0	NW		0	0	Clear	
Cincinnati, Ohio	29.83	757.7	30.57	776.5	13	—10.6	81	NE	4	1.8		7cs	0	W		0	0	Fair	
Cleveland, Ohio	29.79	756.7	30.61	777.5	5	—15.0	100	S	4	1.8			10s;fg		Calm	0.02	0.5	Cloudy	
Coleman City, Texas	27.83	706.9	29.44	747.8	56	13.3	81	SE	12	5.4			10s		Calm	0	0	Cloudy	
Columbus, Ohio	29.63	752.6	30.58	776.7	11	—11.7	80	E	5	2.2			10s		Calm	Inap.	Inap.	Cloudy	
Concho, Texas	27.66	702.6	29.26	743.2	60	15.6	94	S	16	7.2			10s		Calm	0	0	Cloudy	
Corsicana, Texas	29.30	744.2	29.76	755.9	57	13.9	75	SE	12	5.4			10ks		Calm	0	0	Cloudy	
Davenport, Iowa	29.66	753.4	30.36	771.1	15	— 9.4	82	E	15	6.7			10s		Calm	0	0	Cloudy	
Dayton, Washington T'y	28.19	716.0	29.88	758.9	40	4.4	91	Calm	0	0			10ks		Calm	0.03	0.8	Cloudy	
Deadwood, Dakota	25.01	635.2			31	— 0.6	89	NE	1	0.4			10n		Calm	0.20	5.1	Light snow	
Decatur, Texas	28.49	723.6	29.64	752.8	54	12.2	80	SE	16	7.2			10s		Calm	0	0	Cloudy	
Delaware Breakwater, Del.	30.36	771.1	30.38	771.6	15	— 9.4	82	N	26	11.6		0	0			0	0	Clear	
Denison, Texas	28.93	734.8	29.71	754.6	50	10.0	86	SE	16	7.2			10s		SE	0	0	Cloudy	
Denver, Colorado	24.33	618.0	29.55	750.6	35	1.7	90	N	13	5.8			10n		Calm	0.58	14.7	Light snow	
Des Moines, Iowa	29.17	740.9	30.10	764.5	24	— 4.4	87	SE	18	8.0			10s		S	0.09	2.3	Cloudy	
Detroit, Michigan	29.84	757.9	30.60	777.2	5	—15.0	100	N	2	0.9		0	0			Inap.	Inap.	Clear	
Dodge City, Kansas	26.80	680.7	29.01	736.8	44	6.7	84	SE	29	13.0		0	0			0.18	4.6	Clear	
Dubuque, Iowa	29.63	752.6	30.39	771.9	19	— 7.2	85	E	9	4.0			10s		Calm	0	0	Cloudy	
Duluth, Minnesota	29.68	753.9	30.41	772.4	20	— 6.7	85	NE	18	8.0			10s		NE	0.01	0.3	Cloudy	
Eagle Pass, Texas	28.83	732.3	29.53	750.0	63	17.2	100	SE	7	3.1			10n		Calm	0.01	0.4	Light rain	
Eagle Rock, Texas	25.04	636.0	29.69	754.1	32	0.0	89	SW	7	3.1			10s		SW	0.89	22.6	Cloudy	
Eastport, Maine	30.04	763.0	30.12	765.0	21	— 6.1	57	NW	16	7.2		5c	0	Calm		0	0	Fair	
Edinburg, Texas					62	16.7	88	S			1	0	5ks		Calm	0	0	Fair	
El Paso, Texas	25.86	656.8			48	8.9	56	W	7	3.1		0	2s		W	0	0	Clear	
Erie, Pennsylvania	29.79	756.7	30.59	777.0	10	—12.2	79	S	3	1.3			10s		Calm	Inap.	Inap.	Cloudy	
Escanaba, Michigan	29.90	759.4	30.65	778.5	4	—15.6	74	N	4	1.8		2c	2s	Calm	Calm	0	0	Fair	
Florence, Arizona	28.31	719.1	29.91	759.7	45	7.2	68	SW	1	0.4		0	0			0	0	Clear	
Fort Apache, New Mexico	24.71	627.6	30.16	766.1	38	3.3	100	E	3	1.3			10n		Calm	0.28	7.1	Light rain	
Fort Assininiboine, Montana	27.02	686.3			20	— 6.7	70	SW	3	1.3			10s		Calm	0	0	Cloudy	
Fort Bennett, Dakota	28.12	714.2			28	— 2.2	77	SE	13	5.8			10n		Calm	0.16	4.1	Light snow	
Fort Buford, Dakota	27.85	707.4	29.77	756.1	22	— 5.6	100	Calm	0	0			10n		Calm	0.04	1.0	Light rain	
Fort Custer, Montana	26.68	677.7			31	— 0.6	100	Calm	0	0			Fog			0.03	0.8	Dense fog	
Fort Davis, Texas	24.80	629.9	29.76	755.9	42	5.6	74	W	4	1.8		0	0			0	0	Clear	
Fort Elliott, Texas	26.78	680.2	28.97	735.8	50	10.0	86	SE	12	5.4			10s		SE	0	0	Cloudy	
Fort Gibson, Indian T'y	29.23	742.4	29.77	756.1	41	5.0	57	SE	20	8.9			10s		SE	0	0	Cloudy	
Fort Grant, Arizona	24.89	632.2	29.69	754.1	40	4.4	74	NW	18	8.0			10s		Calm	0.10	2.5	Cloudy	
Fort Griffin, Texas	28.22	716.8	29.44	747.8	57	13.9	87	SE	24	10.7			10s		Calm	0	0	Cloudy	
Fort Keogh, Montana	27.29	693.2			34	1.1	79	NW	4	1.8			10s		Calm	0	0	Cloudy	
Fort McKavett, Texas	27.34	694.4	29.18	741.1	59	15.0	94	E	8	3.6			10n		Calm	Inap.	Inap.	Light rain	
Fort Macon, North Carolina	30.33	770.4	30.34	770.6	25	— 3.9	62	N	17	7.6		0	0			0	0	Clear	
Fort St. Michaels	29.59	751.6	29.62	752.3	—16	—26.7	100	N	3	1.3		0	0						
Fort Missoula, Montana	26.60	675.6			34	1.1	100	Calm	0	0			10s		Calm	0 04	1.0	Cloudy	
Fort Shaw, Montana	26.19	665.2			37	2.8	71	W	4	1.8			10s		Calm	0	0	Cloudy	
Fort Sill, Indian Territory	28.39	721.1	29.47	748.5	51	10.6	86	SE	29	13.0			10s		Calm	0	0	Cloudy	
Fort Stevenson, Dakota	28.02	711.7			20	— 6.7	85	SE	4	1.8			10s		Calm	0.02	0.5	Cloudy	
Fort Verde, Arizona					40	4.4	91	W			2	0	0			0.08	2.0	Clear	
Fredericksburg, Texas	27.88	708.1	29.39	746.5	58	14.4	100	S	14	6.3			10n		Calm	0.02	0.5	Light rain	
Galveston, Texas	29.74	755.4	29.79	756.7	57	13.9	94	SE	12	5.4			10s		Calm	0	0	Threatening	
Grand Haven, Michigan	29.84	757.9	30.57	776.5	9	—12.8	78	E	6	2.7		0	0			0	0	Clear	
Hatteras, North Carolina	30.31	769.9	30.33	770.4	25	— 3.9	87	N	32	14.3		5k	0	NW		0	0	Fair	
Helena, Montana	25.64	651.2			38	3.3	31	S	1	0.4		8k	0	Calm		0	0	Cloudy	
Henrietta, Texas	28.62	726.9	29.52	749.8	55	12.8	81	SE	21	9.4			10s		Calm	0	0	Cloudy	
Indianapolis, Indiana	29.61	752.1	30.48	774.2	12	—11.1	70	E	5	2.2		1c	Sm'c	Calm	Calm	0	0	Clear	
Indianola, Texas	29.70	754.4	29.72	754.9	59	15.0	100	SE	12	5.4			10s		Calm	0	0	Threatening	
Jacksboro, Texas	28.49	723.6	29.58	751.3	55	12.8	81	SE	20	8.9			10s		SE	0	0	Cloudy	
Jacksonville, Florida	30.16	766.1	30.21	767.3	43	6.1	59	N	14	6.3		5cs	0	W		0	0	Fair	
Keokuk, Iowa	29.56	750.8	30.25	768.3	24	— 4.4	87	E	18	8.0			10n		Calm	Inap	Inap.	Light snow	
Key West, Florida	29.99	761.7	30.02	762.5	65	18.3	84	NE	16	7.2		0	8s		NE	0	0	Cloudy	
Kittyhawk, North Carolina	30.33	770.4	30.36	771.1	23	— 5.0	85	N	35	15.6		2k	0	N		0	0	Clear	
Knoxville, Tennessee	29.32	744.7	30.41	772.4	23	— 5.0	73	NE	6	2.7		1cs	0	Calm		0	0	Clear	
La Crosse, Wisconsin	29.55	750.6	30.34	770.6	25	— 3.9	87	SE	15	6.7			10s		Calm	0	0	Cloudy	
La Mesilla, New Mexico	25.72	653.3	29.87	758.7	47	8.3	48	W	7	3.1		0	8s		Calm	0	0	Cloudy	
Laredo, Texas	29.15	740.4	29.48	748.8	66	18.9	95	S	5	2.2			10s		Calm	Inap.	Inap.	Cloudy	
Leavenworth, Kansas	29.00	736.6	29.86	758.4	33	0.6	79	SE	14	6.3			10s			0.03	0.8	Cloudy	
Lewiston, Idaho	29.15	740.4	29.81	757.2	37	2.8	91	SW	1	0.4			Fog			0.13	3.3	Foggy	
Little Rock, Arkansas	29.70	754.4	30.04	763.0	37	2.8	81	E	10	4.5			10ks		SW	0	0	Cloudy	
Los Angeles, California	29.66	753.4	30.03	762.7	48	8.9	78	N	5	2.2		0	0			0.08	2.0	Clear	
Louisville, Kentucky	29.83	757.7	30.45	773.4	13	—10.6	81	NE	12	5.4		8ck	2s	Calm	Calm	0	0	Cloudy	
Lynchburg, Virginia	29.71	754.6	30.46	773.7	20	— 6.7	85	Calm	0	0		0	0			0	0	Clear	
Madison, Wisconsin	29.38	746.2	30.46	773.7	18	—17.8	84	E	13	5.8			10s		Calm	0	0	Cloudy	
Marquette, Michigan	29.84	757.9	30.64	778.2	8	—13.3	55	NW	1	0.4		0	5s		NW	0	0	Fair	
Mason, Texas	28.00	711.2	29.69	754.1	60	15.6	94	SE	6	2.7			10n		Calm	0.03	0.8	Light rain	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.80	756.9	30.16	766.1	35	1.7	61	E	4	1.8		5cs	0	Calm		0	0	Fair	
Milwaukee, Wisconsin	29.73	755.1	30.52	775.2	23	— 5.0	86	E	14	6.3			10s		Calm	0	0	Cloudy	
Mobile, Alabama	30.05	763.3	30.13	765.3	46	7.8	62	SE	14	6.3			10ks		S	0	0	Cloudy	
Montgomery, Alabama	30.02	762.5	30.26	768.6	38	3.3	46	E	12	5.4		10k	0	N		0	0	Cloudy	
Moorhead, Minnesota	29.04	737.6	30.06	763.5	20	— 6.7	92	SE	26	11.6			10n		SE	0.29	7.4	Light snow.	
Morgantown, W. Virginia	29.48	748.8	30.59	777.0	13	—10.6	44	NE	4	1.8			10s;hz		Calm	0	0	Cloudy	
Mt. Washington, N. H.	23.63	600.2	29.99	761.7	1	—17.2	72	NE	22	9.8			Fog		NE	0	0	Dense fog.	
Nashville, Tennessee	29.75	755.6	30.33	770.4	27	— 2.8	64	E	5	2.2		8ck	0	NW		0	0	Fair	
New Haven, Connecticut	30.22	767.6	30.34	770.6	13	—10.6	65	N	5	2.2		0	0			0	0	Clear	
New London, Connecticut	30.26	768.6	30.31	769.9	21	— 6.1	71	NW	7	3.1			10s		Calm	0	0	Cloudy	
New Orleans, Louisiana	29.92	760.0	29.98	761.5	55	12.8	74	E	24	10.7			10s		E	0	0	Cloudy	
Newport, Rhode Island	30.19	766.8	30.25	768.3	23	— 5.0	86	NW	7	3.1			10s		Calm	0	0	Cloudy	
New River, N. Carolina					22	— 5.6	85	N			4	2cs	0	Calm				Clear	
New Shoreham, Rhode I'd	30.25	768.3	30.28	769.1	24	— 4.4	74	N	20	8.9			10s		N	0	0	Cloudy	
New York, New York	30.19	766.8	30.39	771.9	17	— 8.3	83	NW	10	4.5		0	2s		Calm	0	0	Fair	
Norfolk, Virginia	30.34	770.6	30.41	772.4	18	— 7.8	84	N	13	5.8			10ks		N	0	0	Cloudy	
North Platte, Nebraska	26.66	677.2	29.23	742.4	32	0.0	94	E	14	6.3			10n		Calm	0.12	3.0	Sleeting	
Olympia, Washington T'y	29.79	756.7	29.83	757.7	39.5	4.2	96	S	1	0.4			10s;fg		Calm	0.45	11.4	Cloudy	
Omaha, Nebraska	28.70	729.0	29.84	757.9	28	— 2.2	88	SE	22	9.8			10n		Calm	0.08	2.0	Heavy sleet.	
Oswego, New York	30.17	766.3	30.53	775.4	5	—15.0	88	Calm	0	0		0	Fog		S	0.02	0.5	Clear.	
Pensacola, Florida	30.14	765.5	30.17	766.3	45	7.2	61	E	20	8.9		4ck	4s	Calm	E	0	0	Fair	
Philadelphia, Pa	30.35	770.9	30.40	772.1	14	—10.0	64	N	18	8.0		0	0			0	0	Clear	
Phœnix, Arizona	28.66	728.0	30.49	774.4	46	7.8	40	W	4	1.8		0	0			0.20	5.1	Clear	
Pike's Peak, Colorado	17.30	439.4	29.51	749.5	12	—11.1	80	W	4	1.8			10s		Calm	0.23	5.8	Cloudy	
Pilot Point, Texas	28.93	734.8	29.77	756.1	51	10.6	79	E	16	7.2			10s		Calm	0	0	Cloudy	
Ploche, Nevada	23.85	605.8	29.62	752.3	32	0.0	69	N	11	4.9		0	0			0.19	4.8	Clear	
Pittsburg, Pennsylvania	29.70	754.4	30.62	777.7	7	—13.9	88	E	4	1.8			10n		NE	0.02	0.5	Light snow.	
Port Huron, Michigan	29.85	758.2	30.61	777.5	3	—16.1	100	N	4	1.8			Fog			0.03	0.8	Dense fog.	
Portland, Maine	30.18	766.6	30.23	767.8	23	— 5.0	60	NW	7	3.1		0**	0			0	0	Clear	
Portland, Oregon	29.80	756.9	29.87	758.7	46.5	8.1	96	S	2	0.9			10n		SW	0.22	5.6	Light rain	
Portsmouth, N. Carolina					27	— 2.8	53	NE	27	12.1		2k	0	Calm		0	0	Clear	
Prescott, Arizona	24.52	622.8	29.88	758.9	34	1.1	79	N	1	0.4		0	0			0.09	2.3	Clear	
Punta Rassa, Florida	30.03	762.7	30.05	763.3	53	11.7	86	NE	18	8.0			10ks		W	0	0	Cloudy	
Red Bluff, California	29.68	753.9	30.03	762.7	52.0	11.1	86	S	14	6.3		0	2s		Calm	0.06	1.5	Clear	
Rio Grande City, Texas	29.43	747.5	29.64	752.8	66	18.9	89	SE	13	5.8			10s		SE	0	0	Cloudy	
Rochester, New York	29.87	758.7	30.57	776.5	2	—16.7	72	W	8	3.6		0	1s		Calm	Inap.	Inap.	Clear	
Roseburg, Oregon	29.35	745.5	29.91	759.7	48.5	9.2	85	SE	2	0.9			10n		Calm	0.20	5.1	Light rain	
Sacramento, California	30.04	763.0	30.12	765.0	53	11.7	93	SE	8	3.6			10n		Calm	0.08	2.0	Light rain	
St. Louis, Missouri	29.64	752.8	30.26	768.6	28	— 2.2	59	SE	13	5.8		10cs	0	Calm		0	0	Cloudy	
St. Paul, Minnesota	29.33	745.0	30.22	767.6	21	— 6.1	86	E	18	8.0			10n		E	0.29	7.4	Light snow.	
Salt Lake City, Utah	25.44	646.2	29.77	756.1	37	2.8	71	NW	10	4.5			10n		Calm	1.20	30.5	Light rain	
San Antonio, Texas	28.97	735.8	29.64	752.8	62	16.7	100	SE	5	2.2			10n		Calm	0.04	1.0	Light rain	
San Diego, California	30.00	762.0	30.07	763.8	56	13.3	87	Calm	0	0			10s		Calm	0.18	4.6	Cloudy	
Sandusky, Ohio	29.83	757.7	30.58	776.7	12	—11.1	61	W	2	0.9			10s		Calm	Inap.	Inap.	Cloudy	
Sandy Hook, New Jersey	30.33	770.4	30.37	771.4	17	— 8.3	67	N	20	8.9		5ks	0	NW		0	0	Fair	
San Francisco, California	30.02	762.5	30.09	764.3	56	13.3	87	S	9	4.0			10n		Calm	0.04	1.0	Light rain	
Santa Fé, New Mexico	22.77	578.4	29.31	744.5	34	1.1	90	W	2	0.9			10s		Calm	0.01	0.3	Cloudy	
Savannah, Georgia	30.21	767.3	30.34	770.6	33	0.6	61	NE	12	5.4		0	0			0	0	Clear	
Shreveport, Louisiana	29.63	752.6	29.87	758.7	49	9.4	71	E	10	4.5			10s		Calm	0	0	Cloudy	
Silver City, New Mexico	23.93	607.8	30.14	765.5	37	2.8	81	W	8	3.6			10n		W	0.28	7.1	Light rain	
Smithville, North Carolina	30.33	770.4	30.36	771.1	23	— 5.0	73	N	8	3.6		0	0			0	0	Clear	
Socorro, New Mexico	24.99	634.7	29.05	737.9	39	3.9	55	NW	10	4.5		0	0s		NW	0	0	Fair	
Springfield, Illinois	29.59	751.6	30.31	769.9	30	— 1.1	78	SE	17	7.6			10s			0	0	Cloudy	
Springfield, Massachusetts	30.20	767.1	30.34	770.6	10	—12.2	58	Calm	0	0		0	0			0	0	Clear	
Stockton, Texas	26.53	673.8	29.53	750.0	46	7.8	77	S	4	1.8		0	0			0	0	Clear	
St. Vincent, Minnesota	29.23	742.4	30.07	763.8	23	— 5.0	86	SE	18	8.0		0	2s		Calm	0.03	0.8	Cloudy	
Thatcher's Island, Mass	30.19	766.8	30.25	768.3	23	— 5.0	73	N	25	11.2			2s		Calm	0	0	Clear	
Toledo, Ohio	29.80	756.9	30.58	776.7	7	—13.9	78	Calm	0	0			10s;fg		Calm	Inap.	Inap.	Cloudy	
Tucson, Arizona	27.30	693.4	29.85	758.2	52	11.1	54	W	9	4.0		0	0			0.21	5.3	Clear	
Umatilla, Oregon	29.62	752.3	30.14	765.5	29.5	— 1.4	95	W	1	0.4		0	Fog		Calm	0	0	Clear	
Uvalde, Texas	29.46	748.3	30.31	769.9	57	13.9	29	Calm	0	0		10k	0	Calm		0.10	2.5	Cloudy	
Vicksburg, Mississippi	29.75	755.6	30.01	762.2	48	8.9	63	SE	12	5.4		10k	Sm'e	SW	Calm	0	0	Cloudy	
Visalia, California	29.76	755.9	30.14	765.5	46	7.8	92	NW	1	0.4		0	Fog		Calm	0.12	3.0	Clear	
Washington, D. C.	30.34	770.6	30.47	773.9	9	—12.8	68	NW	10	4.5		0	0			0	0	Clear	
Wickenburg, Arizona					40	4.4	73	NW			1	0	0			0	0	Clear	
Wilmington, N. Carolina	30.32	770.1	30.38	771.6	25	— 3.9	75	N	8	3.6		0	0			0	0	Clear	
Winnemucca, Nevada	25.57	649.5	29.93	760.2	35	1.7	80	SW	6	2.7		0	0			0	0	Clear	
Wood's Holl, Mass	30.20	767.1	30.24	768.1	21	— 6.1	71	NW	12	5.4			10s		NE	0	0	Cloudy	
Yankton, Dakota	28.52	724.4	29.86	758.4	26	— 3.3	100	SE	26	11.6			10n			0.43	10.9	Light snow.	
Yuma, Arizona	29.71	754.6	29.85	758.4	56	13.3	51	W	6	2.7		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.67	560.6			54.8	12.7	80	Calm	0	0			10n			0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica‡	29.77	756.1	30.08	764.0	69	20.6	84	E				2c	2k						
Havana, Cuba, W. I	29.95	760.7	30.00	762.0	67	19.4	68	Calm	0	0		0	2ks		NE	0	0	Hazy	Charles Hasselbrink.
Jakobshavn, Greenland	30.04	763.0	30.10	764.5	0.7	—17.4		S			2		6			0	0		K. V. Möller.
Kingston, Jamaica, W. I	29.95	760.7	29.96	761.0	68.2	20.1	80	Calm	0	0		0	0			0	0		Robert Johnstone.
Navassa, W. I	29.86	758.4	29.94	760.5	75	23.9	75	NW	6	2.7		8k	8s	N	NW	0	0	Cloudy	F. M. Everett.
Paramaribo, S. A	29.98	761.5	29.98	761.5	77	25.0	91	E			3	4c	5k	E		0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.43	747.5	29.98	761.5	79	26.1	85	E			1		10s		Calm	0	0	Cloudy	Francesco J. Cisneros
Rivas, Nicaragua					73.4	23		SE			1	0	2ks		SE	0	0		Earl Flint.
Santiago de Cuba, W. I	29.95	760.7	29.97	761.2	75	23.9	72	Calm	0	0		0	1ks			0	0		Robert Mason.
St. Thomas, W. I																			G. O. Gellich.
Upernavik, Greenland	30.05	763.2	30.11	764.8	— 3.6	—19.8		W			4		3			0	0		K. Elberg.
York Factory, B. A	30.59	777.0	30.65	778.5	—27.0	—32.8		W	4	1.8		2c	2s	SW	SW	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	Upper.	Lower.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.71	754.6	56.8	13.8	87	WNW			1		10							Heavy rain	Capt. Lord Wal.er Kerr
H. M. S. Antelope, N. 36° 23′ E. 22° 46′	29.96	751.0	55	12.8		ESE			4		9	ESE				1	SE	D. clouds	Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 37′, E. 58° 36′	30.09	754.3	77	25.0	73	SE			1		2	ENE						D. clouds	Comm. G. Haud.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	30.02	752.5	76	24.4	62	ENE			4		0					4	ENE	Blue sky	Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 24° 31′, E. 118° 31′	30.30	769.6	51	10.6	93	N			5		10					1	NE	Overcast	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.80	756.9	56	13.3	63	WNW			4–6		2	NW						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 18° 29′, W. 77° 57′	29.95	760.7	75	23.9	77	ESE			1		5					1	NW	D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, Singapore, Malay Peninsula	29.89	759.2	85	29.4		E			1		1	SE				2	E	Misty	Capt. W. H. Maxwell.
H. M. S. Emerald																			Comm. C. Johnstone.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.94	760.5	82	27.8	64	NW			3–4		0							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 4° 50,′ W. 81° 20′	29.90	759.4	76	24.4	73	E			1–2		7	NE				0–1	Sw'l	Showery	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.17	740.9				WNW			1									D. clouds	Capt. L. F. Jones.
H. M. S. Griffin																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris, N. 41° 50′, E. 16° 58′	29.78	756.4	54	12.2	?	E			4		8	E				4	E	Showery	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 149° 57′	30.28	769.1	60.5	15.8	88	ENE			1		10	E				Sm'h		Overcast	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Africa	29.94	760.5	80	26.7	91	Calm			0		8							Raining	Capt. C. J. Brownrigg.
H. M. S. Magpie																			Capt. R. H. Napier.
H. M. S. Malabar, N. 34° 04′, E. 23° 34′	29.95	760.7	61	16.1	77	SW			3–4		4	W				3	W	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, Vigo, Spain	30.08	764.0	57	13.9	97	WNW			6		10	W						Rain & mist	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Granada, W. I.	29.93	760.2	80	26.7	80	ESE			3		3	ESE						D. clouds	Capt. E. Drummond.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			Capt. Y. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.88	758.9	79.5	26.4	100	Calm			0		10							Overcast	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	30.29	769.4	59	15.0	82	W			2-3		10							Overcast	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.61	752.1	77	25.0	69	ESE			2-3	1ck						3	SE	Misty	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Callao Bay, Peru	29.94	760.5	67	19.4	97	SE			1		7	SSE						D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 37° 06′, E. 5° 10′	30.02	762.5	65	18.3		WNW			3		3					3	WNW	D. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	29.95	760.7	72	22.2		N			1-2		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, Palestine	29.96	761.0	59.5	15.3	88	NE			1		9							D. clouds	Capt. F. Nepham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Bulama, Senegambia	29.90	759.5	81.0	27.3	92	NNW			1		0							Blue sky	S. C. da Silva Costa, Capt'n.
Sado, St. Paul de Loando, Africa	29.84	758.0	82.4	28.0	71	W			3		3	W				2	W	D' clouds	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, N. 37° 45′, E. 15° 36′	29.63	752.5	62.6	17.0	67	ENE			2		8							D. clouds	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.	Force	Amount and kind.		Direction.				Character.	Dir'n from.		
									Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.10	764.5	55	12.8	87	NE	20	8.9		10		NE	0	0			Cloudy	
N. Yard, Portsmouth, N. H.	30.23	767.8	16	— 8.9	83	NW	6	2.7		0			0	0			Clear	
Naval Hospital, Yokohama, Japan	29.90	759.4	38	3.3	54	Calm			0	0			0	0			Clear	
Adams, Callao, Peru	29.94	760.5	70	21.1	90	SSE			1	8		SSE			Long	SW	Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.04	763.0	54	12.2	87	SE			2	10		SE	0.20	5.1			Rainy	
Alert, Hong-Kong, China	30.19	766 8	62	16.7	77	ENE			3	10		ENE			Sm'h		Cloudy	
Alliance, Key West, Florida	30.04	763.0	66	18.9	89	NE			2	10			0	0	Sm'h		Cloudy	
Ashuelot, Tientsin, China	30.45	773.4	19	— 7.2	100	WSW			1	0							Clear	
Colorado, New York, N. Y.	30.36	771.1	14	—16.0	100	NNW	3	1.3		2			0	0			Fair	
Constitution, N. Yard, League I'd., Pa			13	—10.6		N	1	0.4		2							Clear	
Franklin, Norfolk, Va	30.35	770.9	21	— 6.1		N	12	5.4		5		N	0	0			Fair	
Galena, Villafranca, France	29.72	754.9	57	13.9	52	Calm			0	2					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal.	30.08	764.0	52	11.1	100	S	3.6	1.6		5		S	0.08	2.0			Fair	
Jamestown, Sitka, Alaska	29.58	751.3	31	— 0.6		NW			1	0			0.20	5.1			Clear	
Kearsarge, N. 28° 30′, W. 87° 10′	30.06	763.5	64	17.8	73	ENE			6	10		ENE			R'gh	ENE	Raining	
Lackawanna, Callao, Peru †	30.07	763.8	69	20.6	95	SE			2	8		SE	0	0			Fair	
Marion, Sandy P't, Terra del Fuego	29.32	744.7	49	9.4	71	WSW			4	2		WSW	Li	ght	Sm'h		Squally	
Michigan, Erie, Pennsylvania	30.58	776.7	10	—12.2		S	1	0.4		10							Cloudy	
Minnesota, New York, N. Y.	30.38	771.6	17	— 8.3		NNW			2	2							Foggy	
Monocacy, Shanghai, China	30.61	777.5	31	— 0.6	89	N			2	8		Calm					Cloudy	
New Hampshire, Port Royal, S. C.	30.33	770.4	35	1.7	70	NNE	18	8.0		2		Calm	0	0			Fair	
Nipsic, Marseilles, France	29.78	756.4	55	12.8	62	NW			1	2					Sm'h		D. clouds	
Onward, Callao, Peru †	29.93	760.2	68	20.0	95	SE			2	10		NW			Long	W	Cloudy	
Palos, Shanghai, China	30.66	778.7	31	— 0.6	58	NE			1	8		NE					Fair	
Passaic, Washington, D. C.	30.51	774.9	10	—12.2	79	NW			2	0							Clear	
Pensacola, San Jose, Guatemala	29.95	760.7	73	22.8	85	NNE			1	0			0	0	Sm'h		Clear	
Portsmouth, Washington, D. C.	30.48	774.2	10	—12.2	100	NW			1	0							Clear	
Powhatan, New York, N. Y.	30.35	770.9	15	— 9.4	100	N			1-2	2							Hazy	
Quinnebaug, N. 42° 50′, E. 9° 50′	29.73	755.1	54	12.2	67	N			2	2		W			Sm'h		Fair	
Richmond, Hong-Kong, China	30.29	769.4	60	15.6	88	ENE			3	0			1.00	25.4			Hazy	
Saratoga, Baltimore, Md	30.45	773.4	14	—10.0	100	NW			2	2		Calm	0	0			Clear	
Shenandoah, Montevideo, Uruguay	29.73	755.1	70	21.1	85	W			2	0					Sm'h		Clear	
St. Louis, League Island, Pa	30.36	771.1	12	—11.1	80	NNW	6	2.7		0			0	0			Clear	
Swatara, Nagasaki, Japan †	30.32	770.1	38	3.3	72	N			1	8		NW			Sm'h		D. clouds	
Tennessee, N. 17° 54′, W. 79° 43′	30.00	762.0	79	26.1	95	NNE	8	3.6		5		Calm	0	0	Sm'h		Fair	
Ticonderoga, N. Yard, Mare Id., Cal.	30.09	764.3	55	12.8	100	S			1	10		Calm	0.19	4.8			Rainy	
Trenton, Villafranca, France	29.74	755.4	67	19.4	37	SSE			1-2	5			0	0	Sm'h		Fair	
Vandalia, Port Spain, Trinidad, W.I	29.98	761.5	77	25.0	91	ENE			2	5		SE					Fair	
Wabash, Boston, Massachusetts	30.26	768.6	21	— 6.1	57	NNW	11	4.9		10		NNW	0	0			Cloudy	
Wachusetts, Panama, Panama	29.55	750.6	74	23.3	90	NNW			2	2		N			Sm'h		Clear	
Wyoming, Villafranca, France	29.77	756.1	58	14.4	48	S			1	2		WNW			Sm'h		Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
S. 12° 58′, W. 10° 16′	30.00	762.0	83	28.3	71	ESE			3		6							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 23° 22′, W. 28° 09′	30.25	768.3	71.5	21.9	76				5		8							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang, ‡																			
N. 15° 52′, W. 36° 22′	30.01	762.2	76.2	24.6	61	ENE			4		6							D. clouds	Capt. H. Youlden.
S. S. Cipero																			W. N. Lailey.
City of Agra, ‡																			
S. 28° 33′, W. 25° 25′	30.13	765.3	80.0	26.7	78	NE			4		5							D. clouds	Capt. T. Young.
Barque Commewyne, ‡																			
N. 29° 18′, W. 59° 28′	29.92	760.0	67.3	19.6	74	WSW			5		6							Showery	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 21° 59′, W. 2° 13′	30.13	765.3	77.2	25.1	74	ESE			5		10							Showery	Capt. H. Spalding.
Ship Ellen Stuart, ‡																			
N. 18° 21′, E. 91° 45′	30.08	764.0	75.5	24.2	68	NE			3		0							Misty	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope, ‡																			
S. 4° 19′, W. 36° 12′	29.90	759.4	80.5	26.9	85	ESE			4		7							D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomedie																			Capt W. P. Hughes.
Ship Lochee																			Capt J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 19° 00′, W. 45° 29′	30.15	765.8	75.9	24.4	86	ENE			5		9							Showery	Capt. H. W. Dyke.
Barque Mertola,																			
N. 43° 44′, W. 11° 45′	30.03	762.7	55.5	13.1	100	W			6		10							Rain & mist	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee, ‡																			
N. 9° 00′, W. 22° 30′	29.94	760.5	78.5	25.8	91	NNE			2		10					Swell	N; NW	Overcast	Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven																			Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡																			
N. 37° 27′, W. 4° 22′	30.00	762.0	60	15.6	75	W			3		4							D. clouds	Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, ‡																			
N. 51° 00′, W. 16° 04′	29.74	755.4	53	11.7		ESE			2		3		ESE			Con.	Var.	Clear	Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, ‡																			
N. 49° 13′, W. 26° 55′	29.59	751.6	55	12.8		S			6		10		E			Cross	Var.	Misty	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, ‡																			
N. 51° 08′, W. 15° 00′	30.00	762.0	52	11.1		Var.			1		5		SW	0	0	Mod.	NW	Clear	Capt. Ch. W. Kennedy.
S. S. Republic,																			
N. 42° 15′, W. 52° 34′	29.82	757.4	50	10.0	72	NE			2		10		W	0	0	Sm'h		Cloudy	Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann ‡																			Capt. H. Baur.
S. S. Köln,																			
N. 51° 33′, E. 2° 13′	29.42	747.3	44.6	7.0		W			5		10		W	0	0	R'gh	W	Cloudy	
S. S. Leipzig,																			
N. 41° 56′, W. 49° 09′	29.87	758.7	42.0	5.6	63	Calm			0		2		WSW	0	0	Sm'h	W:W	Clear	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand.

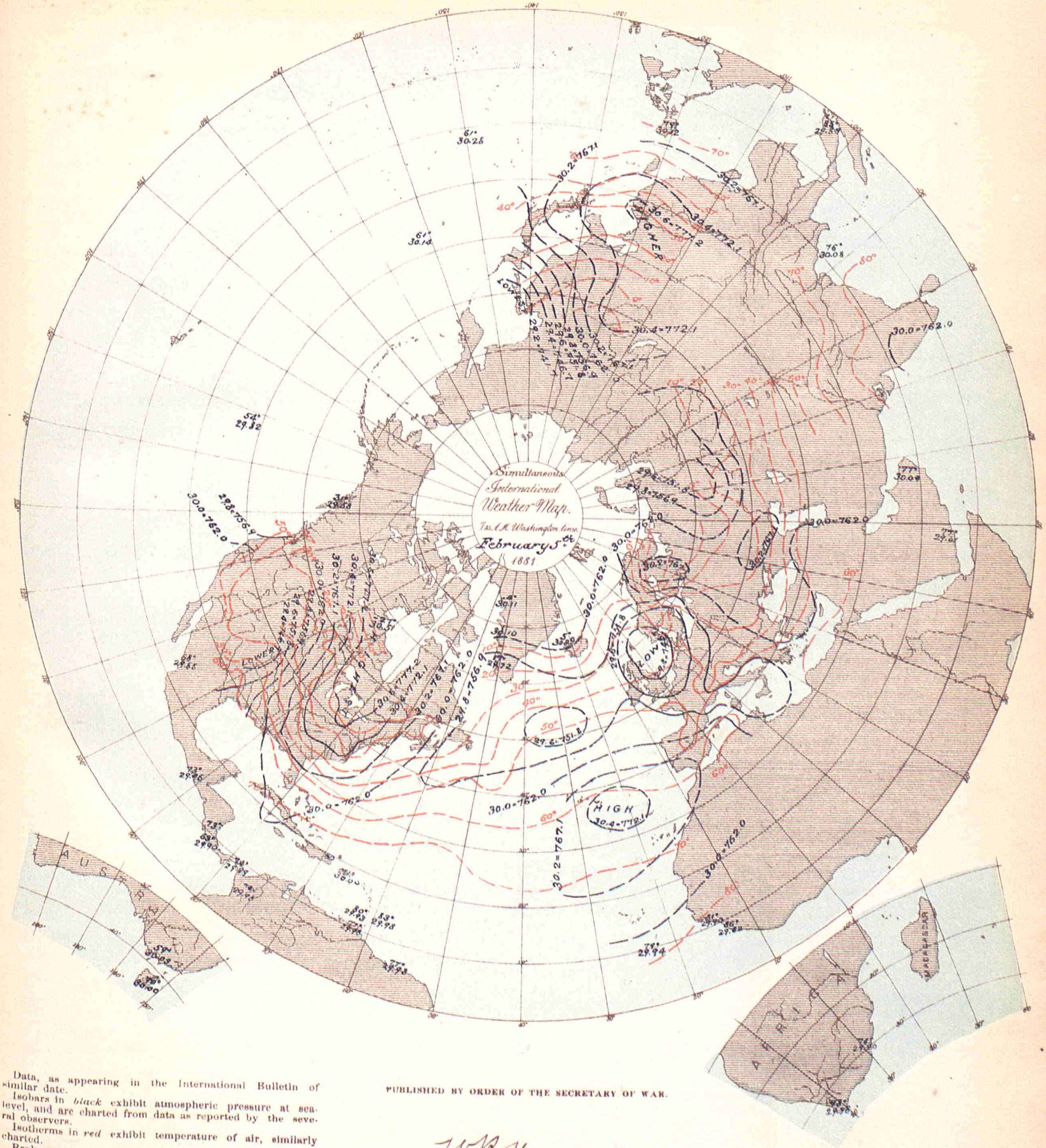
UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. ‡ N. 46° 45′, W. 37° 42′	29.67	753.6	55	12.8	87	WNW			5		5		W			Mod.	W	Fair	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 51° 37′, W. 15° 31′ †	29.91	759.7	49	9.4	78	NNW			3		2		NW	0	0	Mod.	NW	Fine	Capt. R. W. Sargent.
S. S. Ohio.																			Wm. Shakford, 1st Off'r
S. S. Pennsylvania, N. 42° 10′, W. 59° 35′ †	29.73	755.1	36	2.2	80	N			5		10		N	0	0	Sm'h	N	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern.																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 29° 28′, E. 129° 05′ †	30.39	771.9	58	14.4	64	NNW			5		8		N	0	0	Mod.	N	Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 36° 57′, E. 162° 09′ †*	30.14	765.5	61	16.1	82	N			2		2		NW			Mod.	NW	Fair	Capt. W. H. Kidley.
S. S. Oceanic, San Francisco, Cal.	29.96	761.0	56	13.3	87	SE			2		8		SE	0	0			Cloudy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Otterendorp.*																			
S. S. Columbia.																			Capt. Fred. Bolles.
S. S. Oregon, N. 43° 30′, W. 124° 35′ †	29.79	756.7	51.0	10.6	?	SSW			3		10		SW					Foggy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, N. 34° 16′, W. 119° 31′ †	30.02	762.5	52	11.1	93	NW			7		0					H'vy	SW	Clear	Capt. J. N. Ingalls.
S. S. Idaho, ‡ Seattle, Wash. Ter. †	29.56	750.8	50	10.0	100	SE			2		10							Foggy	C. E. Lyons, 1st Officer.
S. S. Orizaba.																			
S. S. Senator, N. 32° 45′, W. 117° 25′ †	30.02	762.5	57	13	94	W			3		0					Mod.	W	Clear	Thos. Wallace.
S. S. State of California, San Francisco, Cal. †.	30.11	764.8	54	12.2	93	W			2		10		SW	0	0			Foggy	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal. †	30.04	763.0	54	12.2	93	SSW			3		10		Calm					Light rain	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 21° 13′, W. 173° 37′	29.85	758.2	76	24.4	95	NW			1		10					Long	NW	Drizzling	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W. †	29.79	756.7	86	30.0		S			5		10		S	0	0			Overcast	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Panama, Panama †	29.99	761.7	75	23.9	86	NW			1		0			0	0	Sm'll	E	Clear	Capt. D. S. Austin.
S. S. City of Peking, N. 28° 22′, E. 125° 22′ †	30.41	772.4	48	8.9	70	NNE			4		10		WSW	0	0	Sm'h		Cloudy	Capt. G. G. Berry.
S. S. City of Sidney.																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 37° 33′, W. 145° 45′ †	29.82	757.4	54	12.2	80	SW			7		10		SW			R'gh	SW	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 35° 36′, W. 121° 51′ †	30.16	766.1	57	13.9	87	W			3		5		NW	0	0	R'gh	W	Fair	Capt. R. R. Searle.
S. S. Dakota.																			Capt. D. E. Griffiths.
S. S. Granada, N. 13° 45′, W. 90° 30′ †	29.80	756.9	79	26.1	86	NNW			2		0			0	0			Hazy	
S. S. Zealandia, S. 22° 00′, W. 174° 04′	29.92	760.0	78	25.6	86	S			5		8		SSE			Sm'h		Raining	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland, ‡ Antwerp, Belgium. †	29.33	745.0	51	10.6	72	WSW			4		8		W			Sm'h		Fair	Capt. Sam'l Jackson.
S. S. Nederland, ‡ N. 46° 14′, W. 33° 14′ †	29.90	759.4	57	3.9		SW			5		8		W	0	0	Long	NNW	Fine	Capt. S. Stokes.
S. S. Rhynland, ‡ Antwerp, Belgium.	29.43	747.5	48	8.9		S			5		8		SSW	0.2	5.			Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland.																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, ‡ Jacksonville, Florida. †	30.15	765.8	50	10.0		NE			2		5		NE	0	0			Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va.	30.35	770.9	22	— 5.6	72	N	6	2.7						0	0			Fair	Capt J. Jorgensen.
Sch'r Annie R. Lewis, N. 23° 47′, W. 56° 00′ †	30.01	762.2	78	25.6		SW			2		8		SSW	0	0	Mod.	SSE	Cloudy	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 39° 32′, E. 3° 34′ †*	30.10	764.5	60	15.6		WSW			4		10		W			Mod.	W;NE	Threatening	Capt. B. F. Woodbury.
Brigantine George, ‡ N. 19° 55′, W. 67° 50′ †	30.22	767.6	80	26.7		SE			2		2			0	0	Long h'vy	NNW	Fine	Capt. W H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va. †	30.31	769.9	23	— 5.0		NW	4	1.8		5k?	5k?			0	0			Clear?	
Ship Jumna.																			Capt. James S. Gawin.
Bark Sunbeam, ‡ Lisbon, Spain. †	30.22	767.6	58	14.4	100	W			6		8		W	0	0			Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 6, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.19	766.8	65.8	18.8	79	NE			6		0			0	0	Clear.	Dr. Ollive.
Nemours			30.10	764.5	63.1	17.3	82	W			6		2			0	0	Very fair.	Raynard.
Algiers			30.00	762.1	61.5	16.4	64	NNW			5		9			0.236	6.0	Covered	Nicolas.
La Calle			29.76	756.0	58.3	14.6	68	NNW			5		9			0.488	12.4	Covered	Fonfréde.
Tunis			29.72	754.8															Jacques.
Sfax			29.88	759.0															Gau.
Saida			30.15	765.8	48.2	9.0	92	W			4		10			0	0	Covered	Dumas.
Tebessa			29.85	758.1	48.6	9.2	68	N			4		8			0.146	3.7	Very cloudy	Watrin.
Geriville																			Lonchamp.
Laghouat			30.00	761.9	60.4	15.8	66	W			5		4			0	0	Cloudy	Herbin.
Biskra			29.94	760.5															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.92	759.9	30.01	762.2	57.8	14.3	66	SE	12	5.4			10			0	0	Dull	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania			30.00	762.0	75	23.9		SE			2		5k			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.17	740.9	29.74	755.4	34.9	1.6	96	Ca'm			0		10			0.028	0.7	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.89	733.9	29.68	753.9	34.9	1.6	94	SW	1.8	0.8			8			0	0		Dr. Wiersbicki.
Eperies	28.87	733.4	29.78	756.5	34.2	1.2	89	S			2		0			0.081	2.05		Julius Mikolik.
Gratz‡	28.49	723.7	29.79	756.6	33.1	0.6	79	SW			1		10			0	0		Andreas Rospini.
Hermannstadt	28.35	720.0	29.84	757.9	30.9	— 0.6	83	SSE			4		8			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.37	720.7	29.76	755.8	34.5	1.4	96	SW			1		10			0	0		The Staff.
Lemberg	28.75	730.3	29.78	756.5	30.4	— 0.9	80	SE			2		5			0.047	1.2		Dr. T. Stanecki.
Pola	29.53	750.1	29.65	753.0	46.8	8.2	87	W			7		10			0	0		I. R. HydrographicOffice
Szathmar	29.33	745.0	29.78	756.5	38.8	3.8	70	S			2		3			0.705	17.9		Beicht Peter, S. J.
Szegedin	29.49	749.0	29.78	756.4	33.8	1.0	89	S			1		3			0	0		Karl Stancel.
Trieste	29.57	751.0	29.67	753.6	48.9	9.4	87	Calm			0		10			0	0		P. Busin.
Vienna	29.02	737.2	29.76	756.0	33.8	1.0	81	Calm			0		9			0.071	1.8	Raining	I. R. Central Met. Obs'y
																0	0		
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.50	749.3	29.71	754.5	37.9	3.3	89	NW			6		10		NW	0.106	2.7	Light rain	Royal Observatory
Furnes	29.70	754.3	29.72	754.9	37.6	3.1	87	N			6		10			0.071	1.8	Raining	M. E. de Cae.
Maeseyck	29.45	748.0	29.58	751.2	39.7	4.3	82	W			2		10			0.055	1.4	Raining	M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 9, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.83	757.7	29.93	760.2	35.5	1.9	66	NNW	12	5.4			3			0	0	Blue sky	W. Boswell.
Armagh, Observatory	29.79	756.7	30.04	763.0	34.7	1.5	74	SW	3	1.3									S. Call.
Bidston, Liverpool Obs'y			30.00	762.0	35.8	2.1	65	NW	13	5.8			2					Blue sky	John Hartnup.
Bolton, Sharples	29.40	746.7	29.95	760.7	34.2	1.2	79	NNW	6	2.7			5					D. clouds	Thomas Mackereth.
Bradford, Yorkshire																			
Bridgetown, Barbadoes	29.95	760.7	29.98	761.5	83	28.3	64	NE			3		4			0.01	0.3		J McLandsborough, F.R.S
Cardington			29.90	759.4	39.0	3.9	73	NW			2.0		1					D. clouds	Pvt. J. Surgenor, A. H. C.
Chatham, School M. E.	29.77	756.1	29.90	759.4	38.1	3.4	65	N			1		9					Blue sky	John McLaren.
Falmouth, Observatory	29.83	757.7	30.07	763.8	42.3	5.7	66	NNW			1		9					Gloomy	Lance Cpl. R. Tear, R.C.
Fort Napier, Natal	27.61	701.3	29.82	757.4	72.3	22.4	99	NE			0		7					Overcast	The Staff.
Free Town, Sierra Leone	29.59	751.6	29.83	757.7	86	30.0	88	SE			1		3					Overcast	Pvt. E. K. Anniss, A.H.C.
Galway, Queen's College																		D. clouds	C. E. Keane.
Gibraltar, Mediterranean	30.20	767.1	30.26	768.6	59.8	15.4	86	W			5		4						J. O'Donaghadue.
Glasgow, Observatory	29.78	756.4	29.99	761.7	35.6	2.0	65	WNW			2							Blue sky	2nd Cpl. O. Baldwin.
Greenwich, Royal Obs'y	29.73	755.1	29.90	759.4	37.1	2.8	68	NNW			2		4			Blank		Blue sky	D. G. MacLean.
Guernsey	29.78	756.4	30.00	762.0	42	5.6	50	NW			2		3					D. clouds	The Staff.
Kew, Observatory	29.90	759.4	29.93	760.2	38.0	3.3	63	NW	18	8.0			5					D. clouds	Dr. S. E. Hoskins, F. R. S.
Leicester, Museum	29.68	753.9	29.94	760.5	38.0	3.3	67	N			2		2					D. clouds	The Met'g'l Office.
Malta, Mediterranean	29.56	750.8	29.63	752.6	57	13.9	93	SW			2		6			Blank		Blue sky	J. E. Carryer.
Nassau, Bahamas			30.14	765.5	67.5	19.7	61	NE			6		10					D. clouds	F. S. Vine, A. H. C.
Oscott, St. Mary's College	29.44	747.8	29.98	761.5	35.8	2.1	76	NNW			4		3					Overcast	C. S. Duncombe.
Oxford, Radcliffe Obs'y	29.73	755.1	29.99	761.7	37.5	3.1	65	NNW			3		2					D. clouds	Robert Pate.
Plymouth	29.97	761.2	30.05	763.3	41.0	5.0	74	NW			1		5					Blue sky	The Staff.
Sandwick Manse, Orkneys			29.89	759.2	36.8	2.7	73	WNW	20	8.9			6					D. clouds	John Merrifield.
Scutari Cemetery, Turkey	29.74	755.4	29.81	757.2	50.6	10.3	85	NE			2		9					D. clouds	Rev. C. Clouston, L. L. D.
Sheffield	29.70	754.4	29.96	761.0	38.2	3.4	61	NE			2		1					D. clouds	Serg't W. H. Lyne.
Silloth Rectory	29.98	761.5	30.01	762.2	40.0	4.4	74	N			1		0			0	0	Blue sky	W. F. Cooper.
Stonyhurst, Observatory			29.99	761.7	34.7	1.5	60	NW	6	2.7			10			0	0	Blue sky	Rev. F. Redford, M. A.
Strathfield Turgiss	29.74	755.4	29.97	761.2	38.2	3.4	68	N			3		1					Overcast	Rev. S. J. Perry.
Truro, Royal Institution	29.98	761.5	30.04	763.0	49	9.4	78	NW			4		5					Squally	Rev. C. H. Griffith, F.M.S.
Valencia, Observatory	29.88	758.9	29.90	759.4	42.2	5.7	73	ESE	34	15.2			10					D. clouds	W. Newcombe.
																		D. clouds	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.40	772.1	30.45	773.4	19	— 7.2	85	N	20	8.9			10s			0.040	1.02	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	30.47	773.9	30.54	775.7	13	—10.6	87	N	15	6.7		0	0			0	0	Clear	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	30.70	779.8	30.73	780.5	7	—13.9	79	NW	1	0.4		0	0			0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.52	749.8	30.41	772.4	20	— 6.7	100	SE	3	1.3			10n			0.289	7.34	Light snow	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.27	768.8	30.41	772.4	23	— 5.0	93	N	11	4.9			10ks			0	0	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.39	771.9	30.78	781.8	3	—16.1	73	N	3	1.3		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	30.55	776.0	30.78	781.8	8	—13.3	56	W					Sm'e			0	0	Smoky	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario												%							Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	30.02	762.5	30.84	783.3	—10	—23.3	59	Calm	0	0		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.97	761.2	30.77	781.5	2	—16.7	97	NW	2	0.9		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	30.03	762.7	30.79	782.1	—10	—23.3	100	E	7	3.1		0	0			0	0	Clear	M. Payne.
Quebec, Quebec*	30.39	771.9	30.76	781.3	— 2	—18.9	100	Calm			0		Fog			0	0	Foggy	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.34	770.6	30.88	784.3	—12	—24.4	51	Calm	0	0		0	0			0	0	Clear	K. Stewart.
Saugeen, Ontario*	29.98	761.5	30.81	782.6	— 5	—20.6	70	SE	5	2.2		0	0			0	0	Clear	W. H. McIntyre.
St. Andrews	30.48	774.2	30.54	775.7	15	— 9.4	76	N	3	1.3		0	0			0	0	Clear	
St. John's, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.25	768.3	30.29	769.4	25	— 3.9	90	N	10	4.5			10n			Inap.	Inap.	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	30.35	770.9	30.77	781.5	11	—11.7	94	N	10	4.5		0	0			0	0	Clear	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.39	771.9	30.46	773.7	22	— 5.6	70	NE	4	1.8		2k	0	NE		0.01	0.3	Clear	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.89	759.2	30.15	765.8	30	— 1.1	89	W	2	0.9			10			0	0	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't

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

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

Beaufort West, Cape Colony																			
Cape St. Francis Lt. House	29.96	761.0			70.5	21.4	86	E	5.9	2.6			9s			0	0	Cloudy	John Duthie.
Cape Town, C. G. H. Obs'y	29.90	759.4	29.93	760.2	77.0	25.0	60	S	12.5	5.6		0	4		SW	0	0		The Staff, for D. Gill.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.35	770.9	30.38	771.6	36.1	2.3	86	SSE	1.3	0.6		3ck		W		0	0	Cloudy	M. Marc Dechevrens, S J.

STATIONS.	Barometer. Corrected for instru'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.	Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
											Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	From.	From.	Inch.	Mill.		
COSTA RICA SERIES.																		
By authority of the Minister of Foreign Affairs.																		
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																		
San José	26.23	666.2	29.95	760.7	67.6	19.8	90	Calm			0	10s			Inap.	Inap.	Cloudy	Federico Maison.
DANISH SERIES.																		
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																		
Copenhagen	29.38	746.2	29.43	747.4	35.1	1.7	91	Calm	0	0			10					Oversergent Fischer.
Faröe	29.47	748.4	29.48	748.9	31.1	— 0.5	100	N			4		10					Overloerer Lauridsen.
Godthaab, Greenland	29.91	759.6	29.84	758.0	15.4	— 9.2	75	NNE			2		2					S. Kleinschmidt.
Stykkisholm, Iceland	29.92	760.0	29.97	761.1	—5.4	—20.8	86	E			8		2					A. O. Thorlacius.
Thorshavn	29.85	758.3	29.89	759.2	31.3	— 0.4	76	N	11	5			5					Overloerer Bergh.
Vestervig	29.42	747.3	29.52	749.7	28.2	— 2.1		NNE			2		10					Locarer Oesterbol.
FRENCH SERIES.																		
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																		
Agen, Normal School	29.45	747.9	30.11	764.9	44.2	6.8	55	NW			1			SE	SE	0.024	0.6	M. Labroue, Director.
Alençon	29.47	748.5	30.02	762.5	38.5	3.6	76	NW			2		5kn			0.004	0.1	Cloudy. M. Nicot, Director.
Arras, Engineer School	29.54	750.4	29.81	757.1	37.4	3.0	80	NNW	14.5	6.5			k					M. Klein, Commandant.
Avignon, Normal School	29.79	756.7	29.87	758.7	46.4	8	51	N			3		0			0.335	8.5	Clear. M. Giraud, Director.
Bar-sur-Seine	29.30	744.3	29.92	759.9	39.7	4.3	72	NW			3		10		NW	0.307	7.8	Covered. M. Saillard, Director.
Beauvais, Normal School	29.63	752.5	29.90	759.5	37.9	3.3	85	WNW			1		10		NW	0.030	0.75	Raining. M. Frère Eugene Marie.
Besançon, Normal School	28.98	736.2	29.91	759.6	36.7	2.6	93	S			1		10n		S	0.319	8.1	Raining. M. Gobin, Director.
Bordeaux, Observatory	29.84	758.0	30.12	765.0	45.9	7.7	71	N			1		10		W	0.106	2.7	Covered. M. Rayet, Director.
Bourges, Normal School	29.21	742.0	29.82	757.4	40.1	4.5	89	WSW			4		n		WSW	0.020	0.5	M. Postel, Director.
Brest, Naval Observatory	29.81	757.2	30.06	763.4	49.3	9.6	69	NNE			1		4		N	0	0	M. de Rermaree, Dir.
Caen, Normal School	29.80	756.9	29.88	758.9	43.5	6.4	97	SE			1		5		SE	0	0	Cloudy. M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.49	749.0	29.82	757.3	42.4	5.8	89	W			2		10	NW	NW	0.217	5.5	Covered. M. Jadot, Director.
Charleville, Normal School	29.22	742.3	29.78	756.4	43.2	6.2	94	SSW			1		10			0.08	2.	Covered. M. Grimard.
Clermont-Ferrand Obs'y	28.52	744.5	29.91	759.8	40.6	4.8	66	W			4		5			0.106	2.7	½ covered. M. Allnard, Director.
Cluny, Normal School	29.06	738.2	29.93	760.1	39.2	4	87	SW			2		7		NW	0	0	M. de Villemontée, Dir.
Commercy, Normal School	28.92	734.6	29.80	757.0	36.3	2.4	100	W			6		10n		W	0.150	3.8	Rain & snow. Dr. Coulet, Director.
Gap, Normal School	27.37	695.2	29.92	759.9	41.0	5.0	69	S			3		5		E	0	0	½ covered. M. Jeangirard, Director.
Gréasque, du. Rhone	28.62	727.0	29.76	756.0	42.4	5.8	39	NW			8		5		NW	0.256	6.5	½ covered. M. Kina, Director.
Grenoble, Normal School	29.12	739.6	29.91	759.7	39.7	4.3	72	N			1		k			0.402	10.2	M. Ablard, Director.
Guéret, Normal School	28.35	720.1	29.97	761.2	36.0	2.2	79	W			1		n		E	0	0	M. Rivoir, Director.
Lamballe, Normal School	29.81	757.2	30.10	764.4	43.2	6.2	70	N			4				N	0	0	M. Ollitrault, Director.
Lescar, Normal School	29.55	750.6	30.24	768.1	44.6	7	83	W			1		10			0.539	13.7	Covered. M. Chauvin, Director.
Lorient, Naval Observatory	29.98	761.6	30.09	764.2	49.6	9.8	89	NW			1		2		NW	0	0	¼ covered. Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.85	732.8	29.90	759.5	39.9	4.4	67	NW			2		10n		NW	0.165	4.2	Covered. M. André, Director.
Mans, Normal School	29.67	753.7	29.99	761.7	40.1	4.5	98	N			4		5		N	0.08	2	Cloudy. M. Pihoen, Director.
Marseille, Observatory	29.50	749.2	29.77	756.1	47.3	8.5	51	NNW			5		3		NW	0.071	1.80	M. Stephan, Director.
Montlouis l'Instituteur	24.63	625.5	29.86	758.5	30.2	—1.0	65	SW	9.4	4.2			5		W	0	0	M. Cave, for Dr. Fines.
Montpellier, Normal School	29.79	756.7	29.90	759.5	46.4	8	52	NW			6		5			0	0	Cloudy. M. Galzin, Director.
Nancy, Normal School	29.02	737.0	29.81	757.1	35.2	1.8	89	WSW			1		10n		S	0.157	4.0	Rain & snow. M. Hasse.
Nantes, Observatory	29.91	759.6	30.07	763.7	44.2	6.8	74	WNW			2		6n		W	0	0	M. Larocque, Director.
Nice	29.60	751.9	29.64	752.8	50.4	10.2	82	W			2		10	W	W	0.087	2.2	Light rain. Capt. Boissière, Director.
Perpignan, Observatory	29.84	757.9	29.95	760.6	48.9	9.4	45	NE	22.4	10.0			4		NW	0	0	Dr. Fines.
Pic-du-Midi, Plantade	22.35	567.7			19.2	—7.1							10		NW	1.488	37.8	Snowy. M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.83	732.3	29.93	760.2	41.4	5.2	50	N			3		2n	N	N	0.08	2.	Slightly cl'dy. M. Tallieu.
Puy de Dôme Obs'y, Summit	24.91	632.8			22.6	—5.2	98	WNW			4		10			0.299	7.6	Foggy. M. Allnard, Director
Rochefort, Naval Obs'y	30.05	763.8	30.08	764.1	48.2	9.0	67	NNW			1		2		WNW	0	0	¼ covered. Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.85	758.2	30.07	763.8	45.0	7.2	53	NNW			1		0			0	0	Clear. M. Monillot, Director.
Rodez, Normal School	27.85	707.4	30.08	764.1	34.2	1.2	92	W			1		4ck	1		NW	0.142	3.6	M. Richard, Director.
Rouen, Normal School	29.84	758.0	29.93	760.2	44.6	7	74	NW			2		10			NW	0	0	Covered. M. Platrier, Director.
Saint Lô, Normal School	29.84	757.9	30.00	761.9	40.8	4.9	59	NW			1		5			NW	0.008	0.2	Cloudy. M. Delaplanche, Dir.
Saint Maur, Observatory	29.72	755.0	29.89	759.2	38.8	3.8	72	NW			2		10			NW	0.047	1.2	Snowing. M. Renou, Director.
Toulouse, Observatory	29.36	745.8	30.09	764.2	44.4	6.9	90	WNW			2		10			0	0	Covered. M. Baillaud, Director.
Tours	29.78	750.4	29.98	761.4	42.4	5.8	61	NNW			2		8		W	0	0	¼ covered. M. de Tastes.
Versailles, Observatory	29.40	746.8	29.89	759 2	37.8	3.2	73	NW			2					0	0	Dr. A. Bérigny, Director
Sub-Series.																		
Paris, Montsouris Obs'y																		M. Marié Davy, Director
GERMAN SERIES.																		
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																		
Bamberg	28.78	731.1	29.63	752.7	37.9	3.3	80	W			6		Sk	W		0.079	2.0	Raining. Prof. Dr. Holt.
Berlin	29.34	745.1	29.51	749.6	37.8	3.2	89	SW			1		10			0.102	2.6	Rain; snow. Prof. Dr. Arndt.
Breslau	29.09	738.9	29.61	752.2	37.0	2.8	59	Calm			0		8	W		0	0	Royal University Obs'y.
Carlsruhe	29.31	744.5	29.74	755.5	39.6	4.2	79	SW			5		10			0	0	Albert Senz.
Cassel	28.91	734.2	29.50	749.4	37.4	3.0	89	W			2		8	W		0.065	1.64	Dr. H. Möhl.
Frankfort on the Main	29.32	744.7	29.70	754.3	38.8	3.8	88	SW			4		10			0.280	7.1	Raining. Physical Society.
Friedrichshafen	28.34	719.7	29.80	756.9	39.9	4.4	69	W			4		6	W		0	0	Chief Telegrapher Wilhelm.
Hamburg	29.43	747.4	29.50	749.2	36.3	2.4	95	WSW			3		Fog			0.039	1.0	Dr. R. Kleeman.
Kiel	29.41	747.0	29.43	747.4	37.2	2.9	94	W			1		10			0.094	2.41	Snowing. Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.17	740.8	29.60	751.7	38.7	3.7	93	SSW			3		7	SW		0	0	Prof. Dr. Bruhns.
Magdeburg	29.30	744.1	29.52	749.9	37.9	3.3	92	SSW			1		9ks	S		0.079	2.0	Dr. Assmann.
Memel	29.63	752.6	29.08	753.8	26.8	—2.9	89	S			4–5		10ks					Reinbrecht & Issermann.
Munich	27.88	708.1	29.72	754.9	37.9	3.3	64	SW			3		8	W		0.091	2.3	Central Station.
Neufahrwasser	29.56	750.8	29.58	751.2	31.8	—0.1	90	SSE			1		10			0.020	0.5	A. Lothes.
Neustadt, Palatinate	29.15	740.4	29.67	753.6	42.6	5.9	98						4			0.236	6.	Snowy. Dicknether.
Stuttgart	28.74	730.0	29.65	753.1	41.5	5.3	65	W			4		9	W		0.016	0.4	Prof. Dr. Schoder.
Thorn	29.37	746.0	29.56	750.7	35.6	2.0	78	SW			2		9			0	0	Dr. O. Cunerth.
Weissenburg, Bavaria	28.19	716.0	29.69	754.0	38.3	3.5	71	W			4		9	W		0.063	1.6	Prof. Kemlein.
Wustrow	29.41	747.0	29.43	747.6	34.5	1.4	94	S			2		10			0	0	Foggy. Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.28	743.7	29.67	753.7	55.0	12.8		NE			1.0		10					Covered	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.09	764.2	30.14	765.5	79.9	26.6	51	WSW	12.0	5.4			2	WSW		0	0	D. clouds	
Deesa	29.61	752.1	30.08	764.1	88.8	31.6	9	WSW	8.5	3.8			4	SW		0	0	D. clouds	
Bombay	30.00	761.9	30.04	762.9	84.7	29.3	62	W	9.0	4.0			0			0	0	Blue sky	
Poona, Yarrowda	28.18	715.8	30.02	762.6	85.9	29.9	16	E	8.0	3.6			0			0	0	Blue sky	
Belgaum	27.48	697.9	30.00	762.0	81.0	27.2	16	NE	9.0	4.0			0			0	0	Blue sky	
Lahore	29.37	746.0	30.12	765.2	76.3	24.6	26	W	1.4	0.6			2			0	0	Blue sky	
Roorkee	29.19	741.5	30.11	764.9	71.8	22.1	34	Calm	1.6	0.7			3			0	0		
Agra	29.56	750.9	30.14	765.4	79.8	26.6	27	NW	3.3	1.5			0			0	0		
Nagpur	29.04	737.6	30.09	764.2	84.2	29.0	28	E	3.1	1.4			0			0	0	Blue sky	
Jubbulpore	28.77	730.7	30.18	766.5	68.2	20.1	34	NE	2.0	0.9			0			0	0	Blue sky	
Lucknow	29.75	755.5	30.13	765.3	76.2	24.6	76	NW	1.7	0.8			0			0	0	Blue sky	
Allahabad	29.82	757.3	30.14	765.5	73.6	23.1	40	Calm	1.6	0.7			0			0	0	Blue sky	
Patna	29.84	758.0	30.03	762.8	72.2	22.3	55	W	1.0	0.4			0			0	0	Blue sky	
Hazaribagh	28.08	713.1	30.14	765.6	68.0	20.0	28	NNW	7.7	3.4			0			0	0	Blue sky	
Cuttack	30.02	762.4	30.10	764.6	79.0	26.1	46	Calm	0.3	0.1			0			0	0	Blue sky	
Calcutta, Alipore	30.06	763.6	30.09	764.2	74.9	23.8	56	NNW	2.0	0.9			0			0	0	Blue sky	
Goalpara	29.70	754.4	30.12	765.0	70.3	21.3	52	NE	5.0	2.2			0			0	0	Blue sky	
Chittagong																			
Sibsagar	29.78	756.5	30.14	765.4	64.9	18.3	80	ESE	1.2	0.5			0			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.25	743.0	29.67	753.7	46.4	8.0	52	Calm	0	0			10			0	0		Prof. Giovanni Clodig
Milan	29.15	740.4	29.69	754.0	35.6	2.0	91	SW	1.8	0.8			8			0	0		Prof. Schiaparelli.
Padua	29.56	750.7	29.67	753.5	44.8	7.1	77	NNW	4.9	2.2			10	NE		0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.77	730.7	29.71	754.6	30.9	— 0.6	87	NNE	0.7	0.3			8			0	0		Prof. P. F. Denza.
Genoa	29.45	747.9	29.64	752.8	44.2	6.8	58	N	8.1	3.6			8	W		0	0		Prof. G. M. Garibaldi.
Mondovi	27.74	704.7	29.71	754.6	36.1	2.3	61	ENE			2		1	SSW		0	0		Prof. D. C. Bruno.
Pesaro	29.62	752.3	29.67	753.6	42.3	5.7	83	W	9.8	4.4			10			0	0		Prof. Luigi Guidi.
Florence	29.35	745.4	29.61	752.0	49.1	9.5	65	NW			2		10			0	0		Cav. F. Meucci.
Leghorn	29.52	749.9	29.61	752.0	45.9	7.7	68	ENE	4.3	1.9			10			0	0		Prof. P. Monte.
Rome	29.39	746.5	29.57	751.0	54.0	12.2	58	N	1.3	0.6			9			0	0		Prof. P. S. Ferrari.
Lecce	29.34	745.2	29.60	751.7	55.9	13.3	67	SSE	17.4	7.8			9	S		0.268	6.8		Prof. C. de Giorgi.
Cosenza	28.74	729.9	29.63	752.7	52.2	11.2	71	SW	1.3	0.6			9	SSW		0	0		Prof. D. Conti.
Cagliari	29.42	747.3	29.62	752.3	54.0	12.2	57	SW			6		4			0.039	1.0		Prof. A. Pacinotti.
Palermo	29.36	745.8	29.61	752.2	59.4	15.2	55	SW	8.1	3.6			10			0.217	5.5		Prof. G. Ciaccatore.
Syracuse	29.54	750.4	29.59	751.5	58.1	14.5	67	WSW	2.5	1.1			10	SW		0.039	1.0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.06	738.0	29.58	751.2	54.3	12.4	72	S	0.7	0.3			2	W		0	0		Prof. F. Brioschi.
Stelvio	21.91	556.7			18.9	— 7.3	83	E			4		rocks		W	0.157	4.0	Covered	P. F. Denza.
Valdobbia	21.72	551.9			18.3	— 7.6	80	E			6		9kn		WNW	0	0	Misty	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.33	770.4	30.35	770.9	30.3	— 0.9	60	NW	2.9	1.3			0			0	0	Clear	K. Sasaki.
Kioto	30.10	764.5	30.29	769.3	28.6	— 1.9	81						0			0	0	Clear	
Nagasaki, I. M. Obs'y	30.16	766.0	30.38	771.6	30.8	— 0.7	76	Calm	0	0			0			0.040	1.02	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	30.02	762.5	30.09	764.3	31.1	— 0.5	70	WNW	5.4	2.4		0	0			0	0	Clear	The Staff.
Wakayama	30.25	768.3	30.30	769.6	33.2	0.7	65	NW	4.8	2.1		rck	0	NW		0	0	Fair	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.79	756.6	29.98	761.4	81.8	27.7	60	E	17.0	7.6		0	4		ESE	0	0	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.23	615.5	30.06	763.5	45.0	7.2	86	N			1	0	0			0	0	Blue sky	Prof. M. Leal.
Mazatlan	29.65	753.1	29.91	759.8	62.0	16.7	72	NNE	1.6	0.8		0	0			0	0	Light haze	F. Quijano, C. E.
Mexico, Central Obs'y	22.97	583.0	30.06	763.3	49.6	9.8	59	SW	1.1	0.5		0	0			0	0	Fine	The Staff.
Pabellon, Aguascalientes	23.66	601.1	29.69	754.0	46.4	8.0	44	WNW			6	0	0			0	0	Fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.31	592.0	30.09	764.2	50.0	10.0	60	SW	12.4	5.6		0	9		SW	0	0	Very cloudy	Prof. P. Spina.
San Luis Potosi	24.35	618.3	30.36	771.2	47.5	8.6	37	SW	3.1	0.4		0	0			0	0	Clear	G. Barroeta, M. D.
Tlacotalpam	29.67	753.6	29.68	753.9	73.2	22.9	80	S	1.7	0.8		0	0			0	0	Fair	Prof. M. Cházaro.
Zacatecas	22.26	565.4	29.96	760.9	35.4	1.9		WSW	5.1	2.3		0	0			0	0		J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.72	754.9	29.72	754.9	38.8	3.8		NNW			5					0.087	2.2		
Groningen	29.47	748.6	29.53	750.0	36.0	2.2		WNW			2					0.059	1.5		
Helder	29.61	752.0	29.61	752.0	36.0	2.2		NNW			5					0.031	0.8		
Hellevoetsluis	29.66	753.4	29.66	753.4	37.0	2.8	93	NNW			3					0.138	3.5		
Utrecht	29.58	751.2	29.62	752.4	36.5	2.5	86	NW			4		10			0.012	0.3	Dull	H. van der Brink

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.60	751.8	29.66	753.4	27.3	— 2.6	58	N	12.5	5.6			0			0	0		
Christiania	29.43	747.4	29.58	751.4	21.9	— 5.6	60	NNW	4	2			1			0.067	1.7		
Gjæsvær	29.52	749.9	29.55	750.5	13.3	—10.4		SSE			2		10						
Lodingen	29.55	750.6	29.60	751.8	9.7	—12.4	70	NE			4		1			0.031	0.8		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.16	766.1	30.32	770 1	60.1	15.6	93	WNW	5.6	2.5			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.18	741.2	30.19	766.9	56.1	13.4	86	WNW	12.5	5.6			9			0.091	2.3		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.29	769.3	30.38	771.6	63.7	17.6	66	SSW	2.5	1.1			10			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.95	760.7	30.31	769.9	58.5	14.7	84	NNW	7.4	3.3			10			0	0		The Staff.
Ponta Delgada, Azores	30.32	770.0	30.39	771.8	60.4	15.8	71	SW	14.3	6.4			3			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.51	724.2	29.66	753.3	13.3	—10.4	100	W	22	10			5			Blank			Capt. Lasarew.
Archangel	29.99	761.8	30.01	762.3	— 9.8	—23.2	83	ESE	4	2			10						Capt. Sseliwerstow.
Astrakhan	30.51	774.9	30.43	772.8	23.4	— 4.8	98	ENE	2	1			10cp					Heavy cld's	Capt. Wisganow.
Barnaul	29.14	740.1	29.66	753.4	20.8	— 6.2	78	SW	0	0			5					Light clouds	Meteorological Obs'y.
Dorpat	29.46	748.2	29.71	754.7	22.1	— 5.5	80	S	4	2		6ck							Observatory.
Ekaterinburg	28.90	734.1	29.97	761.3	— 4.2	—20.1	67	WNW	22	10			1cs						Meteorological Obs'y.
Kasan	30.15	765.8	30.45	773.5	1.8	—16.8	89	WNW	4	2			0						Observatory.
Kertch	30.09	764.2	30.11	764.7	34.7	1.5	87	E	7	3			10						Lagorio.
Kieff	29.32	744.8	30.00	762.0	24.8	— 4.0	93	SSE	13	6			10ks;n						Cand. Fatjanow.
Lugan	30.06	763.4	30.28	769.0	22.6	— 5.2	90	ESE	13	6			10						Meteorological Obs'y.
Moscow	29.66	753.3	30.26	768.6	12.7	—10.7	76	SSE	10.1	4.5			10s						Meteorological Obs'y.
Nertchinsk	27.84	707.0	30.40	772.2	— 1.5	—18.6	60	Calm	0	0			2						Meteorological Obs'y.
Nikolaiev	30.01	762.2	30.08	764.0	33.4	0.8	100	ESE	9	4			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.36	745.8	29.45	748.0	1.4	—17.0	93	W	22	10			10n						Lieut. Iwanow.
Nukuss	29.97	761.3	30.22	767.5	30.7	— 0.7	90	NNW	4.2	1.9			10kn						Dr. Dobrochotow.
Pekin, China	30.31	769.8	30.45	773.4	21.9	— 5.6	26	NE	7	3			0						Physical Observatory.
St. Petersburg	29.71	754.7	29.73	755.1	20.8	— 6.2	87	S	13	6			10s;n						Central Physical Obs'y.
Tashkend, Laboratory	28.42	731.8	30.00	762.1	50.2	10.1	91						10			Blank			Teich, A. M.
Tiflis	28.83	732.2	30.29	769.3	44.6	7.0	81	ESE	11	5			10n						Physical Observatory.
Warsaw	29.23	742.5	29.67	753.6	32.0	0.0	78	SE	7	3			3ks						Astronomical Obs'y.
Wilna	29.36	745.8	29.80	757.0	24.6	— 4.1	88	SSE	7	3			10					Heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.56	750.8	29.87	758.6	16.2	— 8.8	78	SSW	2	1			6						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.99	761.7	37.5	3.0	50	NW			1		10k			0.04	1.0	Fine..	Andrew Gibb.
Monach Lt. House, Hebrides			29.95	760.7	38	3.3	72	SSE			4	3	0	SSE		0	0	Light clouds	J. Youngclause.
North Unst, Shetland Isl'ds			29.77	756.1				N			3		5			Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.72	754.8	29.83	757.6	56.5	13.6	65	W	4.9	2.2			k			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.10	764.4	30.15	765.9	55.4	13.0	73	NW	2.7	1.2		2	7	W		0.185	4.7	Almost cov'd	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.12	688.9			48.2	9.0	67	N	4.5	2.0		0	3			0	0	Light clouds	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.80	706.2	30.02	762.5	59.0	15.0	56	NW	18.1	8.1		0	4			0	0	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.83	757.7	29.98	761.5	69.6	20.9	52	NW	3.8	1.7		2	4	E		0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.17	740.8	30.07	763.8	54.5	12.5	98	SW	5.6	2.5			10			0.295	7.5	Raining	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.93	760.3	30.00	762.0	68.1	20.1	89	E	10.3	4.6		0	0			0.012	0.3	Clear	Benito Vines, S. J.
Manilla, Phillippine Islands	30.07	763.7	30.12	765.0	78.8	26.0	66	NE	2.2	1.0						0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.18	766.5	30.28	769.0	60.8	16.0	81	WNW	18.8	8.4			10		W	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.92	760.0	30.01	762.3	71.2	21.8	94	SW	0	0		2s	0	SW		0	0	Clear	Enrique Gadea, Chief Engineer.
Tugnegarao, Philippine Ids	30.07	763.8	30.21	767.5	69.0	20.6	83	NNW	3.5	1.5			1s			0	0	Fair	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.54	750.3	29.58	751.3	5.7	—14.6	100	SE			2		10			0.138	3.5		
Umea	29.48	748.9	29.54	750.2	5.0	—15.0	100	N			4		8			0	0		
Hernosand	29.58	751.4	29.63	752.7	6.6	—14.1	79	NNW			2		10			0.469	11.9		
Stockholm	29.25	742.9	29.43	747.4	33.1	0.6	96	N			2		10			0.055	1.4	Snowing	
Wisby	29.42	747.3	29.48	748.8	34.2	1.2	92	SW			4		10			0.059	1.5		
Sub-Series.																			
Upsala	29.37	746.1	29.46	748.3	16.2	— 8.8	96	N	7.4	3.3			10			0.054	1.37	Rain & sleet.	Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.43	722.2	29.90	759 4	41.5	5.3	48	WNW			1		6			0.020	0.5	Cloudy	The Observatory.
Zurich	28.15	715.1	29.84	758.0	39.6	4.2	69	W			3		5			0.031	0.8	Cloudy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —4.6 mm.; Ther. +2°.3 cent.; Hum. —26 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.87	758.7	50.2	10.1	75	NE	9	4.0			8		N	0	0		The Observatory.
Valona			29.61	752.1	59.5	15.3		NW			1		2			0	0	Slightly cld'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.04	763.1	66.7	19.3	68	WSW			1	c	3k		SW	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.68	779.3	30.78	781.8	14	—10.0	64	NE	3	1.3		0	0			0	0	Clear	
Alpena, Michigan	30.05	763.3	30.81	782.6	— 5	—20.6	63	N	2	0.9		0	0			0	0	Clear	
Atlanta, Georgia	29.16	740.7	30.38	771.6	30	— 1.1	48	E	28	12.5		8k;ck	0	Calm		0	0	Fair	
Atlantic City, New Jersey	30.61	777.5	30.63	778.0	14	—10.0	81	N	12	5.4		5k	0	NE		0	0	Fair	
Attou Id., Alaska ‡	29.40	746.7			37	2.8	100	S	16	7.2			10n		SW	0.09	2.3	Cloudy	
Augusta, Georgia	30.33	770.4	30.55	776.0	32	0.0	59	Calm	0	0		0	5s		Calm	0	0	Fair	
Baltimore, Maryland	30.64	778.2	30.69	779.5	20	— 6.7	70	NW	8	3.6		0	0			0	0	Clear	
Barnegat, New Jersey	30.60	777.2	30.62	777.7	17	— 8.3	67	N	15	6.7		2k	2s	NE	NE	0	0	Fair	
Benton, Montana	27.31	693.7			25	— 3.9	87	Calm	0	0			10s		Calm	0	0	Cloudy	
Bismarck, Dakota	28.32	719.3	30.18	766.6	20	— 6.7	85	NE	6	2.7			10s		Calm	0.09	2.3	Cloudy	
Boise City, Idaho	27.27	692.6	30.23	767.8	35	1.7	94	N	1	0.4		0	0			0	0	Clear	
Boston, Massachusetts	30.45	773.4	30.62	777.7	21	— 6.1	86	NW	9	4.0		0	0			0	0	Clear	
Brackettville, Texas	28.32	719.3	29.86	745.7	46	7.8	77	NW	2	0.9		0	0			0.12	3.0	Clear	
Brownsville, Texas	29.48	748.8	29.53	750.0	59	15.0	100	Calm	0	0		5ck	Fog	Calm	Calm	0.28	7.1	Fair	
Buffalo, New York	29.97	761.2	30.79	782.1	— 2	—18.9	67	NE	6	2.7		0	Sm'e			0	0	Clear	
Burlington, Vermont	30.53	775.4	30.87	784.1	5	—15.0	75	E	6	2.7		0	0			Inap.	Inap.	Clear	
Cairo, Illinois	29.70	754.4	30.11	764.8	49	9.4	49	E	19	8.5			10s		E	0.02	0.5	Threatening	
Campo, California	27.40	696.0	29.97	761.2	30	— 1.1	89	NW	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	26.94	684.3			41	5.0	74	Calm			0	0	2s		Calm	0	0	Clear	
Cape Henry, Virginia	30.58	776.7	30.60	777.2	23	— 5.0	60	N	20	8.9		0	0			0	0	Clear	
Cape May, New Jersey																			
Castroville, Texas	28.66	728.0	29.34	745.2	57	13.9	93	NE	1	0.4		2c	0	Calm		0.56	14.2	Fair	
Cedar Keys, Florida	30.15	765.8	30.18	766.6	52	11.1	79	NE	13	5.8		1c	0	Calm		0	0	Clear	
Champaign, Illinois	29.45	748.0	30.31	769.9	25	— 3.9	63	SE	20	8.9			10s		SE	0	0	Cloudy	
Charleston, S. Carolina	30.47	773.9	30.53	775.4	32	0.0	59	N	16	7.2		0	0			0	0	Clear	
Charlotte, N. Carolina	29.69	754.1	30.58	776.7	26	— 3.3	52	NE	7	3.1		0	Sm'e			0	0	Clear	
Chattanooga, Tennessee	29.50	749.3	30.35	770.9	37	2.8	45	SE	5	2.2		5ck	0	W	Calm	0	0	Clear	
Cheyenne, Wyoming	23.84	605.5	29.78	756.4	20	— 6.7	85	N	10	4.5			10n		Calm	0.03	0.8	Fair	
Chicago, Illinois	29.70	754.4	30.46	773.7	19	— 7.2	54	SE	11	4.9		5c	2s	SE	Calm	0	0	Light snow	
Chincoteague, Virginia	30.58	776.7	30.61	777.5	17	— 8.3	83	N	16	7.2		0	0			0	0	Fair	
Cincinnati, Ohio	29.83	757.7	30.54	775.7	24	— 4.4	74	NE	6	2.7		0	Sm'e		Calm	0	0	Clear	
Cleveland, Ohio	29.91	759.7	30.72	780.3	12.5	—10.8	80	SE	6	2.7		8cs	0	W		0	0	Clear	
Coleman City, Texas	27.63	701.8	29.26	743.2	44	6.7	84	NW	20	8.9		0	0			0.12	3.0	Clear	
Columbus, Ohio	29.67	753.6	30.60	777.2	16	— 8.9	83	E	9	4.0		2cs	0	Calm		Inap.	Inap.	Clear	
Concho, Texas	27.53	699.2	29.18	741.1	45	7.2	92	NW	12	5.4		1c	0	Calm		0.07	1.8	Clear	
Corsicana, Texas	28.95	735.3	29.40	746.7	56	13.3	100	Calm	0	0			Fog			2.14	54.4	Foggy	
Davenport, Iowa	29.58	751.3	30.27	768.8	21	— 6.1	71	E	16	7.2			10s		Calm	0	0	Cloudy	
Dayton, Washington T'y	28.44	722.4	30.15	765.8	39	3.9	91	Calm	0	0		10k	0	Calm		0	0	Cloudy	
Deadwood, Dakota	25.32	643.1			17	— 8.3	83	NW	2	0.9			10s		Calm	0.25	6.3	Cloudy	
Decatur, Texas	28 20	716.3	29.33	745.0	49	9.4	100	NE	10	4.5			10n		Calm	2.31	58.7	Light rain	
Delaware Breakwater, Del.	30.60	777.2	30.63	778.0	19	— 7.2	85	N	21	9.4		0	0			0	0	Clear	
Denison, Texas	28.61	726.7	29.37	746.0	50	10.0	93	E	8	3.6			10n		Calm	1.83	46.5	Light rain	
Denver, Colorado	24.63	625.6	29.85	758.2	23	— 5.0	86	N	2	0.9			10n		Calm	0.32	8.1	Light snow	
Des Moines, Iowa	29.17	740.9	30.10	764.5	27	— 2.8	88	SE	12	5.4			10s		SE	0.26	6.6	Cloudy	
Detroit, Michigan	29.90	761.0	30.74	780.8	5	—15.0	87	NE	8	3.6		0	0			0	0	Clear	
Dodge City, Kansas	27.01	686.0	29.31	744.5	32	0.0	89	N	16	7.2			10n		Calm	1.17	29.7	Light snow	
Dubuque, Iowa	29.60	751.8	30.36	771.1	25	— 3.9	75	E	10	4.5			10s		Calm	Inap.	Inap.	Cloudy	
Duluth, Minnesota	29.47	748.5	30.48	774.2	22	— 5.6	86	NE	19	8.5			10s		NE	0.01	0.3	Cloudy	
Eagle Pass, Texas	28.73	729.7	29.44	747.8	55	12.8	68	NW	2	0.9		0	2s		Calm	0.23	5.8	Fair	
Eagle Rock, Texas	25.29	642.4	29.94	760.5	31	— 0.6	89	Calm	0	0			10ks		W	0	0	Cloudy	
Eastport, Maine	30.47	773.9	30.54	775.7	18	— 7.8	53	N	13	5.8		0	0			0	0	Clear	
Edinburg, Texas																			
El Paso, Texas	25.83	656.1			45	7.2	61	W	4	1.8						0.70	17.8		
Erie, Pennsylvania	29.92	760.0	30.73	780.5	7	—13.9	77	W	4	1.8		0	2s		W	0.10	2.5	Clear	
Escanaba, Michigan	29.98	761.5	30.71	780.0	15	— 9.4	82	Calm	0	0		0	0			0	0	Clear	
Florence, Arizona	28.27	718.0	29.87	758.7	41	5.0	57	Calm	0	0		5c	0	Calm		0	0	Fair	
Fort Apache, New Mexico	24.70	627.4	30.14	765.5	37	2.8	53	N	4	1.8		0	0			0	0	Clear	
Fort Assinniboine, Montana	27.27	692.6			24	— 4.4	74	NE	6	2.7			2s		N	0.09	2.3	Fair	
Fort Bennett, Dakota	28.45	722.6			21	— 6.1	71	N	12	5.4			10s		Calm	0	0	Cloudy	
Fort Buford, Dakota	28.20	716.3	30.18	766.6	20	— 6.7	85	Calm	0	0			10n		Calm	0.35	8.9	Light snow	
Fort Custer, Montana	26.92	683.8			23	— 5.0	86	Calm	0	0			10s		Calm	0.04	1.0	Cloudy	
Fort Davis, Texas	24.77	629.2	29.73	755.1	39	3.9	100	N	5	2.2			10s		Calm	0	0	Cloudy	
Fort Elliott, Texas	25.75	679.4	29.00	736.6	37	2.8	81	NE	20	8.9			10n		Calm	Inap.	Inap.	Light rain	
Fort Gibson, Indian T'y	28.99	736.3	29.53	750.0	43	6.1	83	SE	16	7.2			10n		NE	0.24	6.1	Light rain	
Fort Grant, Arizona	24.88	631.9	29.68	753.9	41	5.0	49	NW	18	8.0			10s		Calm	1.70	43.2	Cloudy	
Fort Griffin, Texas	28.01	711.4	29.23	742.4	49	9.4	78	S	10	4.5		2k	0	W		0	0	Clear	
Fort Keogh, Montana	27.62	701.5			25	— 3.9	87	Calm	0	0			10s		Calm	0.08	2.0	Cloudy	
Fort McKavett, Texas	27.22	691.4	29.11	739.4	42	5.6	84	W	8	3.6			10s		Calm	0.05	1.3	Cloudy	
Fort Macon, North Carolina	30.50	774.7	30.51	774.9	26	— 3.3	75	N	16	7.2		0	0			0.13	3.3	Clear	
Fort St. Michaels	30.07	763.8	30.11	764.8	—19	—28.3	100	N	4	1.8		0	0			0	0	Clear	
Fort Missoula, Montana	26.88	682.7			31	— 0.6	89	Calm	0	0									
Fort Shaw, Montana	26.44	671.6			31	— 0.6	89	W	2	0.9		0	0			0	0	Clear	
Fort Sill, Indian Territory	28.21	716.5	29.30	744.2	44	6.7	100	E	4	1.8			10s		Calm	0.05	1.3	Cloudy	
Fort Stevenson, Dakota	28.34	719.8			20	— 6.7	85	NE	10	4.5			10n		Calm	0.54	13.7	Heavy rain	
Fort Verde, Arizona					38	3.3	54	NW			2	0	0		SE	Inap.	Inap.	Light snow	
Fredericksburg, Texas	27.61	701.3	29.11	739.4	48	8.9	65	S	2	0.9		0	0			0	0	Clear	
Galveston, Texas	29.36	745.7	29.40	746.7	58	14.4	88	SE	13	5.8						0.22	5.6	Clear	
Grand Haven, Michigan	29.89	759.2	30.62	777.7	13	—10.6	81	E	22	9.8			10s		Calm	2.37	58.2	Cloudy	
Hatteras, North Carolina	30.50	774.7	30.52	775.2	30	— 1.1	78	N	26	11.7		8k	0	Calm		0	0	Cloudy	
Helena, Montana	25.88	657.3			36	2.2	45	Calm	0	0		0	0			0	0	Clear	
Henrietta, Texas	28.40	721.3	29.29	744.0	47	8.3	100	SE	14	6.3			10n		Calm	0.29	7.4	Light rain	
Indianapolis, Indiana	29.58	751.3	30.42	772.7	25	— 3.9	75	E	10	4.5		1c	Sm'e	Calm	Calm	0	0	Clear	
Indianola, Texas	29.44	747.8	29.46	748.3	57	13.9	94	SE	4	1.8		0	8s		SW	1.80	45.7	Fair	
Jacksboro, Texas	28.22	716.8	29.32	744.7	50	10.0	79	E	8	3.6			10s		Calm	1.32	33.5	Cloudy	
Jacksonville, Florida	30.23	767.8	30.28	769.1	50	10.0	79	NE	12	5.4		5cs	0	Calm		0	0	Fair	
Keokuk, Iowa	29.41	747.0	30.09	764.3	30	— 1.1	68	E	19	8.5			10s		Calm	0.05	1.3	Cloudy	
Key West, Florida	30.02	762.5	30.06	763.5	69	20.6	80	E	20	8.9		10k	0	SE		0.01	0.3	Cloudy	
Kittyhawk, North Carolina	30.53	775.4	30.55	776.0	29	— 1.7	78	NE	36	16.1		0	5ks		NE	0	0	Fair	
Knoxville, Tennessee	29.33	745.0	30.40	772.1	32	0.0	50	NE	4	1.8		0	0			0	0	Clear	
La Crosse, Wisconsin	29.59	751.6	30.37	771.4	27	— 2.8	76	E	13	5.8			10s		Calm	0	0	Cloudy	
La Mesilla, New Mexico	25.70	652.8	29.85	758.2	40	4.4	65	Calm	0	0		0	2s		Calm	0	0	Fair	
Laredo, Texas	29.06	738.1	29.39	746.5	55	12.8	68	SW	1	0.4		0	0			0.14	3.6	Clear	
Leavenworth, Kansas	28.93	734.8	29.79	755.7	34	1.1	90	E	17	7.6			10n			1.86	47.2	Light rain	
Lewiston, Idaho	29.41	747.0	30.08	764.0	37	2.8	90	SE	2	0.9			Fog			0.03	0.8	Foggy	
Little Rock, Arkansas	29.42	747.3	29.74	755.4	43	6.1	92	SE	18	8.0			10n		Calm	0.66	16.8	Light rain	
Los Angeles, California	29.64	752.8	30.01	762.2	51	10.6	72	NW	2	0.9		0	0			0	0	Clear	
Louisville, Kentucky	29.79	756.7	30.39	771.9	29	— 1.7	78	E	6	2.7		5cs	2s	Calm	Calm	0	0	Fair	
Lynchburg, Virginia	29.94	760.5	30.70	779.8	19	— 7.2	85	Calm	0	0		0	Fog		Calm	0	0	Clear	
Madison, Wisconsin	29.35	745.5	30.42	772.7	23	— 5.0	86	E	18	8.0			10s		Calm	0	0	Cloudy	
Marquette, Michigan	29.87	758.7	30.66	778.7	18	— 7.8	68	S	8	3.6			10s		SE	0	0	Cloudy	
Mason, Texas	27.80	706.1	29.50	749.3	50	10.0	86	W	16	7.2		0	0			0.17	4.3	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.56	750.8	29.90	759.4	43	6.1	83	E	6	2.7	.....	.....	10s	.....	SE	0.21	5.3	Cloudy.....	
Milwaukee, Wisconsin	29.75	755.6	30.54	775.7	27	— 2.8	88	SE	15	6.7	.....	.....	10s	.....	SE	0	0	Cloudy.....	
Mobile, Alabama	29.86	758.4	29.94	760.5	53	11.7	67	SE	28	12.5	.....	.....	10s	.....	SE	Inap.	Inap.	Cloudy.....	
Montgomery, Alabama	29.95	760.7	30.19	766.8	43	6.1	35	E	17	7.6	.....	.....	10s	.....	SE	0	0	Cloudy.....	
Moorhead, Minnesota	29.23	742.4	30.26	768.6	23	— 5.0	93	SE	18	8.0	.....	.....	10n	.....	SE	0.22	5.6	Light snow..	
Morgantown, W. Virginia	29.59	751.6	30.74	780.8	3.5	— 15.8	73	Calm	0	0	.....	5cs	Haze	Calm	.....	0	0	Dense haze.	
Mt. Washington, N. H	23.94	608.1	30.30	769.6	4	—15.6	48	NE	34	15.2	.....	0	0	.....	.....	0.05	1.3	Clear.....	
Nashville, Tennessee	29.66	753.4	30.22	767.6	40	4.4	31	E	9	4.0	.....	5cs	0	SE	.....	0	0	Fair.....	
New Haven, Connecticut	30.54	775.7	30.67	779.0	23	— 5.0	60	N	1	0.4	.....	0	0	.....	.....	0	0	Clear.	
New London, Connecticut	30.59	777.0	30.65	778.5	25	— 3.9	75	N	4	1.8	.....	0	1s	.....	Calm	0	0	Clear.....	
New Orleans, Louisiana	29.61	752.1	29.67	753.6	62	16.7	94	SE	42	18.8	.....	.....	10n	.....	Calm	0.62	15.7	Light rain...	
Newport, Rhode Island	30.54	775.7	30.59	777.0	27	— 2.8	76	NW	13	5.8	.....	1k	4s	NE	Calm	0	0	Fair.....	
New River, N. Carolina	.....	.....	.....	.....	23	— 5.0	88	N	.....	.....	4	0	0	.....	.....	.....	.....	Clear.	
New Shoreham, Rhode I'd	30.57	776.5	30.60	777.2	27	— 2.8	64	N	24	10.7	.....	0	8s	.....	N	0	0	Fair	
New York, New York	30.46	773.7	30.66	778.7	25	— 3.9	87	N	7	3.1	.....	.....	10s	.....	N	0	0	Cloudy.....	
Norfolk, Virginia	30.56	776.2	30.62	777.7	23	— 5.0	60	N	14	6.3	.....	0	0	.....	.....	0	0	Clear.....	
North Platte, Nebraska	26.91	683.5	29.56	750.8	25	— 3.9	93	NE	15	6.7	.....	.....	10n	.....	Calm	0.47	11.9	Light snow.	
Olympia, Washington T'y	29.96	761.0	30.00	762.0	48.0	8.9	93	S	6	2.7	.....	.....	10s	.....	Calm	0.30	7.6	Cloudy.....	
Omaha, Nebraska	28.74	730.0	29.87	758.7	32	0.0	89	E	.....	.....	4	.....	10n	.....	E	1.09	27.7	Light rain...	
Oswego, New York	30.41	772.4	30.78	781.8	1	—17.2	100	Calm	0	0	.....	0	Fog	.....	S	0	0	Clear.....	
Pensacola, Florida	29.97	761.2	30.01	762.2	52	11.1	73	E	32	14.3	.....	.....	10s	.....	E	0.03	0.8	Cloudy.....	
Philadelphia, Pa	30.61	777.5	30.67	779.0	18	— 7.8	84	N	14	6.3	.....	5k	0	N	.....	0	0	Fair.....	
Phœnix, Arizona	28.67	728.2	30.50	774.7	42	5.6	58	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear.....	
Pike's Peak, Colorado	17.24	437.9	29.45	748.0	— 8	22.2	100	NW	8	3.6	.....	.....	10n	.....	Calm	0.41	10.4	Light snow.	
Pilot Point, Texas	28.66	728.0	29.47	748.5	49	9.4	100	NE	4	1.8	.....	.....	10n	.....	Calm	2.30	58.4	Light rain ..	
Pioche, Nevada	23.96	608.6	29.73	755.1	30	— 1.1	78	N	12	5.4	.....	0	0	.....	.....	Inap.	Inap.	Clear.....	
Pittsburg, Pennsylvania	29.83	757.7	30.77	781.5	3	—16.1	86	Calm	0	0	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy.....	
Port Huron, Michigan	30.01	762.2	30.77	781.5	5	—15.0	100	NE	3	1.3	.....	.....	Fog	.....	.....	0	0	Dense fog....	
Portland, Maine	30.56	776.2	30.62	777.7	24	— 4.4	74	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear.....	
Portland, Oregon	30.04	763.0	30.11	764.8	49	9.4	93	S	7	3.1	.....	Haze	8s	Calm	Calm	0.36	9.1	Cloudy.....	
Portsmouth, N. Carolina	.....	.....	.....	.....	27	— 2.8	53	NE	28	12.5	.....	5k	0	W	.....	0	0	Fair.....	
Prescott, Arizona	24.55	623.6	29.91	759.7	35	1.7	01	N	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Punta Rassa, Florida	30.08	764.0	30.09	764.3	63	17.2	83	E	19	8.5	.....	5ck	0	W	.....	0	0	Fair.....	
Red Bluff, California	29.90	759 4	30.25	768.3	50.5	10.3	89	NW	2	0.9	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy.....	
Rio Grande City, Texas	29.33	745.0	29.54	750.3	62	16.7	67	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear.....	
Rochester, New York	30.09	764.3	30.80	782.3	4	—15.6	74	SW	5	2.2	.....	0	Fog	.....	.....	0	0	Clear.....	
Roseburg, Oregon	29.60	751.8	30.18	766.6	43	6.1	96	Calm	0	0	.....	.....	10s	.....	Calm	0.10	2.5	Cloudy.....	
Sacramento, California	30.15	765.8	30.22	767.6	51	10.6	93	N	4	1.8	.....	0	0	.....	.....	0.19	4.8	Clear.....	
St. Louis, Missouri	29.47	748.5	30.06	763.5	37	2.8	53	E	24	10.7	.....	.....	10s	.....	Calm	0	0	Cloudy.....	
St. Paul, Minnesota	29.41	747.0	30.29	769.4	26	— 3.3	88	E	14	6.3	.....	.....	10s	.....	E	0.37	9.4	Cloudy.....	
Salt Lake City, Utah	25.61	650.5	29.94	760.5	36	2.2	61	NW	7	3.1	.....	0	1s	.....	Calm	0.09	2.3	Clear.	
San Antonio, Texas	28.77	730.7	29.46	748.3	51	10.6	100	W	4	1.8	.....	.....	Fog	.....	Calm	0.62	15.7	Dense fog...	
San Diego, California	29.95	760.7	30.02	762.5	49	9.4	93	NE	6	2.7	.....	0	5s	.....	Calm	0	0	Fair.....	
Sandusky, Ohio	29.92	760.0	30.68	779.3	10	—12.2	77	NE	12	5.4	.....	0	0	.....	.....	0	0	Clear.....	
Sandy Hook, New Jersey	30.61	777.5	30.65	778.5	25	— 3.9	62	N	12	5.4	.....	8ck	0	Calm	.....	0	0	Cloudy.....	
San Francisco, California	30.17	766.3	30.23	767.8	53	11.7	93	E	3	1.3	.....	.....	Fog	.....	E	0.10	2.5	Dense fog...	
Santa Fé, New Mexico	22.82	579.6	29.30	745.7	32	0.0	79	N	8	3.6	.....	0	2s	.....	Calm	Inap.	Inap.	Fair.....	
Savannah, Georgia	30.34	770.6	30.44	773.2	35	1.7	61	NE	12	5.4	.....	0	0	.....	.....	0	0	Clear.....	
Shreveport, Louisiana	29.27	743.4	29.51	749.5	50	10.0	100	E	8	3.6	.....	.....	10n	.....	Calm	3.38	85.9	Light rain...	
Silver City, New Mexico	23.91	607.3	30.22	767.6	31	— 0.6	79	Calm	0	0	.....	0	5s	.....	Calm	0.16	4.1	Fair.....	
Smithville, North Carolina	30.50	774.7	30.54	775.7	25	— 3.9	87	N	10	4.5	.....	0	0	.....	.....	0	0	Clear.....	
Socorro, New Mexico	25.03	635.8	29.[illegible]	738.9	35	1.7	80	NW	13	5.8	.....	.....	10s	.....	NW	0	0	Cloudy.....	
Springfield, Illinois	29.50	749.3	30.[illegible]	767.1	33	0.6	65	E	19	8.5	.....	.....	10s	.....	.....	0	0	Cloudy.....	
Springfield, Massachusetts	30.54	775.7	30.68	779.3	20	— 6.7	58	N	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Stockton, Texas	26.54	674.1	29.54	750.3	45	7.2	76	W	16	7.2	.....	.....	10s	.....	W	0	0	Cloudy.....	
St. Vincent, Minnesota	29.44	747.8	30.29	769.4	23	— 5.0	86	E	4	1.8	.....	.....	10n	.....	Calm	0.11	2.8	Light snow.	
Thatcher's Island, Mass	30.50	776.2	30 62	777 7	25	— 3.9	75	NE	28	12.5	.....	0	0	.....	.....	0	0	Clear.	
Toledo, Ohio	29.89	759.2	30.68	779.3	5	—15.0	76	N	8	3.6	.....	1c	0	Calm	.....	0	0	Clear.....	
Tucson, Arizona	27.29	693.2	29.84	757.9	45	7.2	39	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Umatilla, Oregon	29.88	758.9	30.40	772.1	32	0.0	89	NW	3	1.3	.....	.....	Fog	.....	Calm	0	0	Dense fog...	
Uvalde, Texas	28.69	728.7	29.53	750.0	35	1.7	70	N	4	1.8	.....	0	0	.....	.....	0.42	10.7	Clear.....	
Vicksburg, Mississippi	29.38	746.2	29.64	752.8	54	12.2	74	SE	24	10.7	.....	.....	10s	.....	SE	0.06	1.5	Cloudy	
Visalia, California	29.79	756.7	30.17	766.3	46.5	8.1	92	SE	2	0.9	.....	0	0	.....	.....	Inap.	Inap.	Clear.....	
Washington, D. C	30.55	776.0	30.68	779.3	16	— 8.9	66	N	6	2.7	.....	0	0	.....	.....	0	0	Clear.....	
Wickenburg, Arizona	.....	.....	.....	.....	45	7.2	46	W	.....	.....	1	0	0	.....	.....	0	0	Clear.	
Wilmington, N. Carolina	30.50	774.7	30.56	776.2	25	— 3.9	75	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Winnemucca, Nevada	25.75	654.0	30.11	764.8	35	1.7	90	S	4	1.8	.....	0	0	.....	.....	0.05	1.3	Clear.....	
Wood's Holl, Mass	30.52	775.2	30.56	776.2	28	— 2.2	77	N	17	7.6	.....	10k	0	NE	.....	0	0	Cloudy.....	
Yankton, Dakota	28.66	728.0	30.00	762.0	28	— 2.2	100	E	17	7.6	.....	.....	10n	.....	.....	0.54	13.7	Light snow.	
Yuma, Arizona	29.71	754.6	29.86	758.4	62	16.7	36	NW	9	4.0	.....	0	0	.....	.....	0	0	Clear.....	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8	.....	.....	54.0	12.2	85	Calm	0	0	.....	.....	10n	.....	.....	0.29	7.4	Cloudy.....	Thomas Herran.
Buff Bay Town, Jam ica.‡	29.80	756.9	30.12	765.0	70	21.1	79	E	.....	.....	.....	2c	0	.....	.....	.....	.....	.....	
Havana, Cuba, W. I	29.96	761.0	30.01	762.2	71	21.7	75	SE	3.6	1.6	.....	0	0	.....	.....	0.02	0.5	Clear.	Charles Hasselbrink.
Jakobshavn, Greenland	29.86	758.4	29.92	759.9	0.3	—17.6	.....	W	.....	.....	4	.....	6	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I	29.98	761.5	29.99	761.7	69.5	20.8	85	Calm	0	0	.....	0	0	.....	.....	0	0	.....	Robert Johnstone.
Navassa, W. I	29.88	758.9	29.96	761.0	75.5	24.2	77	NE	4	1.8	.....	5k	5s	E	NE	0	0	Fair.....	F. M. Everett.
Paramaribo, S. A	29.98	761.5	29.98	761.5	78	25.6	82	E	.....	.....	2	0	3c	.....	.....	0	0	Fair.....	Dr. C. J. Hering.
Puerto Berrio, U. S. Colmbia	29.45	748.0	30.00	762.0	80	26.7	85	Calm	.....	.....	0	.....	10ks	.....	Calm	0	0	Cloudy.....	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	.....	.....	.....	SE	.....	.....	1	10ck	0	SW	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I	29.98	761.5	30.01	762.2	73.4	23	.....	NW	3.6	1.6	.....	0	0	.....	.....	0.14	3.6	Clear.....	Robert Mason.
St. Thomas, W. I	.....	.....	.....	.....	73	22.8	76	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	30.21	767.2	30.27	768.8	— 8.5	—22.5	.....	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	K. Elberg.
York Factory, B. A	30.46	773.7	30.52	775.2	—29 0	—33.9	.....	SW	13	5.8	.....	1c	0	W	.....	0	0	Fair.....	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Comm. A. J. Errington
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.71	754.6	57.8	14.3	78	WNW			2		10	W						Overcast	Capt. Lord Walter Kerr.
H. M. S. Antelope, N. 37° 26′, E. 24° 58′	29.64	752.8	62	16.7		SW			2–4		7	WSW						Showery	Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 39′, E 57° 45′	30.15	765.8	77	25.0	69	ENE			2		0					1	E	Blue sky	Comm. G. W. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.93	760.2	78	25.6	67	ENE			3		8	ENE				2	E	D. clouds	Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 24° 36′, E. 118° 47′	30.25	768.3	55	12.8	87	NE			2–3		9					3	NNE	Overcast	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.00	762.0	54	12.2	70	NW			4–5		1	NW						Blue sky	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 18° 29′, W. 77° 57′	30.00	762.0	75.5	24.2	77	SE			1		1							Blue sky	Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St. J. Garforth.
H. M. S. Egeria, Singapore, Malay Peninsula	29.92	760.0	81	27.2		NNE			1		1	SE				1	E	Blue sky	Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	30.01	762.2	83	28.3	71	WNW			3–4		0							Squally	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 2° 25′, W. 81° 27′	29.99	761.7	78	25.6	86	S			1–2		9					1	NNW	Showery	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.20	741.7				S			2									D. clouds	Capt. L. F. Jones.
H. M. S. Griffin, N. 12° 39′, W. 61° 50′	29.99	761.7	78.5	25.8	95	ENE			3		3	ENE				2	ENE	D. clouds	
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, N. 44° 06′, E. 14° 30′	29.62	752.3	52	11.1	?	NW			1–2		10					2	N	Drizzling	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 149° 57′	30.27	768.8	59	15.0	88	NE			1		10	NE						D. clouds	Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Zanzibar, Africa.	29.81	757.2	80	26.7	91	ESE			1–2		8	S		Blank		1	S	Raining	Capt. C. J. Brownrigg.
H. M. S. Magpie																			Capt. R. H. Napier.
H. M. S. Malabar, N. 35° 16′, E. 18° 48′	29.69	754.1	61	16.1	77	NNW			4–5		4	NW				3–4	NW	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minatour, Vigo, Spain	30.12	765.0	57	13.9	97	W			2		10	W						Rain & mist	Capt. H. Rawson.
H. M. S. Modeste, N. 5° 24′, E. 100° 20′	30.01	762.2	80	26.7	82	NE			1–2		0					1		Blue sky	Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 12° 05′, W. 61° 26′	29.94	760.5	79	26.1	78	E			3		7	E						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, Clarence Bay, Africa	29.91	759.7	82	27.8	100	SSE			2–4		5	SE				2	NW	Squally	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M S. Rocket																			
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.93	760.2	81	27.2	96	SE			3–4		9			Blank				D. clouds	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Spain	30.28	769.4	60	15.6	76	WNW			3		10							Overcast	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.63	752.6	76	24.4	?	E			1–3	4ck						2	ESE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	30.03	762.7	69	20.6	95	Calm			0		8	SW				1	SW	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, N. 36° 29′, E. 14° 05′	29.64	752.8	58	14.4	76	WNW			5		10			Blank		5	WNW	Overcast	Capt. P. H. Colomb.
H. M. S. Triumph, S. 13° 02′, W. 76° 55′	29.98	761.5	70.5	21.4	95	Calm			0		10					2	SSW	Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne, N. 37° 27′, E. 13° 30′	29.65	753.1	61	16.1		NW			6		3	NW				3	NW	D. clouds	Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.	30.00	762.0	72	22.2		N			1		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, Palestine	30.09	764.3	67.5	19.7	60	S			1		0							Blue sky	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Bulama, Senegambia	29.91	759.8	81.0	27.2	92	NW			2		10							Overcast	S. C. da Silva Costa, Comd't.
Sado, S. 6° 11′, E. 12° 07′	29.88	759.0	82.8	28.2	73	NW			3		3					2	NW	D. clouds	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡ N. 38° 13′, E. 15° 37′	29.60	751.9	56.1	13.4	75	E			2		9							Overcast	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

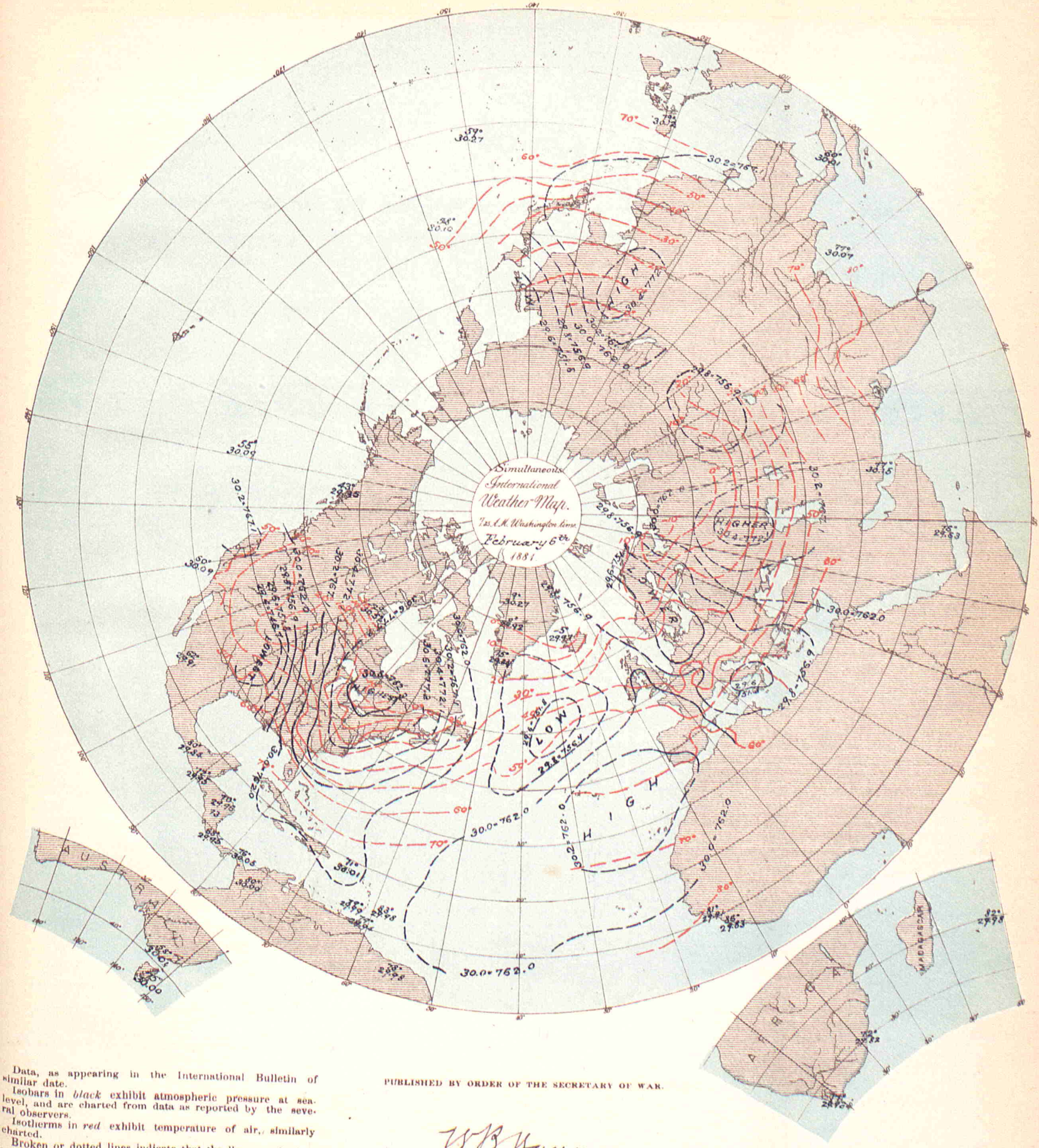
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.	Force	Amount and kind.		Direction							
									Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.04	763.0	59	15.0	82	E	36	16.1		10			1.47	37.3			Cloudy	
N. Yard, Portsmouth, N. H.	30.56	776.2	21	— 6.1	86	NW	8	3.6		0			0	0			Clear	
Naval Hospital, Yokohama, Japan	29.94	760.5	34	1.1	76	Calm			0	0			0	0			Clear	
Adams, S. 10° 30′, W. 78° 15′	30.03	762.7	69	20.6	95	Calm			0	10					Long	SW	Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.18	766.6	52	11.1	93	Calm			0	10			0.05	1.3			Foggy	
Alert, Hong-Kong, China	30.16	766.1	62	16.7	83	NNE			1	10		WNW			Sm'h		Cloudy	
Alliance, N. 26° 15′, W. 85° 20′	29.96	761.0	70	21.1	90	ENE			6	10			Lig	ht	Mod.		Cloudy	
Ashuelot, Tientsin, China	30.40	772.1	24	— 4.4	87	N			4	0							Clear	
Colorado, New York, N. Y.	30.53	775.4	25	— 3.9	100	N	2	0.9		10		Calm	0	0			Overcast	
Constitution, N. Yard, League I'd., Pa			18	— 7.8		N	3	1.3		5							Fair	
Franklin, Norfolk, Va	30.51	774.9	24	— 4.4		NE	12.1	5.4		0			0	0			Clear	
Galena, Villafranca, France	29.59	751.6	51	10.6	86	NW			1	5		NW			Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal.	30.22	767.6	62	16.7	88	NW	3.6	1.6		5		NW	0	0			Fair	
Jamestown, Sitka, Alaska	29.35	745.5	43	6.1	83	ESE			5	2			0	0			Clear	
Kearsarge, N. 29° 20′, W. 87° 35′	29.94	760.5	65	18.3	84	ESE			8	10		ESE			H'vy	ESE	Cloudy	
Lackawanna, Callao, Peru	30.10	764.5	71	21.7	95	SE			1-2	10		SE					Cloudy	
Marion, Sandy P't, Terra del Fuego	29.60	751.8	50	10.0	65	W			2	8		W	Li	ght	Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	30.63	778.0	0	—17.8		SW	2	0.9		2		SW					Clear	
Minnesota, New York, N. Y.	30.63	778.0	27	— 2.8		NNE			3	9							Cloudy	
Monocacy, Shanghai, China	30.38	771.6	37	2.8	90	S			1	2		Calm					Fair	
New Hampshire, Port Royal, S. C.	30.45	773.4	36	2.2	70	NE	22	9.8		0			0	0			Clear	
Nipsic, Marseilles, France	29.77	756.1	49	9.4	44	NNW			7	2					Mod.	NNW	Squally	
Onward, Callao, Peru	29.95	760.7	67	19.4	100	Calm			0	10					Long	W	Cloudy	
Palos, Shanghai, China	30.41	772.4	37	2.8	81	SE			1	2		Calm					Fair	
Passaic, Washington, D. C.	30.68	779.3	12	—11.1	80	NE			1	0							Clear	
Pensacola, San Jose, Guatemala	29.95	760.7	72	22.2	95	WSW			1-2	5			0	0	Sm'h		Fine	
Portsmouth, Washington, D. C.	30.65	778.5	10	—12.2	100	SE			1	0							Clear	
Powhatan, New York, N. Y.	30.61	777.5	24	— 4.4	100	N			3	10							Cloudy	
Quinnebaug, Villafranca, France	29.61	752.1	51	10.6	86	NW			1	8		WNW			Sm'h		Fair	
Richmond, Hong-Kong, China	30.29	769.4	61	16.1	88	SSW			1	8		W	0	0			Cloudy	
Saratoga, Baltimore, Md	30.65	778.5	19	— 7.2	100	NW			2	0			0	0			Clear	
Shenandoah, Montevideo, Uruguay	29.85	758.2	73	22.8	67	NNE			2	2					Sm'h		Fair	
St. Louis, League Island, Pa	30.61	777.5	15	— 9.4	100	N	13	5.8		2		E	0	0			Clear	
Swatara, Nagasaki, Japan	30.26	768.6	37	2.8	71	NE			1	0					Sm'h		Blue sky	
Tennessee, N. 18° 24′, W. 80° 34′	30.01	762.2	78	25.6	95	E	14	6.3		2			0	0			Clear	
Ticonderoga, N. Yard, Mare Id., Cal.	30.23	767.8	54	12.2	100	Calm			0	8		Calm	0	0			Foggy	
Trenton, Villafranca, France	29.57	751.1	54	12.2	61	N			0-1	5			3 h'r	s mod	Sm'h		Fair	
Vandalia, Port Spain, Trinidad, W.I	29.97	761.2	75	23.9	95	E			1	2		Calm					Fair	
Wabash, Boston, Massachusetts	30.64	778.2	19	— 7.2	69	NNW	7	3.1		5?		NNW	0	0			Clear?	
Wachusetts, Panama, Panama	29.56	750.8	75	24.4	86	NNW			1	2		N			Sm'h		Fair	
Wyoming, Villafranca, France	29.61	752.1	50	10.0	79	WNW			1	8		WNW			Sm'h		Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
S. 11° 15′, W. 11° 40′	29.97	761.2	78.2	25.7	86	E			6		4							D. clouds	Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle
Barque Belleisle,																			
N. 22° 05′, W. 30° 30′	30.13	765.3	73.0	22.8	65				4		7							D. clouds	Capt. A. J. Brown.
British Merchant. ‡																			Capt. E. J. Molony.
Chin Yang, ‡																			
N. 15° 01, W. 38° 20′	30.03	762.7	76	24.4	61	ENE			4		5							D. clouds	Capt. H. Youlden.
S. S. Cipero																			Capt W. N. Lailey.
City of Agra, ‡																			
S. 26° 27′, W. 26° 45′	30.09	764.3	80.1	26.7	74	NNE			4		3							D. clouds	Capt. T. Young.
Barque Commewyne, ‡																			
N. 31° 10′, W. 57° 02′	29.99	761.7	64	17.8	62	NW			4		5							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 18° 37′, W. 3° 40′	29.99	761.7	78.2	25.7	94	ESE			3		10							Overcast	Capt. H. Spalding.
Ship Ellen Stuart,																			
N. 15° 57′, E. 92° 01′	30.07	763.8	76.5	24.7	65	N			4		0							Blue sky	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡																			
N. 40° 53′, W. 68° 53′	30.41	772.4	36	2.2	100	NE			6		8					4	NE	Threatening	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope ‡																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperte																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 19° 01′, W. 47° 48′	30.11	764.8	77.5	25.3	86	E			4	4c		SE						Misty	Capt. H. W. Dyke.
Barque Meriola,																			
N. 41° 02′, W. 11° 42′	30.23	767.8	56.3	13.5	100	WSW			5		10							Misty	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee, ‡																			
N. 8° 04′, W. 23° 16′	29.87	758.7	79.5	26.4	91	N			3		7					Cof'd		D. clouds	Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven ‡																			Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton,																			
N. 37° 19′, E. 10° 45′	29.65	753.1	58	14.4	76	WNW			6		5							Misty	Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian,																			
Off Stag Rock, Ireland	29.80	756.9	44	6.7		SSE			4		8†		SSE			Sm'h		Clear?	Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic,																			
N. 50° 17′, W. 18° 36′	29.80	756.9	53	11.7		S			4		8		NW			Mod.	W	Cloudy	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britanic,																			
N. 40° 38′, W. 68° 07′	30.43	772.9	36	2.2		N			5		5		N			Sl't	N	Snowing	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic,																			
N. 50° 16′, W. 23° 43′	29.65	753.1	53	11.7		WSW			5		10		SW	Showers		Mod.	SW	Hazy	Capt. Ch. W. Kennedy.
S. S. Republic,																			
N. 44° 06′, W. 46° 36′	29.80	756.9	50	10.0	72	N			6		10		SW	8 hours Drizzles		H'vy	NNW	Cloudy	Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Köln, ‡																			
N. 50° 08′, W 5° 24′	30.05	763.3	41.0	5.0		NW			4		5		NW	0	0	R'gh	W	Fair	
S. S. Leipzig,																			
N. 43° 09′, W. 45° 01′	29.64	752.8	45.5	7.5	92	N			6		10		N	3 hours		Cross	NNE	Sprinkling	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 48° 42′, W. 29° 55′	29.44	747.8	57	13.9	100	SSE			6		10		SW			Mod.	S	Raining	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 51° 24′, W. 22° 46′	29.74	755.4	50	10.0	86	WSW			5		8		SW	0	0	R'gh	SW	Cloudy	Capt. R. W. Sargent.
S. S. Ohio ‡																			Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, N. 40° 32′, W. 66° 00′ †	30.25	768.3	37	2.8	81	NE			5		10		NE	0	0	Sm'h	NE	Overcast	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 35° 42′, W. 122° 28′ †	30.26	768.6	59	15.0	76	NW			2		0			0	0	Mod.	W	Clear	Capt W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 30° 41′, E. 134° 30′ †	30.28	769.1	57	13.9	63	N			4		2		NW	0	0	Mod.	N	Clear	Capt. H. Davison.
S. S. Gaelic, N. 36° 30′, E. 157° 20′ *†	30.10	764.5	58	14.4	76	W			2		2		NW			Mod.	SW	Fair	Capt. W. H. Kidley.
S. S. Oceanic, San Francisco, Cal	29.93	760.2	57	13.9	87	SE			2		10		S	0	0			Cloudy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles
S. S. Oregon, N. 39° 25′, W. 124° 09′	30.26	768.6	52.5	11.4	?	SSW			2		10		SW					Foggy	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, N. 35° 41′, W. 121° 23′ †	30.14	765.5	57	13.9	81	NW			6		0					H'vy	SW	Clear	Capt. J. N. Ingalls.
S. S. Idaho, Seattle, Wash. Ter †	29.76	755.9	45	7.2	46	S			4		10							Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, San Pedro, Cal †	30.04	763.0	59	15.0	59	NW			1		0					Mod.	W	Clear	Thos. Wallace.
S. S. State of California, N. 40° 50′, W. 124° 30′ †	30.21	767.3	53	11.7	?	SE			2		10		SW	0	0	Long	SW	Foggy	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal †	30.16	766.1	53	11.7	93	SE			1		10		Calm					Foggy	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 16° 53′, W. 171° 38′	29.98	761.5	81	27.2	96	NE			1		2		NE			Sm'h		Clear	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W. †	29.66	753.4	60	15.6	100	WNW			2					0	0			Hazy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Panama, Panama †	30.05	763.3	73	22.8	90	Calm			0		0			0	0	Sm'll	E	Clear	Capt. D. S. Austin.
S. S. City of Peking, N. 25° 51′, E. 121° 16′ †	30.30	769.6	55	12.8	62	NNE			4		10		SW	0	0	Sm'h		Cloudy	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 37° 29′, W. 141° 01′ †	30.09	764.3	55	12.8	80	WNW			2		10					Long	W	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 31° 38′, W. 119° 43′ †	30.09	764.3	60	15.6	82	NW			6		0			0	0	R'gh	WNW	Clear	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, N. 15° 35′, W. 93° 33′ †	29.84	757.9	80	26.7	74	NE			3		5		N	0	0	R'gh	W	Clear	
S. S. Zealandia, S. 26° 08′, W. 176° 30′	30.00	762.0	74	23.3	81	ESE			6		2		SE	0	0	Sm'h	SE	Fine	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland, ‡ Antwerp, Belgium †	29.73	755.1	42	5.6	91	NNE			6		10		NE			Sm'h		Light rain	Capt. Sam'l Jackson.
S. S. Nederland, N. 47° 06′, W. 26° 47′ †	29.79	756.7	59	15.0		SW			5		10		WSW	6 hours		Long	W	Misty	Capt. S. Stokes.
S. S. Rhynland, ‡ Antwerp, Belgium	29.57	751.1	42	5.6		NW			6		10		NW	0.2	5.			Light rain	Capt. W. Geo. Randle.
S. S. Vaderland ‡																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Jacksonville, Florida †	30.29	769.4	65	18.3		NE			2				E	0	0			Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va	30.56	776.2	26	— 3.3	88	Calm	0	0			0			0	0			Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, N. 23° 17′, W. 56° 10′ †	29.97	761.2	78	25.6		Calm			0		10		S	Light		Mod. Cross	SE; NNW	Threatening	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 38° 36′, E. 1° 42′ †*	30.12	765.0	59	15.0		N			5		0					Long	WSW	Fair	Capt B. F. Woodbury.
Brigantine George, ‡ N. 21° 05′, W. 67° 59′ †	30.24	768.1	75	23.9		ENE			5		8		E	Showers		H'vy	NNW	Squally	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	30.54	775.7	25	— 3.9		N	3	1.3		28	28			0	0			Clear	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 38° 40′, W. 9° 35′ †	30.27	768.8	60	15.6	?	W			5		8		WNW	0	0	R'gh	WNW	Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

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

BRITISH SERIES.

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

Aberdeen	29.37	746.0	29.47	748.5	32.0	0.0	100	S	41	18.3			10			0.570	14.48	Snowing	W. Boswell.
Armagh, Observatory	28.84	732.5	29.07	738.4	48.0	8.9	92	S	26	11.6			10					Squally	S. Call.
Bidston, Liverpool Obs'y			29.49	749.0	34.2	1.2	90	SE	44	19.7			10					Overcast	John Hartnup.
Bolton, Sharples	28.90	734.0	29.44	747.8	31.2	— 0.4	100	SSW	25	11.2			10					Snowing	Thomas Mackereth.
Bradford, Yorkshire	29.20	741.7	29.59	751.6	33.6	0.9	90	SE			2		10			0.52	13.2	Snowing	J McLandsborough, F.R.S
Bridgetown, Barbadoes	29.91	759.7	29.94	760.5	82	27.8	76	SE			2		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			29.84	757.9	34.4	1.3	92	S			2.0		10					Snowing	John McLaren.
Chatham, School M. E.	29.87	758.7	30.01	762.2	37.2	2.9	73	S			2		10					Gloomy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.42	747.3	29.65	753.1	49.0	9.4	96	SW			5		10					Rain & fog	The Staff.
Fort Napier, Natal	27.45	697.2	29.67	753.6	82.0	27.8	100	E			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.58	751.3	29.82	757.4	87	30.6	92	SW			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			29.06	738.1				WSW			6		10					Raining	J. O'Donaghadue.
Gibraltar, Mediterranean	30.20	767.1	30.25	768.3	63.6	17.6	92	W			3		3					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.06	738.1	29.26	743.2	35.9	2.2	70	SE			4		10			Blank		Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.80	756.9	29.98	761.5	33.7	0.9	93	S			4		10					Snowing	The Staff.
Guernsey	29.63	752.6	29.85	758.2	40	4.4	86	SE			6		10					Raining	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.94	760.5	29.97	761.2	34.4	1.3	86	S	20	8.9			10					Snowing	The Met'g'l Office.
Leicester, Museum	29.32	744.7	29.59	751.6	32.8	0.4	91	SW			8		10					Snowing	J. E. Carryer.
Malta, Mediterranean	29.48	748.8	29.55	750.6	57	13.9	75	NW			3		7					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.18	766.6	67.5	19.7	66	NE			4		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.17	740.9	29.72	754.9	31.0	— 0.6	100	SSE			6		10					Snowing	Robert Pate.
Oxford, Radcliffe Obs'y	29.54	750.3	29.80	756.9	32.8	0.4	99	SSE			6		10					Snowing	The Staff.
Plymouth	29.61	752.1	29.69	754.1	46.0	7.8	98	SE			5		10					Raining	John Merrifield.
Sandwick Manse, Orkneys			29.32	744.7	33	0.6	100	SE	50	22.4			10					Snowing	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.70	754.4	29.77	756.1	52.2	11.2	78	NE			2		6					D. clouds	Serg't W. H. Lyte.
Sheffield	29.30	744.2	29.59	751.6	31.9	— 0.1	100	S			5		10			0.37	9.4	Snowing	W. F. Cooper.
Silloth Rectory	29.08	738.6	29.11	739.4	36.0	2.2	97	SE			8		10			0.413	10.49	Snowing	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.56	750.8	32.0	0.0	95	SSE	40	17.9			10			Blank		Overcast	Rev. S. J. Perry.
Strathfield Turgiss	29.71	754.6	29.93	760.2	33.7	0.9	92	S			5		10					Rain & snow	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	29.68	753.9	29.78	755.9	46	7.8	92	SW			7		10					Raining	W. Newcombe.
Valencia, Observatory	29.22	742.2	29.25	742.9	52.9	11.6	85	SSW	48	21.5			10			Blank		Misty	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.58	776.7	30.62	777.7	13	—10.6	81	NW	7	3.1		2cs	0			0	0	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.59	777.0	30.66	778.7	— 5	—20.6	92	W	1	0.4		0	0			0	0	Clear	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.72	780.3	30.75	781.0	10	—12.2	75	W	2	0.9		2k	0	Calm		0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.24	742.7	30.11	764.8	23	— 5.0	100	E	5	2.2			10n			0.850	21.59	Heavy snow	James Stewart.
Fredericton, N. B.																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.52	775.2	30.65	778.7	12	—11.1	94	NW	4	1.8		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.42	772.7	30.81	782.6	2	—16.7	89	NE	4	1.8		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.61	777.5	30.84	783.3	2	—16.7	81	Calm	0	0			Sm'c			0	0	Smoky	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	29.58	761.5	30.76	781.3	7	—13.9	66	S	7	3.1		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.95	760.7	30.73	780.3	11	—11.7	82	N	11	4.9		10cs	0	SW		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.96	761.0	30.67	779.0	17	— 8.3	70	E	8	3.6			10ks		E	0	0	Cloudy	M. Payne.
Quebec, Quebec*	30.48	774.2	30.84	783.3	4	—15.6	74	SW			1		5k		SW	0	0	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.32	770.1	30.86	783.8	—10	—23.3	87	Calm	0	0		2c	0	SW		0	0	Fair	K. Stewart.
Saugeen, Ontario*	29.91	759.7	30.69	779.5	18	— 7.8	90	E	7	3.1		0	0			0	0	Clear	W. H. McIntyre.
St. Andrews	30.66	778.7	30.71	780.0	11	—11.7	84	Calm	0	0		0	0			0	0	Clear	
St. John's, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.48	774.2	30.53	775.4	7	—13.9	100	SW	1	0.4		0	0			0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	30.34	770.6	30.75	781.3	15	— 9.4	95	NE	10	4.5		0	2k			0	0	Clear	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.63	778.0	30.70	779.8	14	—10.9	52	NE	2	0.9		0	0			0	0	Clear	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	30.20	767.1	30.46	773.7	27	— 2.8	88	NW	2	0.9		5k	5s			0.05	1.3	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			
Cape St. Francis Lt. House	29.91	759.7			68.3	20.2	87	SW	13.0	5.8			7s			0.010	0.25	Hazy	John Duthie.
Cape Town, C. G. H. Obs'y.	29.96	761.0	30.00	762.0	80.6	27.0	53	SSW	6.2	2.8		0	1s		SE	0.02	0.5		The Staff, for D. Gill.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.38	771.6	30.40	772.2	35.6	2.0	84	E	4.5	2.0		5k		SW		0	0	Very cloudy	M. Marc Dechevrens, S. J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.25	667.0	29.98	751.5	64.8	18.2	92	Calm			0	9ck				0	0	Cloudy	Federico Maison.

DANISH SERIES.

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

Copenhagen	30.00	752.1	30.05	763.3	22.6	— 5.2	74	Calm	0	0			0						Oversergent Fischer.
Fanöe	30.01	752.2	30.03	762.7	31.3	— 0.4	85	SSE			4		10						Overloerer Lauridsen.
Godthaab, Greenland	29.42	747.2	29.46	748.3	15.1	— 9.4	94	Calm			0		10					Snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.35	745.6	29.40	746.7	5.2	—14.9	93	E			7		3						A. O. Thorlacius.
Thorshavn	29.34	745.2	29.37	746.1	34.5	1.4	91	E	36	16			10					Snowing	Overloerer Bergh.
Vestervig	29.87	758.8	29.97	751.2	29.3	— 1.5		SSW			2		1						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.56	750.8	30.21	767.4	44.2	6.8	69	SE			1	nk		SE	0	0			M. Labroue, Director.
Alençon	29.58	751.4	30.13	765.4	36.3	2.4	86	SW			1	10			0.008	0.2	Covered		M. Nicot, Director.
Arras, Engineer School	29.85	758.1	30.12	765.0	36.0	2.2	79	S	11.6	5.2		n							M. Klein, Commandant.
Avignon, Normal School	29.99	761 7	30.07	763.7	43.2	6.2	56	N			6	0			0	0			M. Giraud, Director.
Bar-sur-Seine	29.64	752.9	30.23	767.7	36.0	2.2	93	SSE			1	5kn		SW	0.047	1.2	Cloudy		M. Saillard, Director.
Beauvais, Normal School	29.89	759.1	30.17	766.2	38.7	3.7	75	S			1	10		S	0.049	1.25	Covered		M. Frère Eugene Marie.
Besançon, Normal School	29.34	745.1	30.26	768.7	42.1	5.6	75	S			1	0			0	0	Clear		M. Gobin, Director.
Bordeaux, Observatory	29.93	760.1	30.20	767.1	41.7	5.4	67	S			1	10		WNW	0	0	Covered		M. Rayet, Director.
Bourges, Normal School	29.54	750.4	30.12	765.0	37.4	3	73	S			4	sn		S	0	0			M. Postel, Director.
Brest, Naval Observatory	29.67	753.5	29.95	760.6	47.1	8.4	97	S			3	10		S			Raining		M. de Rermaree, Dir.
Caen, Normal School	29.94	760.5	30.02	762.5	39.4	4.1	100	NW			2	5			0	0	Cloudy		M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.89	759.3	30.23	767.8	35.2	1.8	85	SSE			1	0			0	0	Slightly cl'dy		M. Jadot, Director.
Charleville, Normal School	29.67	753.6	30.21	767.4	40.3	4.6	93	S			1	2		NE	0	0	¼ covered		M. Grimard.
Clermont-Ferrand Obs'y	28.78	731.1	30.20	767.0	37.8	3.2	51	NW			1	5			0	0	½ covered		M. Allnard, Director.
Cluny, Normal School	29.34	745.3	30.21	767.2	40.1	4.5	75	N			3	1		NW	0	0			M. de Villemontée, Dir.
Commercy, Normal School	29.12	739.6	30.01	762.2	36.5	2.5	72	S			1	kn	S	S	0.012	0.3			Dr. Coulet, Director.
Gap, Normal School	27.44	697.1	30.06	763.5	37.0	2.8	52	S			2				0	0			M. Jeangirard, Director.
Grénasque, du. Rhone	28.89	733.7	30.03	762.7	45.5	7.5	48	N			2	0			0	0	Clear		M. Kina, Director.
Grenoble, Normal School	29.35	745.5	30.15	765.7	38.8	3.8	67	WNW			3	ck		N	0.020	0.5			M. Ablard, Director.
Guéret, Normal School	28.54	724.8	30.23	767.8	36.0	2.2	80	SE			1	0			0	0	Clear		M. Rivoir, Director.
Lamballe, Normal School	29.64	752.8	29.93	760.1	36.1	2.3	92	SSW			6	10		SSW	0.08	2.	Raining		M. Ollitrault, Director.
Lescar, Normal School	29.59	751.5	30.28	769.0	48.9	9.4	81	SW			3	5		W	0.04	1.	Cloudy		M. Chauvin, Director.
Lorient, Naval Observatory	29.86	758.5	29.97	761.1	46.4	8.0	100	SE			8	10			0	0	Covered		Lt. T Carré, Director.
Lyon Obs'y, Park Station	29.11	739.4	30.18	766.5	37.4	3.0	60	NW			4	5ks		N	0	0	Cloudy		M. André, Director.
Mans, Normal School	29.85	758.1	30.17	766.3	34.3	1.3	94	S			1	10			0	0	Covered		M. Piboen, Director.
Marseille, Observatory	29.71	754.6	29.98	761.6	49.5	9.7	72	NW			2	0			0	0			M. Stephan, Director.
Montlouis l'Instituteur	24.82	630.4	30.06	763.4	41.0	5.0	31	N	7.4	3.3		0			0	0			M. Cave, for Dr. Fines.
Montpellier, Normal School	30.00	762.1	30.11	764.9	48.6	9.2	34	NNE			3	0			0	0	Clear		M. Galzin, Director.
Nancy, Normal School	29.24	742.8	30.05	763.3	34.2	1.2	78	W			1	10n			0.035	0.9	Light fog		M. Hasse.
Nantes, Observatory	29.97	761.1	30.13	765.2	36.7	2.6	86	ESE			2	10		S			Raining		M. Larocque, Director.
Nice	29.89	759.3	29.93	760.2	55.8	13.2	47	W			3	10	W	W	0.028	0.7	Light rain		Capt. Boissière, Director.
Perpignan, Observatory	30.01	762.2	30.11	764.9	49.1	9.5	30	N	11.2	5.0		1		NW	0	0			Dr. Fines.
Pic-du-Midi, Plantade	22.54	572.5			29.8	—1.2						10		N	0.04	1.	Snowy		M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.09	738.8	30.23	767.9	41.4	5.2	44	N			4	0			0	0	Clear		M. Taillieu.
Puy de Dôme O. s'y, Summit	25.12	638.0			21.2	—5.0	98	W			1	8			0.091	2.3			M. Allnard, Director
Rochefort, Naval Obs'y	30.13	765.4	30.17	766.2	41.0	5.0	71	SSE			1	10		SW	0.28	7.	Covered		Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.89	759.3	30.12	765.0	36.7	2.6	86	SSE			1	10					Raining		M. Mouillot, Director.
Rodez, Normal School	28.00	711.1	30.23	767.9	34.5	1.4	89	WNW			1	1c			0	0			M. Richard, Director.
Rouen, Normal School	30.02	762.6	30.11	764.8	41.7	5.4	93	S			1	10		S	0	0	Covered		M. Platrier, Director.
Saint Lô, Normal School	29.88	758.9	30.04	762.9	33.8	1	81	S			2	10		S	0.20	5.	Snowing		M. Delaplanche, Dir.
Saint Maur, Observatory	29.99	761.8	30.16	766.0	37.9	3.3	69	S			2	5		S	0.028	0.7			M. Renou, Director.
Toulouse, Observatory	29.50	749.4	30.23	767.9	41.5	5.3	63	NNW			1	10			0	0	Covered		M. Baillaud, Director.
Tours	29.95	760.8	30.15	765.8	36.7	2.6	79	SSW			1	10					Rainy		M. de Tastes.
Versailles, Observatory	29.65	753.0	30.13	765.4	37.4	3.0	69	SW			1				0.057	1.44			Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

GERMAN SERIES.

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

Bamberg	29.25	743.0	30.12	765.0	35.8	2.1	77	W			5	2k	W		0.012	0.3			Prof. Dr. Hoh.
Berlin	29.86	758.4	30.04	763.0	28.8	—1.8	60	NW			4	8			0.031	0.8			Prof. Dr. Arndt.
Breslau	29.49	749.1	30.02	762.6	32.2	0.1	96	W			3	10					Sleeting		Royal University Obs'y.
Carlsruhe	29.74	755.5	30.19	766.9	36.3	2.4	55	N			0	9	SW		0.240	6.1			Albert Senz.
Cassel	29.54	750.2	30.15	765.7	30.2	—1.0	75	NW			2	0			0.086	2.18			Dr. H. Möhl.
Frankfort on the Main	29.89	759.1	30.27	768.9	37.0	2.8	53	NW			2	7			0.035	0.9			Physical Society.
Friedrichshafen	28.69	728.6	30.18	766.5	38.1	3.4	74	NW			4	5	W		0.256	6.5			Chief Telegrapher Wilhelm.
Hamburg	30.04	763.0	30.11	764.8	32.2	0.1	66	W			1	4			0	0			Dr. R. Kleeman.
Kiel	30.05	763.3	30.07	763.7	30.9	—0.6	97	Calm			0	4			0.042	1.08			Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.69	754.1	30.13	765.4	28.4	—2.0	72	NW			3	3	WNW		0.343	8.7			Prof. Dr. Bruhns.
Magdeburg	29.89	759.1	30.12	765.1	29.7	—1.3	85	NW			4	1s	NW		0.028	0.7			Dr. Assmann.
Memel	29.80	756.8	29.84	758.0	22.3	—5.4	96	N			2	10n					Snowing		Reinbrecht & Issermann.
Munich	28.27	718.1	30.15	765.7	34.0	1.1	72	NW			1	7	W		0	0			Central Station.
Neufuhrwasser	29.88	759.0	29.90	759.4	30.4	—0.9	86	N			4	10			0.063	1.6	Snowing		A Lothes.
Neustadt, Palatinate	29.57	751.0	30.10	764.5	36.3	2.4	61	E			2	7			0	0			Dickmether.
Stuttgart	29.21	741.9	30.13	765.2	45.1	7.3		N			1	10			0.110	2.8			Prof. Dr. Schoder.
Thorn	29.67	753.7	29.86	758.4	30.6	—0.8	85	W			5	10			0	0			Dr. O. Cunerth.
Weissenburg, Bavaria	28.61	726.7	30.13	765.3	31.8	—0.1	94	W			4	10	NW		0	0			Prof. Kemlein.
Wustrow	30.08	764.0	30.10	764.6	24.3	—4.3	89	N			2	3s			0.079	2.0			Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.20	741.6	29.60	751.7	55.4	13.0		NE			2.0		10					Raining	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.09	764.2	30.14	765.5	77.3	25.2	62	WSW	15.0	6.7		8		W		0	0	D. clouds	
Deesa	29.60	751.9	30.08	763.9	87.4	30.8	17	NNW	8.6	3.8		8		W		0	0	D. clouds	
Bombay	30.00	762.0	30.04	763.0	84.9	29.4	64	NW	12.0	5.4		0				0	0	Blue sky	
Poona, Yarrowda	28.18	715.7	30.03	762.8	82.8	28.2	21	E	7.0	3.1		0				0	0	Blue sky	
Belgaum	27.47	697.7	30.00	761.9	81.2	27.3	20	ENE	9.0	4.0		0				0	0	Blue sky	
Lahore	29.33	745.0	30.09	764.4	72.8	22.7	43	Calm	0.7	0.3		8				0	0	D. clouds	
Roorkee	29.19	741.5	30.12	765.0	69.8	21.0	48	Calm	1.5	0.7		6				0	0		
Agra	29.56	750.8	30.13	765.4	76.3	24.6	29	W	2.2	1.0		0				0	0		
Nagpur	29.05	737.9	30.10	764.5	82.7	28.2	29	E	3.4	1.5		0				0	0	Blue sky	
Jubbulpore	28.75	730.2	30.14	765.5	75.6	24.2	23	E	1.9	0.8		0				0	0	Blue sky	
Lucknow	29.70	754.7	30.09	764.4	69.5	20.8	49	N	1.0	0.4		0				0	0	Blue sky	
Allahabad	29.79	756.6	30.11	764.7	75.8	24.3	38	Calm	1.7	0.8		0				0	0	Blue sky	
Patna	29.93	760.3	30.12	765.0	75.8	24.3	48	W	1.2	0.5		2		W	W	0	0		
Hazaribagh	28.07	712.9	30.13	765.3	68.8	20.4	30	NNW	4.5	2.0		0				0	0	Blue sky	
Cuttack	30.02	762.5	30.10	764.6	76.5	24.7	46	Calm	0.4	0.2		0				0	0	Blue sky	
Calcutta, Alipore	30.07	763.8	30.10	764.4	74.3	23.5	42	Calm	0	0		0				0	0	Blue sky	
Goalpara	29.69	754.1	30.10	764.6	71.8	22.1	51	NNW	2.0	0.9		0				0	0	Blue sky	
Chittagong	29.99	761.7	30.08	764.1	75.0	23.9	50	NW	2.9	1.3		0				0	0	Blue sky	
Sibsagar	29.79	756.6	30.14	765.4	66.3	19.1	73	NE	1.6	0.7		0				0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.58	751.2	30.00	761.9	46.9	8.3	47	Calm	0	0		8				0.130	3.3		Prof. Giovanni Clodig
Milan	29.45	748.0	29.98	761.6	41.5	5.3	75	SSE	5.6	2.5		4		SW		0	0		Prof. Schiaparelli.
Padua	29.91	759.6	30.02	762.4	45.3	7.4	67	N	2.5	1.1		9		E		0.189	4.8		Prof. Dott. Lorenzoni.
Moncalieri	29.08	738.7	30.02	762.6	37.6	3.1	72	S	1.3	0.6		0				0	0		Prof. P. F. Denza.
Genoa	29.74	755.4	29.93	760.3	50.9	10.5	39	NW	8.7	3.9		0				0	0		Prof. G. M. Garibaldi.
Mondovi	28.06	712.8	30.03	762.7	39.7	4.3	35	WNW			4	0				0	0		Prof. D. C. Bruno.
Pesaro	29.91	759.8	29.97	761.1	45.0	7.2	80	NNE	22.4	10.0		10				0.252	6.4		Prof. Luigi Guidi.
Florence	29.64	752.9	29.90	759.5	46.9	8.3	59	N			6	7				0.071	1.8		Cav. F. Meucci.
Leghorn	29.78	756.5	29.87	758.6	49.8	9.9	51	NE	4.9	2.2		3				0	0		Prof. P. Monte.
Rome	29.52	749.9	29.70	754.3	55.0	12.8	51	N	16.8	7.5		3				0.008	0.2		Prof. P. S. Ferrari.
Lecce	29.38	746.2	29.63	752.7	55.4	13.0	66	NNE	15.4	6.9		3		N		0.378	9.6		Prof. C. de Giorgi.
Cosenza	28.72	729.4	29.61	752.2	50.0	10.0	72	NNW	4.9	2.2		9		NW		0	0		Prof. D. Conti.
Cagliari	29.57	751.1	29.77	756.1	53.2	11.8	56	NW			6	7		N		0	0		Prof. A. Pacinotti.
Palermo	29.34	745.3	29.60	751.7	54.5	12.5	72	NW	0.7	0.3		10		NW		0.890	22.6		Prof. G. Ciacciatore.
Syracuse	29.50	749.4	29.55	750.5	56.5	13.6	72	NW	12.5	5.6		10		NNE		0	0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.15	740.3	29.67	753.6	54.1	12.3	62	NE	3.1	1.4		10		NE		0	0		Prof. F. Brioschi.
Stelvio	22.03	559.5			11.7	—11.3	75	E			4	Ics				0	0	Misty	P. F. Denza.
Valdobbia	21.98	558.4			14.5	— 9.7	64	SSW			1	0				0	0	Misty	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.30	769.6	30.31	769.9	32.4	0.2	93	NE	3.2	1.4		0				0.020	0.51	Clear	K. Sasaki.
Kioto	30.05	763.3	30.23	767.8	32.3	0.2	84					5ck		W		0	0	Fair	
Nagasaki, I. M. Obs'y	30.16	766.0	30.38	771.6	34.8	1.6	83	NW	1.7	0.8		0				0.020	0.51	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.97	761.2	30.04	763.0	34.4	1.3	59	NNW	4.4	2.0		0	0			0	0	Clear	The Staff.
Wakayama	30.21	767.3	30.25	768.6	34.8	1.6	82	E	1.2	0.5		ck	6s	W		0.001	0.03	Fair	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.78	756.4	29.97	761.2	83.0	28.3	62	ESE	13.0	5.8		0	3		ESE	0	0	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.22	615.2	30.06	763.4	44.0	6.7	85	NW			1	7c	0	SW		0	0	Cloudy	Prof. M. Leal.
Mazatlan	29.64	752.8	29.90	759.5	56.0	13.3	81	ENE	0.9	0.4		0	1k			0.085	2.15	Clear	F. Quijano, C. E.
Mexico, Central Obs'y					42.8	6.0	40	SW	6.7	3.0		0	0			0	0		The Staff.
Pabellon, Aguascallentes	23.69	601.7	29.78	756.4	40.5	4.7	66	Calm				0	6ks	SW		0	0	½ cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.28	591.3	30.26	768.6	41.0	5.0	42	Calm	0	0		0	0			0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.37	618.9	30.40	772.3	41.7	5.4	44	SW	3.1	0.4		0	0			0	0	Clear	G. Barroeta, M. D.
Tlacotalpam	29.72	754.9	29.73	755.2	73.8	23.2	80	S	10.9	4.9		0	0			0	0	Fair	Prof. M. Cházaro.
Zacatecas	22.22	564.3	29.95	760.8	32.4	0.2							10n			0.8	2.0	Covered	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.11	764.9	30.11	764.9	38.8	3.8		S			4					0.039	1.0		
Groningen	30.03	762.8	30.09	764.2	36.3	2.4		SW			1					0.016	0.4		
Helder	30.08	764.1	30.08	764.1	37.2	2.9		SSW			3					0.591	15.0		
Hellevoetsluis	30.10	764.5	30.10	764.5	39.0	3.9	80	S			3					0.039	1.0		
Utrecht	30.08	764.1	30.13	765.3	38.7	3.7	60	SW			2		2			0.067	1.7	Slightly cl'dy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.76	755.9	29.82	757.5	32.0	0.0	78	SSE	4.5	2.0			7			0.106	2.7		
Christiania	29.70	754.3	29.86	758.4	11.5	—11.4	97	NE	4	2			3			0	0	Light fog	
Gjæsvær	29.59	751.5	29.61	752.1	14.0	—10.0		NE			6		10						
Lodingen	29.56	750.9	29.61	752.1	21.0	— 6.1	85	S			2		10			0.004	0.1		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.13	765.2	30.28	769.2	60.4	15.8	91	W	8.0	3.6			4			0	0		Dr. J. A. Sampaio.
Campo Major	29.25	743.0	30.26	768.7	57.9	14.4	84	W	7.4	3.3			7			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.24	768.0	30.32	770.2	64.9	18.3	60	SW	2.5	1.1			4			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.99	761.7	30.34	770.7	58.5	14.7	84	NNW	7.4	3.3			10			0	0		The Staff.
Ponta Delgada, Azores	30.30	769.5	30.37	771.3	60.1	15.6	83	SW	11.9	5.3			3			0.053	1.6		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.47	748.5	30.73	780.5	—14.4	—25.8	84	W	9	4			0						Capt. Lasarew.
Archangel	29.30	744.1	29.32	744.6	17.2	— 8.2	97	S	13	6			10						Capt. Sselliwerstow.
Astrakhan	30.66	778.7	30.58	776.6	21.7	— 5.7	65	E	16	7			10cp					Snowing	Capt. Wisganow.
Barnaul	29.74	755.5	30.31	769.9	— 7.4	—21.9	77	SW	13	6			0					Heavy cl'd's	Meteorological Obs'y.
Dorpat	29.45	747.9	29.71	754.6	15.4	— 9.2	88	WNW	4	2			10n						Observatory.
Ekaterinburg	29.36	745.7	30.44	773.1	1.6	—16.9	56	WSW	27	12			10						Meteorological Obs'y.
Kasan	30.08	764.1	30.38	771.7	5.7	—14.6	66	S	20	9			10						Observatory.
Kertch	30.01	762.3	30.03	762.8	42.1	5.6	74	SE	7	3			3						Lagorio.
Kieff	29.31	744.4	29.97	761.3	31.5	— 0.3	100	SSE	7	3			10ks;n					Light snow.	Cand. Fatjanow.
Lugan	29.97	761.2	30.18	766.6	31.6	— 0.2	83	ESE	22	10			10						Meteorological Obs'y.
Moscow	29.43	747.5	30.01	762.3	24.8	— 4.0	80	S	7.8	3.5			10s						Meteorological Obs'y.
Nertchinsk	27.84	707.1	30.52	775.1	—20.7	—29.3	80	Calm	0	0			0						Meteorological Obs'y.
Nikolaiev	29.95	760.8	30.02	762.6	32.7	0.4	100	E	9	4			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.61	752.1	29.70	754.3	3.6	—15.8	81	W	13	6			10n						Lieut. Iwanow.
Nukuss	30.32	770.2	30.58	776.6	25.9	— 3.4	91	NE	4.5	2.0			0						Dr. Dobrochotow.
Pekin, China	30.19	766.9	30.34	770.5	23.2	— 4.9	36	Calm	0	0			1k						Physical Observatory.
St. Petersburg	29.51	749.6	29.53	750.0	16.5	— 8.6	94	NW	25	11			10n					Snowing	Central Physical Obs'y.
Tashkend, Laboratory	29.02	737.2	30.73	780.6	24.4	— 4.2	84						10			Blank			Teich, A. M.
Tiflis	29.02	737.1	30.50	774.6	42.3	5.7	80	SE	2	1			10						Physical Observatory.
Warsaw	29.47	748.4	29.90	759.5	34.5	1.4	83	WSW	20	9			10ks						Astronomical Obs'y.
Wilna	29.37	746.0	29.80	757.0	33.1	0.6	89	SSW	4	2			10					Heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.41	747.1	29.72	755.0	7.2	—13.8	75	W	22	10			10					Snowing	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.26	743.2	34.0	1.1	87	S			6		10n			0.5	12.7	Snowy	Andrew Gibb.
Monach Lt. House, Hebrides			28.87	733.3	39	3.9	91	SSE			8		10			0	0	Sleeting	J. Youngclause.
North Unst, Shetland Isl'ds			29.78	756.4				SE			3	3	7	SE		0	0		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.00	762.0	30.11	764.7	51.8	11	78	NNE	2.2	1.0			1k			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.14	765.5	30.20	767.0	58.3	14.6	80	E	0.9	0.4			10			0	0	Covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.24	691.8	30.20	767.0	65.7	18.7	85	N	4.2	1.9		0	9			0	0	Almost cov'd	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.97	710.4	30.21	767.2	58.1	14.5	62	W	9.0	4.0		0	6			0	0	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.98	761.6	30.13	765.4	71.6	22.0	50	NNW	5.2	2.3		0	3			0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.27	743.5	30.18	766.5	52.7	11.5	98	SW	12.5	5.6			10			0.087	2.2	Misty	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.01	762.1	30.07	763.8	69.8	21.0	82	ENE	14.8	6.6		0	0			0	0	Clear	Benito Vines, S. J.
Manilla, Phillippine Islands	30.03	762.7	30.08	764.0	79.5	26.4	66	NE	2.6	1.2						0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.20	767.1	30.30	769.7	60.1	15.6	80	WNW	7.7	3.4			10		NW	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.93	760.1	30.02	762.4	76.3	24.6	81	NE	11.9	5.32		2s	5kn	NE	NE	0.049	1.25	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	30.04	762.8	30.17	766.5	71.3	21.8	78	NNW	3.2	1.5						0	0	Fair	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.54	750.2	29.58	751.2	— 7.6	—22.0	100	N			2		0			0	0		
Umea	29.61	752.2	29.67	753.5	— 7.5	—13.6	51	NW			2		0			0	0		
Hernosand	29.72	754.9	29.77	756.2	— 8.1	—22.3	92	Calm			0		0			0	0		
Stockholm	29.68	753.9	29.86	758.4	— 7.5	—13.6	75	W			2		0			0.240	6.1		
Wisby	29.79	756.7	29.85	758.2	20.1	— 6.6	84	NNW			4		0			0.047	1.2		
Sub-Series.																			
Upsala	29.74	755.3	29.82	757.5	6.3	—14.3	92	SSW	4.7	2.1			0			0	0		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.69	728.6	30.16	766.0	38.8	3.8	53	NNE			3		1			0	0	Clear	The Observatory.
Zurich	28.48	723.3	30.18	766.5	35.6	2.0	78	N			1		5			0.291	7.4	Cloudy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. +0.9 mm.; Ther. +1°.0 cent.; Hum. —21 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.83	757.7	51.1	10.6	76	N	13	6.0			6		SW	0	0		The Observatory.
Valona			29.60	751.8	60.4	15.8		NW			1		2			0	0	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.92	760.0	66.2	19.0	73	NE			1		10cs			0	0		Prof. C. V. A. van Dyck.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

Albany, New York	30.82	782.8	30.92	785.4	14	—10.0	46	NE	1	0.4	.....	8cs	0	NE	.....	0	0	Fair	
Alpena, Michigan	29.88	758.9	30.59	777.0	20	— 6.7	70	SE	13	5.8	.....	8c	0	Calm	.....	0	0	Fair	
Atlanta, Georgia	29.18	741.1	30.40	772 1	33	0.6	69	E	28	12.5	.....	.....	10s	.....	E	0	0	Cloudy	
Atlantic City, New Jersey	30.78	781.8	30.79	782.1	18	— 7.8	83	N	8	3.6	.....	Haze	0	Calm	.....	0	0	Clear	
Attou Id., Alaska‡	29.37	746.0	.....	.....	30	— 1.1	68	S	33	14.8	.....	0	5s	.....	S	0.39	9.9	Fair	
Augusta, Georgia	30.37	771.4	30.58	776.7	37	2.8	71	SE	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Baltimore, Maryland	30.77	781.5	30.82	782.8	18	— 7.8	83	NW	3	1.3	.....	0	Fog	.....	Calm	0	0	Clear	
Barnegat, New Jersey	30.76	781.3	30.79	782.1	17	— 8.3	83	N	14	6.3	.....	0	Haze	.....	Calm	0	0	Clear	
Benton, Montana	27.03	686.6	.....	.....	21	— 6.1	86	Calm	0	0	.....	.....	10s	.....	Calm	0.09	2.3	Cloudy	
Bismarck. Dakota	28.03	711.9	29.89	759.2	20	— 6.7	85	N	8	3.6	.....	.....	10s	.....	Calm	0.44	11.2	Cloudy	
Boise City, Idaho	26.95	684.5	29.91	759.7	40	4.4	91	NE	4	1.8	.....	.....	10n	.....	Calm	0.11	2.8	Light rain	
Boston, Massachusetts	30.65	778.5	30.83	783.1	21	— 6.1	57	NW	10	4.5	.....	0	Haze	.....	Calm	0	0	Clear	
Brackettville, Texas	28.78	731.0	29.87	758.7	37	2.8	71	N	10	4.5	.....	0	0	.....	.....	0.10	2.5	Clear	
Brownsville, Texas	29.77	756.1	29.81	757.2	56	13.3	88	N	12	5.4	.....	2cs	0	Calm	.....	0.07	1.8	Clear	
Buffalo, New York	29.94	760.5	30.72	780.3	17	— 8.3	67	NE	8	3.6	.....	0	1s	.....	Calm	0	0	Clear	
Burlington, Vermont	30.61	777.5	30.95	786.1	8	—13.3	78	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Cairo, Illinois	29.78	756.4	30.18	766.6	43	6.1	75	SE	12	5.4	.....	.....	10n	.....	SE	0.36	9.1	Light rain	
Campo, California	27.41	696.2	29.98	761.5	28	— 2.2	77	E	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Camp Thomas, Arizona	27.12	688.8	.....	.....	38	3.3	63	W	.....	.....	1	0	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	30.70	779.8	30.72	780.3	28	— 2.2	77	N	14	6.3	.....	0	0	.....	.....	0	0	Clear	
Cape May, New Jersey	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Castroville, Texas	29.12	739.6	29.84	757.9	41	5.0	65	NW	11	4.9	.....	.....	10s	.....	Calm	0.06	1.5	Cloudy	
Cedar Keys, Florida	30.18	766.6	30.20	767.1	58	14.4	76	E	24	10.7	.....	1c	2ks	Calm	S	0	0	Fair	
Champaign, Illinois	29.33	745.0	30.16	766.1	36	2.2	80	SE	21	9.4	.....	.....	10n	.....	SE	0.84	21.3	Light rain	
Charleston, S. Carolina	30.46	773.7	30.52	775.2	38	3.3	81	N	16	7.2	.....	.....	10s	.....	N	0	0	Threatening	
Charlotte, N. Carolina	29.76	755.9	30.66	778.7	27	— 2.8	64	NE	9	4.0	.....	2cs	8s	Calm	Calm	0	0	Cloudy	
Chattanooga, Tennessee	29.52	749.8	30.36	771.1	39	3.9	63	SE	5	2.2	.....	.....	10n	.....	SE	Inap.	Inap.	Light rain	
Cheyenne, Wyoming	23.76	603.5	29.70	754.4	25	— 3.9	62	NW	24	10.7	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy	
Chicago, Illinois	29.54	750.3	30.26	768.6	34	1.1	90	S	.....	.....	.....	.....	10n	.....	Calm	0.53	13.5	Light rain	
Chincoteague, Virginia	30.73	780.5	30.75	781.0	22	— 5.6	86	N	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Cincinnati, Ohio	29.72	754.9	30.41	772.4	38	3.3	45	SE	6	2.7	.....	1c	4s	W	Calm	0	0	Fair	
Cleveland, Ohio	29.76	755.9	30.54	775.7	26.5	— 3.1	58	SE	19	8.5	.....	8cs	0	.....	Calm	0	0	Fair	
Coleman City, Texas	28.15	715.0	29.88	758.9	32	0.0	79	N	20	8.9	.....	.....	10s	.....	N	0.07	1.8	Cloudy	
Columbus, Ohio	29.58	751.3	30.48	774.2	29	— 1.7	78	E	17	7.6	.....	5cs	5s	SE	Calm	0	0	Cloudy	
Concho, Texas	28.00	711.2	29.74	755.4	34	1.1	79	NW	8	3.6	.....	0	2s	.....	Calm	0	0	Fair	
Corsicana, Texas	29.46	748.3	29.94	760.5	45	7.2	76	NW	4	1.8	.....	.....	10ks	.....	Calm	0	0	Cloudy	
Davenport, Iowa	29.39	746.5	30.04	763.0	36	2.2	90	SE	12	5.4	.....	.....	10n	.....	Calm	0.60	15.2	Light rain	
Dayton, Washington T'y	28.21	716.5	29.91	759.7	38	3.3	90	S	4	1.8	.....	10k	0	S	.....	0.03	0.8	Cloudy	
Deadwood, Dakota	25.15	638.8	.....	.....	13	—10.6	81	W	2	0.9	.....	.....	10n	.....	Calm	0.22	5.6	Light snow	
Decatur, Texas	28.72	729.5	29.92	760.0	37	2.8	81	NW	10	4.5	.....	.....	10s	.....	Calm	0.07	1.8	Cloudy	
Delaware Breakwater, Del.	30.74	780.8	30.76	781.3	22	— 5.6	86	NE	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Denison, Texas	29.07	738.4	29.88	758.9	42	5.6	91	W	8	3.6	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
Denver, Colorado	24.56	623.8	29.78	756.4	14	—10.0	82	S	2	0.9	.....	0	0	.....	.....	0.05	1.3	Clear	
Des Moines, Iowa	28.98	736.1	29.87	758.7	35	1.7	90	SE	6	2.7	.....	.....	10s	.....	Calm	1.05	26.7	Cloudy	
Detroit, Michigan	29.79	756.7	30.53	775.4	22	— 5.6	86	E	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
Dodge City, Kansas	27.21	691.1	29.63	752.6	16	— 8.9	66	NW	14	6.3	.....	0	0	.....	.....	0.08	2.0	Clear	
Dubuque, Iowa	29.35	745.5	30.08	764.0	34	1.1	90	SE	8	3.6	.....	.....	10n	.....	Calm	0.38	9.7	Sleeting	
Duluth, Minnesota	29.49	749.0	30.11	764.8	28	— 2.2	88	NE	12	5.4	.....	.....	10s	.....	NE	0.03	0.8	Cloudy	
Eagle Pass, Texas	29.21	741.9	29.96	761.0	41	5.0	65	N	10	4.5	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Eagle Rock, Idaho	25.24	641.1	29.89	759.2	29	— 1.7	89	SW	5	2.2	.....	.....	10s	.....	Calm	0	0	Threatening	
Eastport, Maine	30.64	778.2	30.71	780.0	17	— 8.3	67	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Edinburg, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
El Paso, Texas	26.12	663.4	.....	.....	35	1.7	79	NE	4	1.8	.....	.....	10s	.....	Calm	0.10	2.5	Cloudy	
Erie, Pennsylvania	29.88	758.9	30.66	778.7	23	— 5.0	86	NE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Escanaba, Michigan	29.65	753.1	30.35	770.9	25	— 3.9	87	E	9	4.0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Florence, Arizona	28.45	722.6	30.05	763.3	36	2.2	45	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort Apache, New Mexico	24.87	631.7	30.32	770.1	27	— 2.8	53	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort Assiniboine, Montana	27.02	686.3	.....	.....	22	— 5.6	70	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Bennett, Dakota	28.22	716.8	.....	.....	22	— 5.6	72	N	10	4.5	.....	.....	10n	.....	Calm	0.10	2.5	Light snow	
Fort Buford, Dakota	27.94	709.7	29.90	759.4	18	— 7.8	100	N	2	0.9	.....	.....	10n	.....	Calm	0.06	1.5	Light snow	
Fort Custer, Montana	26.71	678.4	.....	.....	22	— 5.6	100	N	2	0.9	.....	.....	Fog	.....	.....	0	0	Dense fog	
Fort Davis, Texas	25.06	636.5	30.02	762.5	26	— 3.3	88	SW	2	0.9	.....	0	5s	.....	Calm	0.01	0.3	Fair	
Fort Elliott, Texas	27.09	688.1	29.47	748.5	32	0.0	72	NW	20	8.9	.....	.....	10s	.....	NW	0.23	5.8	Cloudy	
Fort Gibson, Indian T'y	29.22	742.2	29.76	755.9	46	7.8	84	W	12	5.4	.....	.....	10s	.....	SW	0.26	6.6	Cloudy	
Fort Grant, Arizona	24.99	634.7	29.79	756.7	37	2.8	45	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Fort Griffin, Texas	28.56	725.4	29.87	758.7	34	1.1	79	NW	13	5.8	.....	.....	10s	.....	Calm	0.20	5.1	Cloudy	
Fort Keogh, Montana	27.40	696.0	.....	.....	24	— 4.4	87	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort McKavett, Texas	27.66	702.6	29.66	753.4	32	0.0	79	NW	15	6.7	.....	0	0	.....	.....	0	0	Clear	
Fort Macon, North Carolina	30.57	776.5	30.58	776.7	35	1.7	80	NE	23	10.3	.....	5cs	2s	N	Calm	0	0	Fair	
Fort St. Michaels	30.17	766.3	30.20	767.1	—20	—28.9	100	N	1	0.4	.....	0	0	.....	.....	.....	.....	.....	
Fort Missoula, Montana	26.59	675.4	.....	.....	30	— 1.1	100	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Shaw, Montana	26.16	664.4	.....	.....	37	2.8	63	W	12	5.4	.....	5cs	0	Calm	.....	0	0	Fair	
Fort Sill, Indian Territory	28.63	727.2	29.78	756.4	32	0.0	89	N	12	5.4	.....	.....	10s	.....	Calm	1.96	49.8	Cloudy	
Fort Stevenson, Dakota	28.00	711.2	.....	.....	20	— 6.7	85	NE	8	3.6	.....	.....	10n	.....	NE	0.25	6.3	Light snow	
Fort Verde, Arizona	.....	.....	.....	.....	30	— 1.1	78	W	.....	.....	1	0	0	.....	.....	0	0	Clear	
Fredericksburg, Texas	28.18	715.8	29.84	757.9	39	3.9	73	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Galveston, Texas	29.82	757.4	29.87	758.7	54	12.2	80	NW	10	4.5	.....	.....	10s	.....	Calm	0	0	Cloudy	
Grand Haven, Michigan	29.67	753.6	30.36	771.1	27	— 2.8	88	E	12	5.4	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Hatteras, North Carolina	30.56	776.2	30.58	776.7	34	1.1	79	N	24	10.7	.....	0	5s	.....	Calm	0	0	Fair	
Helena, Montana	25.64	651.2	.....	.....	28	— 2.2	22	Calm	0	0	.....	8k	0	Calm	.....	0	0	Cloudy	
Henrietta, Texas	28.88	733.5	29.84	757.9	34	1.1	90	NW	16	7.2	.....	.....	10s	.....	Calm	0.38	7.6	Cloudy	
Indianapolis, Indiana	29.46	748.3	30.28	769.1	36	2.2	76	SE	4	1.8	.....	.....	10n	.....	Calm	0.14	3.6	Light rain	
Indianola, Texas	29.88	758.9	29.91	759.7	50	10.0	79	NW	20	8.9	.....	.....	10n	.....	N	Inap.	Inap.	Light rain	
Jacksboro, Texas	28.74	730.0	29.90	759.4	35	1.7	80	NW	13	5.8	.....	.....	10s	.....	Calm	0.14	3.6	Cloudy	
Jacksonville, Florida	30.29	769.4	30.33	770.4	60	15.6	60	E	12	5.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Keokuk, Iowa	29.30	744.2	29.96	761.0	39	3.9	82	SE	21	9.4	.....	.....	10s	.....	SE	0.70	17.8	Cloudy	
Key West, Florida	30.09	764.3	30.12	765.0	71	21.7	75	E	20	8.9	.....	10k	0	E	.....	0	0	Cloudy	
Kittyhawk, North Carolina	30.64	778.2	30.67	779.0	33	0.6	89	N	26	11.6	.....	2c	0	Calm	.....	0	0	Clear	
Knoxville, Tennessee	29.36	745.7	30.42	772.7	39	3.9	38	NE	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
La Crosse, Wisconsin	29.27	743.4	30.03	762.7	34	1.1	79	SE	22	9.8	.....	.....	10n	.....	Calm	0.19	4.8	Light snow	
La Mesilla, New Mexico	25.98	659.9	30.13	765.3	36	2.2	71	S	3	1.3	.....	.....	10n	.....	Calm	Inap.	Inap.	Light snow	
Laredo, Texas	29.54	750.3	29.88	758.9	47	8.3	70	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Leavenworth, Kansas	28.87	733.3	29.71	754.6	41	5.0	91	SE	3	1.3	.....	.....	10n	.....	SE	1.27	32.3	Light rain	
Lewiston, Idaho	29.11	739.4	29.78	756.4	37	2.8	100	S	2	0.9	.....	.....	10n	.....	Calm	0.12	3.0	Light rain	
Little Rock, Arkansas	29.62	752.3	29.94	760.5	52	11.1	93	SE	4	1.8	.....	.....	10n	.....	SE	0.83	21.1	Light rain	
Los Angeles, California	29.63	752.6	29.99	761.7	53	11.7	80	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Louisville, Kentucky	29.70	754.4	30.29	769.4	39	3.9	64	E	9	4.0	.....	.....	10n	.....	Calm	0.11	2.8	Light rain	
Lynchburg, Virginia	30.04	763.0	30.80	782.3	24	— 4.4	87	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Madison, Wisconsin	29.10	739.1	30.13	765.3	33	0.6	89	SE	18	8.0	.....	.....	10n	.....	Calm	0.08	2.0	Light snow	
Marquette, Michigan	29.57	751.1	30.33	770.4	27	— 2.8	76	NE	12	5.4	.....	.....	10s	.....	SE	0	0	Cloudy	
Mason, Texas	28.26	717.8	30.09	764.3	34	1.1	79	W	6	2.7	.....	0	2s	.....	Calm	0	0	Fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
United States Series—Continued.																			
Memphis, Tennessee	29.72	754.9	30.07	763.8	46	7.8	77	E	12	5.4			10s		SE	0.92	23.4	Cloudy	
Milwaukee, Wisconsin	29.50	749.3	30.26	768.6	34	1.1	90	SE	18	8.0			10n		SE	0.12	3.0	Sleeting	
Mobile, Alabama	29.84	757.9	29.92	760.0	56	13.3	94	SE	36	16.1			10n		SE	3.14	79.8	Light rain	
Montgomery, Alabama	29.97	761.2	30.21	767.3	44	6.7	67	E	16	7.2			10n		Calm	0.15	3.8	Light rain	
Moorhead, Minnesota	28.90	734.0	29.89	759.2	27	— 2.8	94	SE	22	9.8			10n		SE	0.34	8.6	Light snow	
Morgantown, W. Virginia	29.52	749.8	30.58	776.7	33	0.6	79	E	8	3.6		8cs	0	Calm		0	0	Fair	
Mt. Washington, N. H.	24.19	614.4	30.56	776.0	18	— 7.8	52	NE	15	6.7		0	0			0	0	Clear	
Nashville, Tennessee	29.68	753.9	30.24	768.1	39	3.9	73	E	15	6.7			10n		SE	0.17	4.3	Light rain	
New Haven, Connecticut	30.71	780.0	30.84	783.3	29	— 7.2	54	N	20	8.9		0	0			0	0	Clear	
New London, Connecticut	30.78	781.8	30.83	783.1	20	— 6.7	70	N	6	2.7		0	0			0	0	Clear	
New Orleans, Louisiana	29.78	756.4	29.83	757.7	58	14.4	88	NE	25	11.2			10s		NE	1.93	49.0	Cloudy	
Newport, Rhode Island	30.74	780.8	30.80	782.3	21	— 6.1	71	N	8	3.6		0	0			0	0	Clear	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.80	782.3	30.83	783.1	27	— 2.8	76	N	21	9.4		0	0			0	0	Clear	
New York, New York	30.64	778.2	30.84	783.3	26	— 3.3	88	N	9	4.0		0	Fog			0	0	Clear	
Norfolk, Virginia	30.65	778.5	30.72	780.3	27	— 2.8	64	N	6	2.7		2cs	Sm'e	Calm	Calm	0	0	Fair	
North Platte, Nebraska	26.87	682.5	29.62	752.3	9	—12.8	78	W	12	5.4		0	0			0.02	0.5	Clear	
Olympia, Washington T'y	29.98	761.5	30.02	762.5	38.0	3.3	96	S	3	1.3		0	2s		Calm	0.60	15.2	Fair	
Omaha, Nebraska	28.59	726.2	29.70	754.4	35	1.7	100	SE	6	2.7			10n		Calm	1.33	33.8	Light rain	
Oswego, New York	30.44	773.2	30.81	782.6	7	—13.9	77	SE	9	4.0		Haze	0	Calm		0	0	Clear	
Pensacola, Florida	30.04	763.0	30.07	763.8	58	14.4	88	SE	26	11.6			10n		Calm	1.78	45.2	Light rain	
Philadelphia, Pa.	30.75	781.0	30.81	782.6	20	— 6.7	85	NE	12	5.4		0	Fog		Calm	0	0	Clear	
Phœnix, Arizona	28.84	732.5	30.71	780.0	46	7.8	82	SW	3	1.3		0	0			0	0	Clear	
Pike's Peak, Colorado	17.34	440.4	29.55	750.6	— 5	—20.6	63	NW	6	2.7		0	0			0.27	6.9	Clear	
Pilot Point, Texas	29.09	738.9	29.96	761.0	38	3.3	81	N	12	5.4		0	5s		Calm	0.21	5.3	Fair	
Pioche, Nevada	23.99	609.3	29.76	755.9	28	— 2.2	66	NW	3	1.3		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.76	755.9	30.66	778.7	22	— 5.6	72	NE	5	2.2		0	0			0	0	Clear	
Port Huron, Michigan	29.82	757.4	30.55	776.0	21	— 6.1	71	SE	12	5.4		10cs	0	Calm		0	0	Cloudy	
Portland, Maine	30.75	781.0	30.80	782.3	20	— 6.7	70	NW	2	0.9		0	0			0	0	Clear	
Portland, Oregon	30.00	762.0	30.08	764.0	39	3.9	100	Calm	0	0			Fog		Calm	0.90	22.9	Dense fog	
Portsmouth, N. Carolina					35	1.7	61	NE	29	13.0		2k	0	W		0	0	Clear	
Prescott, Arizona	24.68	626.9	30.04	763.0	27	— 2.8	76	Calm	0	0		0	0			0	0	Clear	
Punta Rassa, Florida	30.13	765.3	30.15	765.8	65	18.3	93	E	22	9.8		5ck	0	SE		0	0	Fair	
Red Bluff, California	29.67	753.6	30.02	762.5	52.0	11.1	89	S	4	1.8			10s		Calm	0.03	0.8	Cloudy	
Rio Grande City, Texas	29.68	753.9	29.89	759.2	56	13.3	87	NW	6	2.7		0	5s		Calm	0.13	3.3	Fair	
Rochester, New York	30.08	764.0	30.80	782.3	5	—15.0	75	SW	4	1.8		9c	Fog	Calm		0	0	Cloudy	
Roseburg, Oregon	29.51	749.5	30.07	763.8	43	6.1	96	Calm	0	0		0	0			0.51	13.0	Clear	
Sacramento, California	30.02	762.5	30.10	764.5	53	11.7	93	SE	8	3.6			10n		Calm	0.08	2.0	Light rain	
St. Louis, Missouri	29.47	748.5	30.06	763.5	39	3.9	100	SE	20	8.9			10n		Calm	0.84	21.3	Cloudy	
St. Paul, Minnesota	29.10	739.1	29.94	760.5	30	— 1.1	89	E	14	6.3			10n		E	0.04	1.0	Light snow	
Salt Lake City, Utah	25.63	651.0	29.96	761.0	32	0.0	59	Calm	0	0		0	0			0	0	Clear	
San Antonio, Texas	29.23	742.4	29.95	760.7	42	5.6	74	N	5	2.2			9s		Calm	0	0	Cloudy	
San Diego, California	29.93	760.2	30.01	762.2	48	8.9	70	S	1	0.4		0	0			0	0	Clear	
Sandusky, Ohio	29.78	756.4	30.52	775.2	22	— 5.6	72	E	12	5.4		0	0			0	0	Clear	
Sandy Hook, New Jersey	30.78	781.8	30.82	782.8	23	— 5.0	73	N	6	2.7		0	0			0	0	Clear	
San Francisco, California	30.06	763.5	30.12	765.0	55	12.8	96	SW	3	1.3			Fog		Calm	0.02	0.5	Dense fog	
Santa Fé, New Mexico	23.04	585.2	29.58	751.3	22	— 5.6	86	Calm	0	0		0	Haze			0.01	0.3	Dense haze	
Savannah, Georgia	30.38	771.6	30.48	774.2	39	3.9	82	NE	10	4.5			10s		NE	Inap.	Inap.	Threatening	
Shreveport, Louisiana	29.65	753.1	29.89	759.2	55	12.8	100	SE	4	1.8			10s		Calm	0.30	7.6	Cloudy	
Silver City, New Mexico	24.07	611.4	30.42	772.7	31	— 0.6	79	Calm	0	0			10s		Calm	0	0	Cloudy	
Smithville, North Carolina	30.54	775.7	30.58	776.7	33	0.6	89	N	12	5.4		5k	5s	SW	Calm	0	0	Cloudy	
Socorro, New Mexico	25.26	641.6	29.33	745.0	35	1.7	80	NW	3	1.3			10s		NW	Inap.	Inap.	Cloudy	
Springfield, Illinois	29.41	747.0	30.10	764.5	39.5	4.2	82	SE	19	8.5			10n		SE	0.82	20.8	Light rain	
Springfield, Massachusetts	30.71	780.0	30.86	783.8	13	—10.6	62	N	1	0.4		0	0			0	0	Clear	
Stockton, Texas	26.91	683.5	29.91	759.7	28	— 2.2	77	N	6	2.7		0	0			0	0	Clear	
St. Vincent, Minnesota	29.10	739.1	29.93	760.2	27	— 2.8	88	SE	10	4.5			10n		Calm	0.14	3.6	Light snow	
Thatcher's Island, Mass.	30.74	780.8	30.80	782.3	31	— 0.6	79	NE	12	5.4		0	0			0	0	Clear	
Toledo, Ohio	29.74	755.4	30.48	774.2	24	— 4.4	87	NE	10	4.5		4cs	0	SW		0	0	Fair	
Tucson, Arizona	27.42	696.5	29.97	761.2	47	8.3	34	NE	4	1.8		0	0			0	0	Clear	
Umatilla, Oregon	29.66	753.4	30.18	766.6	33.5	0.8	95	E	3	1.3			10s		Calm	0.03	0.8	Cloudy	
Uvalde, Texas	29.13	739.9	29.99	761.7	42	5.6	66	N	10	7.2		0	0			0	0	Clear	
Vicksburg, Mississippi	29.67	753.6	29.93	760.2	56	13.3	81	NE	5	2.2			10s		Calm	2.13	54.1	Cloudy	
Visalia, California	29.72	754.9	30.10	764.5	47	8.3	92	W	1	0.4			Fog		Calm	0	0	Dense fog	
Washington, D. C.	30.67	779.0	30.81	782.6	9	—12.8	78	N	2	0.9		5cs	Fog	Calm	Calm	0	0	Fair	
Wickenburg, Arizona					35	1.7	61	NW			1	0	0			0	0	Clear	
Wilmington, N. Carolina	30.54	775.7	30.60	777.2	33	0.6	80	NE	8	3.6		10ck	0	Calm		0	0	Cloudy	
Winnemucca, Nevada	25.64	651.2	30.00	762.0	39	3.9	82	S	6	2.7			10ks		SW	0	0	Cloudy	
Wood's Holl, Mass.	30.73	780.5	30.77	781.5	20	— 6.7	85	N	8	3.6		0	0			0	0	Clear	
Yankton, Dakota	28.45	722.0	29.76	755.9	32	0.0	89	E	2	0.9			10n			0.96	24.4	Light snow	
Yuma, Arizona	29.81	757.2	29.96	761.0	57	13.9	25	N	8	3.6		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.11	561.6			52.8	11.6	82	Calm	0	0		5c;cs	2ks			0.43	10.9	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica.‡	29.86	758.4	30.18	766.6	66	18.9	83	E				2c	0						
Havana, Cuba, W. I.	30.04	763.0	30.09	764.3	71	21.7	75	SE	6.0	2.7		0	0			0	0	Clear	Charles Hasselbrink.
Jakobshavn, Greenland	29.59	751.5	29.65	753.0	— 0.4	—18.		Calm				0	0			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	71.0	21.7	84	N	1	0.4			0			0	0		Robert Johnstone.
Navassa, W. I.	29.93	760.2	30.01	762.2	75	23.9	77	NE	12	5.4		0	0			0	0		F. M. Everett.
Paramaribo, S. A.	29.90	759.0	29.97	761.2	79	26.1	87	E			2	2k	5s	E	NE	0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.46	748.3	30.02	762.5	78	25.6	95	Calm			0	5ck	4c	E		0	0	Fair	Francesco J. Cisneros
Rivas, Nicaragua					71.0	22		SE			1	7ck	1ks	SW	SE	0	0	Dense fog	Earl Flint.
Santiago de Cuba, W. I.	30.04	763.0	30.07	763.8	74	23.3	85	NNE	7.2	3.2		4ck	4s		NE	0.04	1.0	Fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	30.16	766.0	30.22	767.0	—10.5	—23.6		W			2		2			0	0		K. Elberg.
York Factory, B. A.	30.36	771.1	30.42	772.7	—28.0	—33.3		W	8	3.6		1c	0	W		0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.60	751.8	55.5	13.1	78	WNW			1-3		10							Raining	Capt. Lord Walter Kerr
H. M. S. Antelope, N. 39° 47′ E. 26° 06′	29.74	755.4	54	12.2		NNE			3		9	NNE				1	NNE	D. clouds	Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 50′, E. 57° 14′	30.31	769.9	75	23.9	77	SSW			1		4	W				0		D. clouds	Comm. G. Hand.
H. M. S. Bittern																			Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.74	755.4	79	26.1	78	SW			3		9	ENE				3	S	D. clouds	Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 26° 05′, E. 120° 13′	30.26	768.6	56	13.3	87	NNE			4-5		9	SSW				3	NNE	D. clouds	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.10	764.5	55	12.8	71	N			6-8		3	N						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 18° 29′, W. 77° 57′	30.18	766.6	76	24.4	77	SSW			1		1							Blue sky	Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, Singapore, Malay Peninsula	29.95	760.7	79	26.1		NNE			2		10	SE				2	E	Misty	Capt. W. H. Maxwell.
H. M. S. Emerald																			Comm. C. Johnstone.
H. M. S. Encounter, Shanghai, China	30.38	771.6	37	2.8	81	E			1		0							Blue sky	Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.96	761.0	83	28.3	71	WNW			2		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 0° 20′, W. 81° 15′	29.96	761.0	78	25.6	88	SSW			1		8	SE				1	NNW	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′						W			1										Capt. L. F. Jones.
H. M. S. Griffin, N. 17° 14′, W. 62° 09′	30.01	762.2	79	26.1	95	NNW			1		3	NNE				1	NE	D. clouds	
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris, Trieste, Austria	29.95	760.7	45	7.2	?	NE			5-6		6	NE				5	E	Squally	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 149° 57′	30.20	767.1	63	17.2	83	NE			1		10	NE						D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Africa	29.87	758.7	80	26.7	96	WNW			2-3		6	N				1	N	Showery	Capt. C. J. Brownrigg.
H. M. S. Magpie																			Capt. R. H. Napier.
H. M. S. Malabar, N. 35° 52′, E. 14° 39′	29.74	755.4	63	17.2	78	NW			5		9	NW				6	NW	Squally	Capt. J. F. G. Grant.
H. M. S. Minotaur, Vigo, Spain	30.25	768.3	55	12.8	93	W			1		10	W						D. clouds	Capt. H. Rawson.
H. M. S. Modeste, N. 5° 24′, E. 100° 20′	29.97	761.2	84	28.9	68	N			1-3		0							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued:																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Off Granada, W. I.	29.95	760.7	77	25.0	86	Calm			0		0							Blue sky	Capt. E. Drummond.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, Clarence Bay, Africa	29.89	759.2	81	27.2	?	E			3		5	SE				2	NW	Squally	Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.89	759.2	81.5	27.5	98	NNE			4–6		10			Blank				Overcast.	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	30.32	770.1	60	15.6	82	NNW			2		10							Overcast	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.68	753.9	76	24.4	91	ENE			2–3		1k					3	ESE	Misty	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	29.94	760.5	68	20.0	95	Calm			0		10					1	W	Foggy	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, N. 36° 57′, E. 12° 23′	29.65	753.1	56.5	13.6	87	NNW			6		7					6	NNW	D. clouds	Capt. P. H. Colomb.
H. M. S. Triumph, S. 15° 30′, W. 76° 00′	30.00	762.0	74	23.3	88	Calm			0		2					1	S	D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.03	763.7	71	21.7		NNE			1–2		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, Palestine	30.26	768.6	69.5	20.8	52	N			1		2	N						D. clouds	Capt. F. Negham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES. Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Bulama, Senegambia	29.89	759.3	84.2	29.0	78	NW			1		6							D' clouds	S. C. da Silva Costa, Comd't.
Sado. Cabinda, Lower Guinea	29.85	758.2	83.5	28.6	75	WNW			2		9			2½	hours	1	NW	Overcast	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, N. 38° 56′, E. 15° 28′	29.58	751.3	57.7	14.3	67	NNW			2		4							D. clouds	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

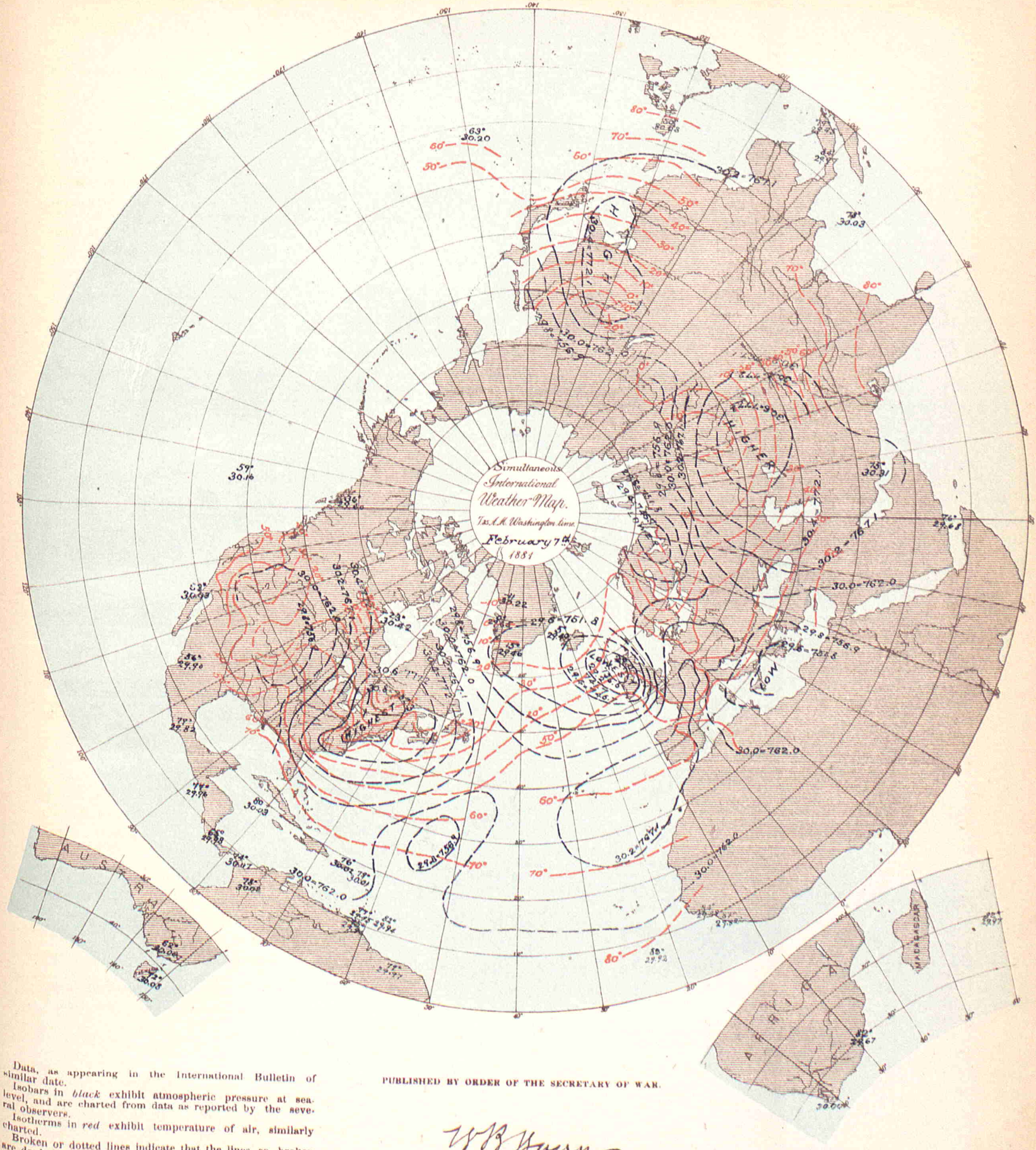
STATIONS AND VESSELS.	BAROMETER REDUCED TO SEA-LEVEL.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND.				CLOUDS.				RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		SEA-SWELL.		WEATHER.	OBSERVERS.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.13	755.3	56	13.3	87	NE	17	7.6			10		NE	1.80	45.7			Stormy.	
N. Yard, Portsmouth, N. H.	30.77	781.5	14	—10.0	16	N	4	1.8			0?			0	0			Cloudy ?	
Naval Hospital, Yokohama, Japan	29.86	758.4	37	2.8	53	Calm			0		0			0	0			Clear	
Adams, Chimbote, Peru	30.03	762.7	78	25.6	69	Calm			0		10					Sm'h		Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.08	754 0	54	12.2	93	SW			2		10		SSW	0	0			Cloudy	
Alert, Hong-Kong, China	30.12	765.0	65	18.3	78	E			3		10		Calm	0	0	Sm'h		Cloudy.	
Alliance, N. 27° 40′, W. 87° 20′	29.88	758.9	72	22.2	90	SE			6-7		10			L	ight	H'vy	SE	Cloudy.	
Ashuelot, Tientsin, China	30.36	771.1	25	— 3.9	87	S			1		0							Clear	
Colorado, New York, N. Y.	30.81	782.6	21	— 6.1	86	N	2	0.9			10			0	0			Hazy.	
Constitution, N. Yard, League I'd., Pa			16	— 8.9		NE	1	0.4			2							Hazy.	
Franklin, Norfolk, Va	29.66	753.4	29	— 1.7		NNE	7	3.1			2			0	0			Fair	
Galena, Villafranca, France	29.90	759.4	56	13.3	40	SW			2		0					Sm'h		Clear	
Independence, N. Yard, Mare I'd, Cal.	30.12	765.0	54	12.2	87	W	1.2	0.5			10		W	0.16	4.1			Overcast	
Jamestown, Sitka, Alaska	29.60	751.8	36	2.2	90	ENE			4		5			0.41	10.4			Fair	
Kearsarge, N. 29° 00′, W. 87° 50′	29.95	760.7	66	18.9	94	ESE			8		10					H'vy	ESE	Cloudy	
Lackawanna, Callao, Peru †	30.13	765.3	69	20.6	100	SE			0-1		10		SE	0	0			Cloudy	
Marion, Sandy P't, Terra del Fuego	29.31	744.5	48	8.9	70	WNW			2		5		W	1 h'r	light	Sm'h		Fair	
Michigan, Erie, Pennsylvania	30.64	778.2	12	—11.1		E	1	0.4			8		E					Fair	
Minnesota, New York, N. Y.	29.83	757.7	22	— 5.6		ENE			2		2							Hazy	
Monocacy, Shanghai, China	30.43	772.9	36	2.2	80	E			1		2							Clear	
New Hampshire, Port Royal, S. C.	30.49	774.4	41	5.0	82	NNE	22	9.8			10		NNE	0	0			Overcast	
Nipsic, Marseilles, France	30.07	763.8	49	9.4	64	NW			4		2					Sm'h		Hazy.	
Onward, Callao, Peru †	29.95	760.7	69	20.6	95	Calm			0		10					Long	W	Cloudy	
Palos, Shanghai, China	30.44	773.2	38	3.3	72	ESE			1		2		Calm					Fair	
Passaic, Washington, D. C.	30.88	784.3	8	—13.3	78	NE			1		2		Calm					Fair	
Pensacola, N. 20° 59′, W. 89° 42′	29.96	761.0	77	25.0	77	ESE			2		2			0	0	Sm'h		Fine	
Portsmouth, Washington, D. C.	29.80	756.9	7	—13.9	100	Calm			0		2							Misty	
Powhatan, New York, N. Y.	30.84	783.3	19	— 7.2	100	NE			1		2							Hazy	
Quinnebaug, Villafranca, France	29.91	759.7	60	15.6	47	W			2		1					Sm'h		Clear	
Richmond, Hong-Kong, China	30.26	768.6	63	17.2	94	ENE			2		10		Calm	0	0			Hazy	
Saratoga, Baltimore, Md.	30.80	782.3	16	— 8.9	100	NW			1		0			0	0			Foggy	
Shenandoah, Montevideo, Urugnay *	29.96	761.0	72	22.2	80	SE			3		0					Mod.	SE	Clear	
St. Louis, League Island, Pa.	30.75	781.0	13	—10.6	100	N	1	0.4			2		NE	0	0			Misty	
Swatara, Nagasaki, Japan †	30.26	768.6	41	5.0	82	N			1		0					Sm'h		Blue sky	
Tennessee, N. 19° 14′, W. 82° 09′	30.03	762.7	80	26.7	96	ESE	16	7.2			8		ESE	Inap.	Inap.	Sm'h		Fair.	
Ticonderoga, N. Yard, Mare Id., Cal.	30.15	765.8	55	12.8	100	SW			1		10		SW					Drizzling	
Trenton, Villafranca, France *	29.86	758.4	68	20.0	34	SW			2		0			0	0	Sm'h		Clear.	
Vandalia, Port Spain, Trinidad, W.I	29.96	761.0	75	23.9	95	Calm			0		5		Calm					Fair	
Wabash, Boston, Massachusetts	30.85	783.6	19	— 7.2	69	NNW	4	1.8			0			0	0			Clear.	
Wachusetts, Panama, Panama *	29.61	752.1	76	24.4	91	NNW			1		2		N			Sm'h		Clear	
Wyoming, Villafranca, France	29.92	760.0	57	13.9	58	SSW			3		0					Mod.	SSE	Clear	

LINES AND VESSELS.	Barometer reduced to Sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
S. 10° 15′, W. 13° 15′	29.93	760.2	80	26.7	82	SE			3		4							D. clouds	Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 21° 07′, W. 32° 34′	30.11	764.8	73.5	23.1	90				5		4							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang, ‡																			
N. 14° 17′, W. 39° 47′	29.99	761.7	77.3	25.2	69	ENE			3		7							D. clouds	Capt. H. Youlden.
S. S. Cipero																			W. N. Lalley.
City of Agra, ‡																			
S. 25° 05′, W. 28° 19′	30.07	763.8	83.5	28.6	94	NNE			3		2							Blue sky	Capt. T. Young.
Barque Commewyne, ‡																			
N. 32° 02′, W. 55° 29′	29.79	756.7	60	15.6	65	NE			2		7							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 17° 29′, W. 5° 07′	30.03	762.7	80	26.7	74	E			3		6							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart, ‡																			
N. 13° 44′, E. 92° 04′	30.03	762.7	77.5	25.3	65	NE			4		0							Blue sky	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡																			
N. 41° 00′, W. 63° 54′	30.60	777.2	29	— 1.7	100	NE			6		6					6	NE	D. clouds	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope, ‡																			
S. 4° 35′, W. 35° 50′	29.91	759.7	81.0	27.2	91	ESE			5		10							Showery	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 19° 18′, W. 49° 26′	30.11	764.8	75.7	24.8	85	S			4		3					3	E	D. clouds	Capt. H. W. Dyke.
Barque Mertola,																			
N. 38° 54′, W. 10° 50′	30.37	771.4	57.8	14.3	99	NNW			3		10							Misty	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee, ‡																			
N. 6° 48′, W. 23° 05′	29.92	760.0	81.5	27.5	89	N			3		1					Sl't	Con.	D. clouds	Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven																			Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyherton, ‡																			
N. 35° 57′, E. 16° 19′	29.56	750 8	55	12.8	93	Var.			4		10							Showery	Capt. R. J. Blacklin.
S. S. Yorkshire,																			
N. 43° 00′, E. 8° 55′	29.92	760.0	52	11.1	54	N			3		6					5	Con.	D. clouds	
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, ‡																			
Off Bar Light Ship, Engl'd	29.35	745.7	36	2.2		SE			6		10		SE			Sl't	SE	Hailing	Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, ‡																			
N. 51° 20′, W. 9° 35′ †	29.38	746.2	53	11.7		SW			6		10		SW			Mod.	SW	Drizzling	Capt. J. W. Jennings.
S. S. Baltic, ‡																			Capt. H. Parsell.
S. S. Britannic,																			
N. 40° 46′, W. 61° 05′ †	30.52	775.2	39	3.9		NNE			6		10		NE			Mod.	NNE	Squally	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, ‡																			
N. 49° 32′, W. 28° 55′ †	29.83	757.7	49	9.4		WSW			6		5?		W	0	0	H'vy	NW	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic,																			
N. 46° 31′, W. 39° 52′ *†	30.08	764.0	53	11.7	80	N			2		5		NE	0	0	H'vy	NW	Fair	Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann ‡																			Capt. H. Baur.
S. S. Köln,																			
N. 49° 45′, W. 9° 46′	29.51	749.5	51.8	11.0		SW			6-7		10		SW	4 h'r	light	Cross	SW	Cloudy	
S. S. Leipzig,																			
N. 44° 58′, W. 39° 02′	30.04	763.0	50.0	10.0	65	Calm			0		10		NW			Sm'h	NW	Sprinkling	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm †																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebran.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. ‡ N. 50° 09′, W. 21° 43′	29.37	746.0	54	12.2	93	WNW			7		2		WNW			H'vy	WNW	Squally	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 50° 43′, W. 27° 19′ †	29.36	745.7	47	8.3	85	WNW			8		8		W		Light	H'vy	W	Cloudy	Capt. R. W. Sargent.
S. S. Ohio.																			Wm. Shakford, 1st Off'r
S. S. Pennsylvania, N. 39° 21′, W. 73° 00′ †	30.66	778.7	39	3.9	46	NE			3		2		NE	0	0	Sm'h	NE	Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 32° 24′, W. 119° 46′ †	30.08	764.0	59	15.0	82	NW			5		0			0	0	Mod.	WNW	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 34° 10′, E. 138° 34′ †	30.12	765.0	50	10.0	72	NW			6		5		NW	0	0	Mod.	NW	Clear	Capt. H. Davison.
S. S. Gaelic, N. 35° 32′, E. 152° 34′ †*	29.96	761.0	50	10.0	86	NNE			6		10		N			R'gh	N	Overcast	Capt. W. H. Kidley
S. S. Oceanic, San Francisco, Cal.	29.87	758.7	57	13.9	87	SSE			3		10		SE	0	0			Cloudy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia.																			Capt. Fred. Bolles.
S. S. Oregon.																			Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal. †	30.09	764.3	54	12.2	93	Calm			0		10		Calm					Rainy	Capt. J. N. Ingalls.
S. S. Idaho, ‡ Tacoma, Wash. Ter. †	30.02	762.5	45	7.2	84	S			1		8							Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba.																			
S. S. Senator, Santa Barbara, Cal. †	30.00	762.0	54	12.2	87	N			1		2		NW			Sm'h		Clear	Thos. Wallace.
S. S. State of California, N. 46° 12′, W. 124° 10′ †	30.05	763.3	47	8.3	70	NE			3		10		NW	0	0	Long	SW	Foggy	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal. †	30.08	764.0	54	12.2	93	SW			1		10		Calm					Foggy	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 12° 33′, W. 169° 37′	29.92	760.0	82	27.8	96	E			3		2		E			Sm'h		Clear	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W. †	29.83	757.7	70	21.1	70	SW			3		10		SW	Squalls				Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Panama, Panama †	30.07	763.8	74	23.3	90	Calm			0		0			0	0			Clear	Capt. D. S. Austin.
S. S. City of Peking, N. 23° 05′, E. 117° 16′ †	30.22	767.6	59	15.0	65	NE			4		10		SW	0	0	Sm'h		Cloudy	Capt. G. G. Berry.
S. S. City of Sidney.																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 37° 29′, W. 135° 20′ †	30.16	766.1	59	15.0	82	S			1		10		SW			Long	W	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 28° 09′, W. 116° 18′ †	30.03	762.7	63	17.2	78	N			4		0			0	0	Mod.	NW	Clear	Capt. R. R. Searle.
S. S. Dakota.																			Capt. D. E. Griffiths.
S. S. Granada, N. 15° 50′, W. 97° 45′ †	29.82	757.4	79	26.1	70	NNW			4		10		NW			Sm'll	SSW	Rainy	
S. S. Zealandia, S. 30° 01′, W. 179° 45′	30.00	762.0	72	22.2	80	E			4		0					Sm'h	ESE	Fine	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland, ‡ Flushing, Netherlands †	29.88	758.9	40	4.4	82	SW			3		2		W			Mod.	W	Fair	Capt. Sam'l Jackson.
S. S. Nederland, ‡ N. 48° 03′, W. 19° 57′ †	29.88	758.9	56	13.3		SW			9		8		SW	0	0	High	W	Misty	Capt. S. Stokes.
S. S. Rhyland, ‡ Antwerp, Belgium.	30.09	764.3	43	6.1		S			4		10		NE	0	0			Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland.																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, ‡ Jacksonville, Florida †	30.24	768.1	65	18.3		E			2		10			1-32	hour			Threatening	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va.	30.66	778.7	30	— 1.1	78	NE	4	1.8			0			0	0			Clear	Capt J. Jorgensen.
Sch'r Annie R. Lewis, N. 22° 31′, W. 56° 08′ †	29.81	757.2	75	24.4		SW			5		5?		SW	12h'rs	he'vy	Long Cross	NW; WSW	Clear?	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 38° 18′, E. 0° 56′ †*	30.27	768.8	63	17.2		Calm			0		0					Short	WSW	Fair	Capt. B. F. Woodbury.
Brigantine George, ‡ N. 22° 08′, W. 68° 45′ †	30.33	770.4	70	21.1		NNE			7		10		NE	Showers		R'gh	NNE	Squally	Capt. W H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va. †	30.69	779.5	31	— 0.6		NNE	2	0.9		0	28			0	0			Clear	
Ship Jumna.																			Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 36° 32′, W. 12° 08′ †	30.34	770.6	62	16.7	100	NNW			5		8		N	Light		Mod.	NW	Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 8, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.18	766.5	66.2	19.0	79	NE			3		7			0	0	Very cloudy	Dr. Olive.
Nemours			30.15	765.7	66.9	19.4	89	NW			1		1			0	0	Very fair	Raynard.
Algiers			30.14	765.6	66.2	19.0	56	W			3		2			Inap.	Inap.	Fair	Nicolas.
La Calle			30.22	767.5	57.9	14.4	72	NNW			5		8			0.374	9.5	Very cloudy	Fonfréde.
Tunis			29.91	759.6															Jacques.
Sfax			29.97	761.2															Gau.
Saida			30.21	767.2	67.6	19.8	51	S			1		0			0	0	Clear.	Dumas.
Tebessa			30.06	763.6	46.4	8.0	62	W			3		5			0	0	Cloudy	Watrin.
Geriville																			Lonchamp.
Laghouat			30.12	765.1	63.3	17.4	59	NE			2		4			0	0	Cloudy	Herbin.
Biskra			30.11	764.7															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.99	761.7	30.08	764.0	58.0	14.4	75	S	5	2.2			2			0.05	1.3	Very fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			30.09	764.3	73	22.8		SW			2		5ks			0	0	Fine	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.25	743.0	29.82	757.5	34.3	1.3	78	E			1		10			0.106	2.7	Snowing	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.00	736.6	29.66	753.4	39.6	4.2	71	SSE	1.8	0.8			10			0.035	0.9		Dr. Wiersbicki.
Eperies	28.88	733.5	29.78	756.4	38.1	3.4	73	Calm			0		ks		NW	0	0		Julius Mikolik.
Gratz‡	28.50	723.8	29.79	756.7	33.1	0.6	93	SW			2		10			0	0		Andreas Rospini.
Hermannstadt	28.35	720 2	29.82	757.5	37.0	2.8	87	SE			4		10			0	0		Prof. A. Gottschling.
Krémsmunster, Obs'y	28.30	718.9	29.69	754.2	32.4	0.2	90	Calm			0		8			0.028	0.7		The Staff.
Lemberg	28.79	731.3	29.86	757.0	36.7	2.6	75	SE			2		4			0	0		Dr. T. Stanecki.
Pola	29.71	754.7	30.22	767.6	41.2	5.1	71	N			1		7			0	0		I. R. HydrographicOffice
Szathmar	29.44	747.8	29.89	759.3	37.8	3.2	85	N			2		10			0.098	2.5		Beicht Peter, S. J.
Szegedin	29.54	750.2	29.83	757.7	30.9	— 0.6		S			1		10			0	0		Karl Stancel.
Trieste	29.75	755.6	29.85	758.2	39.6	4.2	90	Calm			0		10			Inap.	Inap.	Cloudy	P. Busin.
Vienna	28.99	736.3	29.73	755.1	33.8	1.0	90	Calm			0		10			0.020	0.5		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.06	738 0	29.25	743.0	47.1	8.4	77	W			7		10		W	0.295	7.5	Light rain	Royal Observatory
Furnes	29.20	741.7	29.22	742.3	46.9	8.3	82	W			10		10			0.087	2.2	Raining	M. E. de Cae.
Maeseyck	29.10	739 0	29.22	742.2	45.7	7.6	88	W			4		10			0.386	9.8	Raining	M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 10, 1882.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.

BRITISH SERIES.

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

Aberdeen	28.84	732.5	28.94	735.1	37.7	3.2	86	WNW	22	9.8			7			0.020	0.51	D. clouds	W. Boswell.
Armagh, Observatory	28.91	734.3	29.13	739.9	45.0	7.2	86	W	30	13.4			10					Squally	S. Call.
Bidston, Liverpool Obs'y			29.06	738.1	43.0	6.1	85	WSW	53	23.7			10					Raining	John Hartnup.
Bolton, Sharples	28.42	721.9	28.94	735.1	42.9	6.1	92	W	33	14.8			10					Raining	Thomas Mackereth.
Bradford, Yorkshire	28.62	726.9	29.01	736.8	42.2	5.7	91	SW			3		10			0.19	4.8	Raining	J McLandsborough, F.R.S
Bridgetown, Barbadoes	29.84	757.9	29.86	758.4	76	24.4	91	NW			2		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			29.17	740.9	48.0	8.9	78	NW			8.0		9					Overcast	John McLaren.
Chatham, School M. E.	29.10	739.1	29.23	742.4	49.1	9.4	66	W			6		6			Bla	nk	D. clouds	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.40	746.7	29.63	752.6	48.6	9.2	66	WNW			7		4					Squally	The Staff.
Fort Napier, Natal	27.52	699.0	29.74	755.4	75.1	23.9	50	NE			1		3					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	87	30.6	88	E			1		3					D. clouds	C. E. Keane.
Galway, Queen's College			29.42	747.3							6		7					D. clouds	J. O'Donaghadue.
Gibraltar, Mediterranean	30.19	766.8	30.24	768.1	63.8	17.7	93	W			2		3					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	28.80	731.5	29.00	736.6	41.0	5.0	80	NW			2		7k					D. clouds	D. G. MacLean.
Greenwich, Royal Obs'y	29.09	738.9	29.26	743.2	48.7	9.3	67	WSW			8		10					Overcast	The Staff.
Guernsey	29.41	747.0	29.62	752.3	51	10.6	63	WSW			6		3					Squally	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.23	742.4	29.27	743.4	49.4	9.7	63	W	20	8.9			8					Showery	The Met'g'l Office.
Leicester, Museum	28.90	734.0	29.15	740.4	45.2	7.3	78	SW			7		10					Drizzling	J. E. Carryer.
Malta, Mediterranean	29.79	756.7	29.86	758.4	62	16.7	72	NW			3		2					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			30.17	766.3	68.5	20.3	63	NE			2		8					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.64	727.4	29.15	740.4	44.8	7.1	89	W			6		10					Raining	Robert Pate.
Oxford, Radcliffe Obs'y	29.03	737.3	29.29	744.0	47.9	8.8	72	SSW			6		10					Showery	The Staff.
Plymouth	29.50	749.3	29.57	751.1	49.5	9.7	69	W			6		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.10	739.1	34.4	1.3	96	ENE	40	17.9			10					Snowing	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.80	756.9	29.86	758.4	45.2	7.3	90	NNE			2		10			Bla	nk	Misty	Serg't W. H. Lyne.
Sheffield	28.79	731.3	29.07	738.4	41.8	5.4	99	W			6		10			0.33	8.4	Raining	W. F. Cooper.
Silloth Rectory	28.98	736.1	29.00	736.6	40.0	4.4	87	W			2		10			0.107	2.72	Overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.06	738.1	41.2	5.1	91	W	33	14.8			10					Raining	Rev. S. J. Perry.
Strathfield Turgiss	29.10	739.1	29.32	744.7	48.6	9.2	72	W			5		7					Squally	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	29.59	751.6	29.65	753.1	52	11.1	79	W			8		10					Gloomy	W. Newcombe.
Valencia, Observatory	29.62	752.3	29.64	752.8	49.7	9.8	69	W	35	15.6			7					Squally	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.56	776.2	30.60	777.2	— 2	—18.9	100	Calm	0	0		0	0			0	0	Clear	H. J. Cundall, C. E.
Chatham, N. B.*	30.54	775.7	30.61	777.5	2	—16.7	86	Calm	0	0		5c	0			0	0	Fair	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	30.54	775.7	30.57	776.5	16	— 8.9	67	NW	1	0.4		2cs	5ks	Calm		0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	28.78	731.0	29.65	753.1	18	— 7.8	100	N	8	3.6			10n			0.550	13.97	Heavy snow	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.49	774.4	30.64	778.2	16	— 8.9	86	N	2	0.9		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.03	762.7	30.39	771.9	28	— 2.2	81	SE	5	2.2		10cs	0	Calm		0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	30.25	768.3	30.47	773.9	19	— 7.2	69	SE	17	7.6		2k	8ks	W	W	0	0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	29.51	749.5	30.24	768.1	29	— 1.7	95	SE	16	7.2			10n		SE	0.01	0.3	Light rain	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.58	751.3	30.30	769.6	33	0.6	100	SE	3	1.3			10n			Inap.	Inap.	Threatening	H. Morgan.
Port Stanley, Ontario	29.58	751.3	30.25	768.3	33	0.6	88	E	10	7.2			10n		E	0.05	1.3	Cloudy	M. Payne.
Quebec, Quebec*	30.20	767.1	30.55	776.0	15	— 9.4	83	W			1		5s		W	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.85	758.2	30.34	770.6	21	— 6.1	74	E	5	2.2			10s		SE	0	0	Threatening	K. Stewart.
Saugeen, Ontario*	29.41	747.0	30.16	766.1	32	0.0	95	SE	26	11.6			10n			0.01	0.3	Light rain	W. H. McIntyre.
St. Andrews	30.56	776.2	30.62	777.7	19	— 7.2	84	Calm	0	0		0	0			0	0	Clear	
St. John's, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.50	774.7	30.54	775.7	— 5	—20.6	100	Calm	0	0		0	0			0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.93	760.2	30.33	770.4	31	— 0.6	92	SE	3	1.3			10n			Inap.	Inap.	Light rain	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.57	776.5	30.64	778.2	14	—10.0	62	NE	1	0.4		0	0			0	0	Hazy	Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. John's, Newfoundland	30.12	765.0	30.38	771.6	22	— 5.6	72	NW	1	0.4		0	28			0	0	Fair	John Delony.
St. Pierre, N. F*																			N. F. Land, Comd't

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			
Cape St. Francis Lt. House	29.86	758.4			69.5	20.8	78	SW	33.3	14.9			7s			0.010	0.25	Cloudy	John Duthie.
Cape Town, C. G. H. Obs'y	30.02	762.5	30.05	763.3	83.5	28.6	40	S	10.9	4.9		0	2ks			0	0		The Staff, for D. Gill.

CHINESE SERIES.

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

SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	30.20	767.1	30.23	767.7	42.4	5.8	92	E	2.0	0.9			0			0	0	Clear	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Tempera-ture of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direc-tion. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.26	667.0	29.98	761.5	63.5	17.5	98	Calm			0	8c;ck				Inap.	Inap.	Cloudy	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.10	739.1	29.15	740.3	29.3	—1.5	94	SSE	29	13		10						Snowing	Oversergent Fischer.
Fanöe	28.95	735.2	28.97	735.7	33.4	0.8	85	SSW			2	10						Foggy	Overlœrer Lauridsen.
Godthaab, Greenland	29.70	754.4	29.74	755.5	18.3	—7.6	81	NNE			2	2							S. Kleinschmidt.
Stykkisholm, Iceland	29.72	755.0	29.77	756.1	1.0	—17.2	89	E			7	2							A. O. Thorlacius.
Thorshavn	29.47	748.4	29.50	749.3	37.8	3.2	71	E	27	12		7							Overlœrer Bergh.
Vestervig	28.96	735.6	29.06	738.0	26.8	—2.9		ENE			4	10						Snowing	Locarer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.46	748.3	30.12	755.1	54.0	12.2	67	WNW			4	cnk	E	E		0.12	3.		M. Labroue, Director.
Alençon	29.22	742.1	29.77	756.1	47.5	8.6	81	SW			4	5kn		SW		0.28	7.	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.14	740.1	29.39	746.6	48.2	9.0	68	W	27.1	12.1		n						Stormy	M. Klein, Commandant.
Avignon, Normal School	29.89	759.2	29.97	761.2	53.2	11.8	56	N			1	0				0	0	Very clear	M. Giraud, Director.
Bar-sur-Seine	29.17	740.8	29.72	755.0	48.4	9.1	65	W			3	10		W		0.087	2.2	Covered	M. Saillard, Director.
Beauvais, Normal School	29.29	744.0	29.56	750.7	50.2	10.1	63	W			4	8		W		0.20	5.	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	28.95	735.2	29.86	758.4	45.7	7.6	72	S			4	10		WNW		0.327	8.3	Rain & sleet	M. Gobin, Director.
Bordeaux, Observatory	29.82	757.4	30.12	765.1	55.8	13.2	57	NW			4	8		WNW		0.028	0.7	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.24	742.8	29.80	756.9	49.6	9.8	76	WSW			1	kn		WSW		0.217	5.5		M. Postel, Director.
Brest, Naval Observatory	29.66	753.3	29.90	759.5	52.2	11.2	75	NW			6	1b		NW		0.620	15.75	Raining	M. de Kermaree, Dir.
Caen, Normal School	29.53	750.0	29.61	752.0	52.5	11.4	93	W			3	5		E		0.39	10.	Cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.29	743.9	29.62	752.4	49.6	9.8	81	SW			8	8		WSW		0.193	4.9	Very cloudy	M. Jadot, Director.
Charleville, Normal School	28.99	736.3	29.54	750.3	47.5	8.6	65	NW			1	10		NE		0.315	8.0	Covered	M. Grimard.
Clermont-Ferrand Obs'y	28.52	724.4	29.89	759.2	48.2	9.0	65	W			4	5				0.067	1.7	Showery	M. Alluard, Director.
Cluny, Normal School	29.04	737.6	29.88	759.0	50.0	10	86	SW			4	6	S	W		0.075	1.9		M. de Villemontée, Dir.
Commercy, Normal School	28.74	730.0	29.61	752.2	46.8	8.2	81	W			8	n		W		0.413	10.5		Dr. Coulet, Director.
Gap, Normal School	27.35	694.8	29.96	761.0	37.4	3.0	66	S			1	5		SE		0.039	1.00	½ covered	M. Jeanginard, Director.
Gréasque, du. Rhone	28.87	733.2	30.01	762.2	50.9	10.5	68	NW			2	2		NW		0.004	0.1	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.20	741.7	29.99	761.7	42.3	5.7	88	S			1	ck		SE		0.091	2.30		M. Ablard, Director.
Guéret, Normal School	28.33	719.6	29.95	760.7	45.5	7.5	61	SW			4	10n		NE		0.51	13.	Raining	M. Rivoir, Director.
Lamballe, Normal School	29.50	749.4	29.78	756.4	47.5	8.6	81	SW			6	10		SW				Raining	M. Ollitrault, Director.
Lescar, Normal School	29.69	754.0	30.37	771.4	55.4	13	81	W			4	5		NW		0.055	1.4	Cloudy	M Chauvin, Director.
Lorient, Naval Observatory	29.82	757.3	29.92	759.9	51.1	10.6	75	W			4	5		W		0.610	15.5	½ covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.74	730.1	29.77	756.1	50.0	10.0	76	S			1	5n		S		0.307	7.8	Cloudy	M. André, Director.
Mans, Normal School	29.48	748.7	29.79	756.7	47.1	8.4	76	NW			4	0				0.374	9.5	Clear	M. Piboen, Director.
Marseille, Observatory	29.71	754.5	29.98	761.4	51.3	10.7	74	WNW			2	5		NW		0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.82	630.5	30.06	763.5	46.0	7.8	28	W	7.4	3.3		0				0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.87	758.8	29.98	761.6	59.0	15	48	NW			4	2				0	0	Slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	28.83	732.3	29.60	751.9	47.1	8.4	65	W			3	5ck				0.031	0.8	Cloudy	M. Hasse.
Nantes, Observatory	29.77	756.2	29.93	760.3	53.2	11.8	70	WSW			3	10		SW		0.288	6.8	Covered	M. Larocque, Director.
Nice	29.71	754.6	29.74	755.4	55.4	13 0	57	W			4	1	NW	W		0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.94	760.5	30.05	763 2	60.1	15.6	45	N	28.0	12.5		3	NW	NW		0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.51	571.8			29.5	—1.4						5		W		0.146	3.7	Cloudy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.87	733.2	29.94	760.5	49.3	9.6	56	NW			1	5n	NW	NW		0	0	Cloudy	M. Tallieu.
Puy de Dôme O. s'y, Summit	24.89	632.2			30.2	—1.0	98	W			8	10				0.205	5.2	Stormy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.02	762.6	30.05	763.2	53.2	11.8	78	W			3	8				0.35	9.	¾ covered	Lt. E. Devante, Director.
Roche-sur-Yon, N. School	29.76	755.8	29.97	761.2	54.7	12.6	55	W			3	0				0.409	10.4	Clear	M. Mouillot, Director.
Rodez, Normal School	27.87	708.0	30.07	763.7	43.2	6.2	91	NW			2	8	W	W		0.181	4.6	Raining	M. Richard, Director.
Rouen, Normal School	29.48	748.9	29.57	751.0	50.7	10.4	76	SSW			5	5		SSW		0.16	4.	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.52	749.8	29.68	753.8	51.3	10.7	62	W			4	8		W		0.319	8.1	Raining	M. Delaplanche, Dir.
Saint Maur, Observatory	29.47	748.5	29.63	752.7	50.7	10.4	65	W			4	10		WNW		0.039	1.0		M. Renou, Director.
Toulouse, Observatory	29.43	747.6	30.16	766.1	53.8	12.1	65	WNW			3	5				0.039	1.0	Cloudy	M. Baillard, Director.
Tours	29.65	753.2	29.85	758.2	53.1	11.7	57	W			6	8		Calm		0.057	1.7	¾ covered	M. de Tastes.
Versailles, Observatory	29.14	740.2	29.64	752.8	48.2	9.0	71	W			8					0.036	0.93		Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.63	727.1	29.47	748.6	41.4	5.2	75	S			7	7k	SSW			0.220	5.6	Raining	Prof. Dr. Hoh.
Berlin	29.11	739.3	29.28	743.7	39.9	4.4	92	SW			3	10				0.126	3.2	Rain & snow	Prof. Dr. Arndt.
Breslau	29.04	737.5	29.56	750.8	42.9	0.5	73	S			3	10				0.010	0.25	Snowing	Royal University Obs'y.
Carlsruhe	29.11	739.4	29.54	750.2	45.0	7.2	81	SW			8	10	SW			0.146	3.7	Rain & snow	Albert Senz.
Cassel	28.62	727.0	29.21	742.0	39.7	4.3	88	W			4	10	W			0.254	6.46		Dr. H. Möhl.
Frankfort on the Main	29.12	739.6	29.49	749.0	44.6	7.0	81	SSW			3	10				0.287	7.3		Physical Society.
Friedrichshafen	28.30	718.8	29.76	755.8	41.4	5.2	84	SW			5	5	W			0.075	1.9		Chief Telegrapher Wilhelm.
Hamburg	29.00	736.5	29.07	738.3	37.0	2.8	87	SW			5	10				0.402	10.2		Dr. R. Kleeman.
Kiel	29.03	737.4	29.05	737.8	35.6	2.0	92	SSW			2	10				0.110	2.79	Snowing	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	28.94	735.0	29.36	745.7	41.4	5.2	74	S			3	9	W			0.024	0.6		Prof. Dr. Bruhns.
Magdeburg	29.02	737.2	29.25	743.0	39.7	4.3	84	SSE			6	9ks	SW			0.016	0.4	Lightrain	Dr. Assmann.
Memel	29.70	754.4	29.75	755.6	22.1	—5.5	93	SE			4-5	10k							Reinbrecht & Issermann.
Munich	27.82	706.5	29.65	753.2	42.4	5.8	64	W			5	8	W			0.197	5.0		Central Station.
Neufahrwasser	29.54	750.4	29.56	750.8	31.1	—0.5	83	SSE			4	10				0.008	0.2		A Lothes.
Neustadt, Palatinate	28.91	734.2	29.42	747.3	46.4	8.0	77	SW			3	10				0.461	11.7	Raining	Dicknether.
Stuttgart	28.64	727.4	29.54	750.2	45.0	7.2	76	SW			4	5	W			0.161	4.1		Prof. Dr. Schoder.
Thorn	29.29	744.0	29.48	748.7	35.6	2.0	71	S			5	10				0.063	1.6		Dr. O. Cunerth.
Weissenburg, Bavaria	28.08	713.2	29.58	751.2	39.9	4.4	85	SW			6	10	W			0.114	2.9		Prof. Kemlein.
Wustrow	29.12	739.6	29.14	740.2	34.9	1.6	96	S			6	10				0.358	9.1		Profs. Brandes & Reimer.

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

GREEK SERIES.

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

Athens	29.35	745.4	29.74	755.4	55.9	13.3	.....	NE	.....	.....	1.0	.....	5	.....	.....	.....	.....	½ Clear	Schmidt & Wourlisch.

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	29.95	760.6	30.00	761.9	84.0	28.9	46	SSW	20.0	8.9	.....	.....	0	.....	.....	0	0	Blue sky	
Deesa	29.52	749.9	30.00	761.9	86.8	30.4	17	S	8.6	3.8	.....	.....	6	SSW	.....	0	0	D. clouds	
Bombay	29.92	759.9	29.96	760.9	85.1	29.5	51	WNW	10.0	4.5	.....	.....	0	.....	.....	0	0	Blue sky	
Poona, Yarrowda	28.11	713.9	29.95	760.6	85.3	29.6	12	ESE	4.0	1.8	.....	.....	0	.....	.....	0	0	Blue sky	
Belgaum	27.40	695.9	29.92	759.9	80.8	27.1	15	ENE	7.0	3.1	.....	.....	0	.....	.....	0	0	Blue sky	
Lahore	29.21	742.0	29.96	761.1	76.9	24.9	31	E	2.1	0.9	.....	.....	8	.....	.....	0	0	D. clouds	
Roorkee	29.10	739.2	30.02	762.6	72.8	22.7	46	N	0.9	0.4	.....	.....	7	.....	.....	0	0	.....	
Agra	29.44	747.9	30.02	762.4	78.3	25.7	33	NE	2.2	1.0	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28.96	735.4	30.00	761.9	83.7	28.7	30	Calm	2.8	1.2	.....	.....	0	.....	.....	0	0	Blue sky	
Jubbulpore	28.68	728.4	30.06	763.5	76.8	24.9	21	NE	1.6	0.7	.....	.....	0	.....	.....	0	0	Blue sky	
Lucknow	29.66	753.4	30.04	763.1	76.4	24.7	33	Calm	0.6	0.3	.....	.....	7	E	.....	0	0	Blue sky	
Allahabad	29.71	754.7	30.04	762.9	72.3	22.4	50	Calm	1.2	0.5	.....	.....	6	WNW	.....	0	0	D. clouds	
Patna	29.92	760.0	30.11	764.7	73.0	22.8	56	W	0.8	0.4	.....	.....	8	W	W	0	0	D. clouds	
Hazaribagh	27.99	710.9	30.04	762.9	71.3	21.8	32	NNW	4.0	1.8	.....	.....	0	.....	.....	0	0	Blue sky	
Cuttack	29.94	760.6	30.03	762.7	77.5	25.3	42	Calm	0.1	0.04	.....	.....	0	.....	.....	0	0	Blue sky	
Calcutta, Alipore	30.00	762.0	30.02	762.5	73.7	23.2	43	Calm	0	0	.....	.....	0	.....	.....	0	0	Blue sky	
Goalpara	29.60	751.8	30.01	762.2	73.4	23.0	43	NNE	4.2	1.9	.....	.....	0	.....	.....	0	0	Blue sky	
Chittagong	29.93	760.3	30.02	762.6	73.6	23.1	55	W	2.4	1.1	.....	.....	0	.....	.....	0	0	Blue sky	
Sibsagar	29.73	755.1	30.09	764.2	67.0	19.4	74	NE	1.9	0.8	.....	.....	0	.....	.....	0	0	Blue sky	

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.42	747.2	29.84	757.9	38.3	3.5	68	Calm	0	0	.....	.....	10	.....	.....	0	0	.....	Prof. Giovanni Cloding
Milan	29.30	744.1	29.83	757.7	40.5	4.7	74	WNW	3.1	1.4	.....	.....	3	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.69	754.1	29.80	756.9	43.7	6.5	78	S	3.1	1.4	.....	.....	8	SW	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.93	734.7	29.87	758.6	35.2	1.8	79	NW	4.9	2.2	.....	.....	1	S	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.62	752.3	29.81	757.1	50.0	10.0	62	E	6.9	3.1	.....	.....	4	N	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	27.91	708.9	29.87	758.8	35.1	1.7	52	W	.....	.....	4	.....	0	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.80	756.9	29.85	758.2	42.4	5.8	87	W	2.5	1.1	.....	.....	10	W	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.60	751.7	29.85	758.3	45.0	7.2	64	NW	.....	.....	2	.....	10	.....	.....	0	0	.....	Cav. F. Meucci.
Leghorn	29.71	754.7	29.80	756.8	48.2	9.0	88	SW	3.8	1.7	.....	.....	10	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.69	754.2	29.87	758.7	48.9	9.4	52	NNE	0	0	.....	.....	10	.....	.....	0	0	.....	Prof. P. S. Ferrari.
Lecce	29.55	750.6	29.81	757.1	51.6	10.9	69	N	16.8	7.5	.....	.....	4	.....	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	28.97	735.7	29.86	758.5	53.6	12.0	74	NW	2.5	1.1	.....	.....	7	WNW	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.80	757.0	30.00	762.0	53.8	12.1	61	NNW	.....	.....	4	.....	10	.....	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.69	754.1	29.94	760.5	54.3	12.4	65	NW	11.9	5.3	.....	.....	10	NW	.....	0.299	7.6	.....	Prof. G. Cincciatore.
Syracuse	29.78	756.3	29.82	757.4	59.0	15.0	65	NNE	6.3	2.8	.....	.....	9	SW	.....	0.091	2.3	.....	Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.35	745.4	29.87	758.7	54.5	12.5	62	NW	0	0	.....	.....	8	NW	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	21.99	558.7	.....	.....	20.3	— 6.5	58	NE	.....	.....	6	.....	8cks	.....	NW	0	0	Misty	P. F. Denza.
Valdobbia	21.83	554.6	.....	.....	21.0	— 6.1	95	E	.....	.....	6	.....	10	.....	.....	0	0	Covered	

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	30.26	768.6	30.27	768.8	35.5	1.9	79	NNE	7.0	3.1	.....	.....	9cs	W	.....	0	0	Fair	K. Sasaki.
Kioto	30.06	763.5	30.25	768.3	30.0	— 1.1	79	.....	.....	.....	.....	.....	6cs;s	.....	W	0	0	Fair	.....
Nagasaki, I. M. Obs'y	30.07	763.8	30.29	769.3	37.9	3.3	85	Calm	0	0	.....	.....	10cs	.....	.....	0	0	Cloudy	S. Takehayashi.
Tokei Obs'y, Yeddo	30.06	763.6	30.13	765.3	33.7	0.9	58	NNW	2.5	1.1	.....	9cs	0	WNW	.....	0	0	Cloudy	The Staff.
Wakayama	30.20	767.1	30.24	768.1	35.7	2.1	74	E	3.8	1.7	.....	.....	10cs;s	W	W	0	0	Cloudy	S. Iwahashi.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.77	756.1	29.96	761.0	80.5	26.9	78	WNW	6.0	2.7	.....	.....	8	.....	Var.	.....	.....	Showery	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Leon	24.40	619.6	30.35	770.9	38.5	3.6	83	N	.....	.....	2	1c	4k	W	.....	0.098	2.5	Fair	Prof. M. Leal.
Mazatlan	29.77	756.1	30.03	762.8	61.0	16.1	71	E	1.6	0.8	.....	0	0	.....	.....	0	0	Light haze	F. Quijano, C. E.
Mexico, Central Obs'y	.....	.....	.....	.....	38.8	3.8	51	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	The Staff.
Pabellon, Aguascalientes	23.85	605.9	30.05	763.4	31.1	— 0.5	100	Calm	.....	.....	.....	.....	10	.....	.....	0.06	1.5	Snowing	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.28	59[illegible]	30.27	768.8	41.0	5.0	42	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.08	611.7	30.19	766.8	37.4	3.0	64	WSW	0.9	0.4	.....	0	0	.....	.....	0	0	Clear	G. Barroeta, M. D.
Tlacotalpam	29.93	760.2	29.94	760.5	63.3	17.4	88	N	15.5	6.9	.....	2	2	S	SW	0.083	2.1	Clear	Prof. M. Cházaro.
Zacatecas	22.23	566.9	30.12	765.1	30.2	— 1.0	.....	.....	0	0	.....	0	0	.....	.....	0	0	Fine	J. A. Bonilla, M. E.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	29.17	740.8	29.17	740.8	43.3	6.3	.....	WSW	.....	.....	8	.....	.....	.....	.....	0.106	2.7	.....	
Groningen	28.89	733.7	28.94	735.1	38.3	3.5	.....	SW	.....	.....	3	.....	.....	.....	.....	0.189	4.8	.....	
Helder	28.96	735.5	28.96	735.5	39.2	4.0	.....	WSW	.....	.....	4	.....	.....	.....	.....	0.256	6.5	.....	
Hellevoetsluis	29.10	739.2	29.10	739.2	41.4	5.2	96	WSW	.....	.....	6	.....	.....	.....	.....	0	0	.....	
Utrecht	29.03	737.4	29.08	738.6	43.0	6.1	94	SW	.....	.....	6	.....	10	.....	.....	0.882	22.4	Dull	H. van der Brink

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

NORWEGIAN SERIES.

Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.

Bergen	29.15	740.5	29.22	742.1	32.4	0.2	57	Calm	0	0			5			0.024	0.6		
Christiania	29.34	745.2	29.50	749.2	17.4	— 8.1	85	NE	9	4			10			0.008	0.2	Snowing	
Gjæsvær	29.85	758.1	29.87	758.7	11.1	—11.6		Calm			0		9						
Lodingen	29.78	756.0	29.81	757.2	16.3	— 8.7	58	NE			4		0			0	0		

PORTUGUESE SERIES.

Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Angra, Azores	30.19	765.8	30.35	770.8	59.7	15.4	85	WSW	7.4	3.3			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.30	744.1	30.31	769.9	57.9	14.4	76	W	2.5	1.1			3			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.23	767.8	30.32	770.1	65.7	19.3	63	SW	6.3	2.8			5			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.03	762.8	30.40	772.1	58.6	14.8	64	NNE	18.3	8.2			2			0	0		The Staff.
Ponta Delgada, Azores	30.34	770.6	30.41	772.4	60.1	15.6	73	S	7.4	3.3			10			0.028	0.7		

RUSSIAN SERIES.

Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.

Akmolinski	29.52	749.8	30.76	781.2	— 4.7	—20.4	80	SW	13	6			10					Light clouds	Capt. Lasarew.
Archangel	29.44	747.8	29.46	748.3	— 0.8	—18.2	81	NW	18	8			8ks					Snow-drift.	Capt. Ssellwerstow.
Astrakhan	30.27	768.9	30.19	766.8	32.2	0.1	92	SE	11	5			10n			Blank		Heavy clouds	Capt. Wisganow.
Barnaul	30.19	766.8	30.76	781.4	— 1.5	—18.6	68	SW	9	4			5						Meteorological Obs'y.
Dorpat	29.80	757.0	30.07	763.8	15.3	— 9.3	87	ESE	7	3			9k						Observatory.
Ekaterinburg	29.09	738.9	30.12	765.1	18.1	— 7.7	33	WSW	22	10			10					Light clouds	Meteorological Obs'y.
Kasan	29.70	754.3	29.99	761.7	13.1	—10.5	91	S	16	7			10					Light snow.	Observatory.
Kertch	29.88	758.9	29.91	759.7	47.8	8.8	91	S	4	2			3						Lagorio.
Kieff	29.30	744.3	29.97	761.2	33.1	0.6	89	E	2	1			10n						Cand. Fatjanow.
Lugan	29.73	755.1	29.94	760.5	35.1	1.7	84	SE	9	4			8					Light clouds	Meteorological Obs'y.
Moscow	29.57	751.0	30.17	766.2	12.2	—11.0	55	N	7.8	3.5			1k						Meteorological Obs'y.
Nertchinsk	27.47	697.8	30.03	762.8	— 7.6	—22.0	83	Calm	0	0			10					Snowing	Meteorological Obs'y.
Nikolaiev	29.91	759.8	29.98	761.6	32.0	0.0	100	N	9	4			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.60	751.7	29.68	753.9	— 4.0	—20.0	47	Calm	0	0			0						Lieut. Iwanow.
Nukuss	30.40	772.2	30.65	778.5	30.9	— 0.6	85	ENE	6.7	3.0			0						Dr. Dobrochotow.
Pekin, China	29.97	761.2	30.11	764.8	27.3	— 2.6	42	Calm	0	0			4k						Physical Observatory.
St. Petersburg	30.08	764.1	30.10	764.5	5.4	—14.8	73	Calm	0	0			4cs;s					Light clouds	Central Physical Obs'y.
Tashkend, Laboratory	28.97	735.9	30.68	779.2	25.2	— 3.8	91						2						Teich, A. M.
Tiflis	28.80	731.4	30.24	768.1	49.3	9.6	62	E	2	1			10						Physical Observatory.
Warsaw	29.26	743.1	29.69	754.2	33.8	1.0	68	SSE	18	8			10ks					Light clouds	Astronomical Obs'y.
Wilna	29.48	748.8	29.92	760.0	25.5	— 3.6	75	SE	2	1			10					Heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.09	764.2	30.41	772.5	— 6.2	—21.2	74	SW	11	5			10					Light clouds	M. O. Marks.

SCOTTISH SERIES.

Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.

Leith, Restalrig Park			29.01	736.8	43.0	6.1	75	W			2		0			0.01	0.3	Fine	Andrew Gibb.
Monach Lt. House, Hebrides			29.03	737.3	46	7.8	92	W			3	10	5	NW		0	0	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds			28.89	733.8				E			7		10			Blank			Robert Burnet.

SPANISH SERIES.

Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.

Barcelona, Met. Obs'y	29.96	761.0	30.07	763.7	55.4	13.	83	SSE	4.3	1.9			1			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.21	767.4	30.27	768.8	60.3	15.7	80	NW	1.6	0.7		2	6	NW		0	0	Almost cov'd	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.30	693.3			49.6	9.8	76	SW	3.8	1.7		3	4	N		0	0	Cloudy	Domingo Mantiny Perez
Madrid, Royal Obs'y	28.03	711.9	30.30	769.7	51.8	11.0	77	S	2.2	1.0		0	6			0.008	0.2	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	30.02	762.4	30.16	766.1	73.2	22.9	48	WNW	3.1	1.4		2	2	S		0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.41	746.9	30.31	769.8	57.9	14.4	79	SW	5.6	2.5			6			0.047	1.2	Cloudy	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.98	761.6	30.05	763.3	67.7	19.8	74	E	9.4	4.2		2ck	1s	S		0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.96	761.1	30.02	762.4	80.6	27.0	75	SE	2.2	1.0		7ck			W	0	0	Very cloudy	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.21	767.2	30.30	769.7	61.2	16.2	79	NW	9.4	4.2		0	1		N	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.96	761.0	30.05	763.3	70.9	21.6	64	N	10.6	4.76		4k	1k	N	N	0	0	Cloudy	Enrique Gades, Chief Engineer.
Tuguegarao, Philippine Ids	29.92	759.9	30.06	763.6	78.9	26.1	74	SSE	3.4	1.5			9ks		ESE	0	0	Covered	José L. Fastovra.

SWEDISH SERIES.

Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.

Haparanda	29.89	759.2	29.93	760.2	0.	—17.8	100	N			2		0			0	0		
Umea	29.88	758.9	29.93	760.2	— 1.1	—18.4	77	Calm			0		9			0.051	1.3		
Hernosand	29.80	757.0	29.85	758.3	— 5.6	—20.9	79	NNE			2		10			0	0		
Stockholm	29.50	749.3	29.68	753.8	25.9	— 3.4	78	SE			6		10			0	0		
Wisby	29.54	750.3	29.60	751.8	26.6	— 3.0	87	SE			4		10					Snowing	
Sub-Series.																			
Upsala	29.59	751.6	29.68	753.8	22.5	— 5.3	89	ESE	2.9	1.3			10			0.030	0.77		Nils Ekholm.

SWISS SERIES.

Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.

Geneva	28.45	722.5	29.88	759.0	49.5	9.7	55	S			4		7			0.252	6.4	Cloudy	The Observatory.
Zurich	28.11	714.0	29.79	756.6	43.2	6.2	67	W			7		7			1.142	29.0	Raining	The Observatory.

At Geneva the corresponding departures from the normal values are: Bar. —4.2 mm.; Ther. +6°.8 cent.; Hum. —19 per cent.

TURKISH SERIES.

Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.

Constantinople			29.94	760.4	43.2	6.2	96	N	16	7.0			10		N	0	0		The Observatory.
Valona			29.81	757.2	59.9	15.5		NW			1		0			0	0	Clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.85	758.2	70.5	21.4	53	W			1		0			0.350	8.9		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instru-m'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force o—10	CLOUDS. Amount and kind. Up'er o—10	Lo'er o—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.56	776.2	30.66	778.7	21	— 6.1	57	E	2	0.9			10s		Calm	0	0	Cloudy	
Alpena, Michigan	29.43	747.5	30.10	764.5	32	0.0	89	SE	13	5.8			10s		Calm	0	0	Threatening	
Atlanta, Georgia	29.06	738.1	30.24	768.1	42	5.6	91	E	16	7.2			1cn		Calm	1.07	27.2	Light rain	
Atlantic City, New Jersey	30.62	777.7	30.63	778.0	31	— 0.6	89	E	10	4.5		5k	2s	Calm	Calm	0	0	Fair	
Attou Id., Alaska ‡	29.30	744.2			34	1.1	61	SE	28	12.5			10s		E	0	0	Cloudy	
Augusta, Georgia	30.15	765.8	30.35	770.9	50	10.0	93	SE	5	2.2			10s		E	0.06	1.5	Cloudy	
Baltimore, Maryland	30.56	776.2	30.61	777.5	30	— 1.1	78	NE	4	1.8		10cs;ck	o	NE;N		0	0	Cloudy	
Barnegat, New Jersey	30.60	777.2	30.63	778.0	31	— 0.6	89	E	9	4.0		10cs	Haze	Calm	Calm	0	0	Cloudy	
Benton, Montana	26.98	685.3			28	— 2.2	77	W	7	3.1			10s		Calm	0	0	Cloudy	
Bismarck, Dakota	27.84	707.1	29.69	754.1	16	— 8.9	83	NW	6	2.7		Haze	8s		Calm	0.05	1.3	Cloudy	
Boise City, Idaho	27.03	686.5	29.99	761.7	33	0 6	79	NW	4	1.8		o	o			0.09	2.3	Clear	
Boston, Massachusetts	30.49	774.4	30.66	778.7	24	— 4.4	74	Calm	o	o		10cs	o	W		o	o	Cloudy	
Brackettville, Texas	28.80	731.5	29.91	759.7	30	— 1.1	89	N	1	0.4		o	o			o	o	Clear	
Brownsville, Texas	29.91	759.7	29.96	761.0	52	11.1	73	NW	4	1.8		10ck	o	Calm		o	o	Cloudy	
Buffalo, New York	29.56	750.8	30.28	769.1	38	3.3	81	SE	7	3.1			10s		Calm	o	o	Cloudy	
Burlington, Vermont	30.28	769.1	30160	777.2	27	— 2.8	76	S	14	6.3		8ck	o	NW		o	o	Fair	
Cairo, Illinois	29.64	752.8	30.04	763.0	47	8.3	85	SE	6	2.7			10s		SE	0.01	0.3	Threatening	
Campo, California	27.42	696.5	29.99	761.7	30	— 1.1	89	E	3	1.3			10s		Calm	o	o	Cloudy	
Camp Thomas, Arizona	27.10	688.3			35	1.7	70	Calm			o	o	2s		Calm	o	o	Clear	
Cape Henry, Virginia	30.53	775.4	30.55	776.0	39	3.9	91	NE	13	5.8			10ks		Calm	o	o	Cloudy	
Cape May, New Jersey																			
Castroville, Texas	29.19	741.4	29.82	757.4	34	1.1	79	NW	2	0.9		o	2s		Calm	o	o	Fair	
Cedar Keys, Florida	30.11	764.8	30.13	765.3	60	15.6	88	E	15	6.7		1c	o	Calm		o	o	Clear	
Champaign, Illinois	29.14	740.1	29.96	761.0	41	5.0	91	S	9	4.0			1on		S	0.32	8.1	Light rain	
Charleston, S. Carolina	30.33	770.4	30.39	771.9	51	10.6	83	NE	8	3.6			1on		Calm	0.15	3.8	Light rain	
Charlotte, N. Carolina	29.56	750.8	30.42	772.7	41	5.0	82	NE	8	3.6			10s		SE	o	o	Cloudy	
Chattanooga, Tennessee	29.33	745.0	30.14	765.5	48	8.9	85	S	4	1.8			1on		SE	1.31	33.3	Light rain	
Cheyenne, Wyoming	23.69	601.7	29.63	752.6	33	0.6	42	W	10	4.5			10s		Calm	o	o	Cloudy	
Chicago, Illinois	29.26	743.2	29.95	760.7	42	5.6	83	S	8	3.6			1on;fg		Calm	0.81	20.6	Light rain	
Chincoteague, Virginia	30.56	776.2	30.58	776.7	33	0.6	89	E	15	6.7		1c	5s	SW	E	o	o	Fair	
Cincinnati, Ohio	29.51	749.5	30.17	766.3	45	7.2	84	SE	6	2.7			1on;fg		Calm	1.32	33.5	Light rain	
Cleveland, Ohio	29.47	748.5	30.22	767.6	39	3.9	82	S	15	6.7			1on		S	0.03	0.8	Light rain	
Coleman City, Texas	28.14	714.7	29.88	758.9	31	— 0.6	69	SW	4	1.8		o	o			o	o	Clear	
Columbus, Ohio	29.34	745.2	30.21	767.3	39	3.9	91	SE	7	3.1			1on		Calm	0.53	13.5	Light rain	
Concho, Texas	28.01	711.4	29.78	756.4	26	— 3.3	88	Calm	o	o		o	o			o	o	Clear	
Corsicana, Texas	29.53	750.0	30.02	762.5	37	2.8	71	Calm	o	o		o	o			o	o	Clear	
Davenport, Iowa	29.26	743.2	29.91	759.7	38	3.3	100	S	9	4.0			1on;fg		Calm	0.07	1.8	Light rain	
Dayton, Washington T'y	28.19	716.0	29.91	759.7	31	— 0.6	79	Calm	o	o		o	o			o	o	Clear	
Deadwood, Dakota	24.95	633.7			28	— 2.2	77	S	3	1.3		o	o			0.04	1.0	Clear	
Decatur, Texas	28.76	730.5	29.97	761.2	35	1.7	80	E	3	1.3		o	o			o	o	Clear	
Delaware Breakwater, Del.	30.57	776.5	30.60	777.2	30	— 1.1	89	E	14	6.3			10ks		Calm	o	o	Cloudy	
Denison, Texas	29.17	740.9	29.99	761.7	33	0.6	79	W	1	0.4		o	o			Inap.	Inap.	Clear	
Denver, Colorado	24.45	621.0	29.67	753.6	28	— 2.2	66	SE	1	0.4		o	o			o	o	Clear	
Des Moines, Iowa	29.01	736.8	29.93	760.2	27	— 2.8	76	W	4	1.8		o	2s		Calm	0.19	4.8	Clear	
Detroit, Michigan	29.43	747.5	30.14	765.5	40	4.4	100	S	15	6.7			1on		Calm	0.17	4.3	Light rain	
Dodge City, Kansas	27.17	690.1	29.55	750.6	22	— 5.6	58	SE	4	1.8		o	o			o	o	Clear	
Dubuque, Iowa	29.18	741.1	29.89	759.2	36	2.2	90	S	4	1.8			10s		Calm	0.09	2.3	Cloudy	
Duluth, Minnesota	28.94	735.1	29.62	752.3	34	1.1	79	NE	15	6.7			10s		NE	0.41	10.4	Cloudy	
Eagle Pass, Texas	29.31	744.5	30.06	763.5	41	5.0	65	N	1	0.4		o	o			o	o	Clear	
Eagle Rock, Idaho	25.10	637.5	29.75	755.6	15	— 9.4	82	SW	5	2.2		o	o			0.20	5.1	Clear	
Eastport, Maine	30.55	776.0	30.62	777.7	24	— 4.4	61	NW	1	0.4		5c	o	Calm		o	o	Fair	
Edinburg, Texas																			
El Paso, Texas	26.04	661.4			35	1.7	80	N	1	0.4		o	1s		Calm	0.04	1.0	Clear	
Erie, Pennsylvania	29.47	748.5	30.21	767.3	37	2.8	71	SE	24	10.7		10cs	o	Calm		o	o	Cloudy	
Escanaba, Michigan	29.21	741.9	29.87	758.7	34	1.1	90	SE	15	6.7			1on		Calm	0.38	9.7	Light rain	
Florence, Arizona	28.39	721.1	29.99	761.7	42	5.6	58	SW	3	1.3		o	o			o	o	Clear	
Fort Apache, New Mexico	24.86	631.4	30.31	769.9	30	— 1.1	57	E	3	1.3		o	5s		Calm	o	o	Fair	
Fort Assinniboine, Montana	26.95	684.8			19	— 7.2	69	NE	12	5.4			10s		Calm	o	o	Cloudy	
Fort Bennett, Dakota	28.11	714.0			16	— 8.9	66	SE	5	2.2			10s		Calm	0.01	0.3	Cloudy	
Fort Buford, Dakota	27.71	703.8	29.64	752.8	18	— 7.8	84	NW	4	1.8			10s		SW	0.02	0.5	Cloudy	
Fort Custer, Montana	26.51	673.3			28	— 2.2	100	N	12	5.4			1n		Calm	0.03	0.8	Heavy snow	
Fort Davis, Texas	25.00	635.0	29.96	761.0	30	— 1.1	78	W	4	1.8		o	5s		Calm	o	o	Fair	
Fort Elliott, Texas	27.07	687.6	29.43	747.5	26	— 3.3	52	N	4	1.8		o	o			o	o	Clear	
Fort Gibson, Indian T'y	29.40	746.7	29.97	761.2	30	— 1.1	89	Calm	o	o		o	o			0.10	2.5	Clear	
Fort Grant, Arizona	25.02	635.5	29.82	757.4	45	7.2	24	NW	14	6.3		o	2s		Calm	o	o	Clear	
Fort Griffin, Texas	28.56	725.4	29.88	758.9	29	— 1.7	78	Calm	o	o		o	o			o	o	Clear	
Fort Keogh, Montana	27.18	690.4			23	— 5.0	86	SW	10	4.5			10s		Calm	o	o	Cloudy	
Fort McKavett, Texas	27.67	702.8	29.70	754.4	25	— 3.9	75	W	7	3.1		o	o			o	o	Clear	
Fort Macon, North Carolina	30.46	773.7	30.47	773.9	45	7.2	84	NE	19	8.5			10s		Calm	o	o	Cloudy	
Fort St. Michaels	30.31	769.9	30.35	770.9	— 8	—22.2	100	NE	5	2.2		o	o						
Fort Missoula, Montana	26.64	676.6			28	— 2.2	88	S	2	0.9			10s		Calm	o	o	Cloudy	
Fort Shaw, Montana	26.18	665.0			29	— 1.7	89	W	12	5.4			1on		Calm	Inap.	Inap.	Light snow	
Fort Sill, Indian Territory	28.68	728.5	29.83	757.7	31	— 0.6	79	Calm	o	o		o	o			o	o	Clear	
Fort Stevenson, Dakota	27.81	706.4			16	— 8.9	83	N	4	1.8			10ks		N	0.02	0.5	Cloudy	
Fort Verde, Arizona					34	1.1	79	SW			1		1cs		SW	o	o	Cloudy	
Fredericksburg, Texas	28.19	716.0	29.80	756.9	34	1.1	70	N	4	1.8		o	o			o	o	Clear	
Galveston, Texas	29.91	759.7	29.95	760.7	51	10.6	86	N	17	7.6			10s		Calm	o	o	Cloudy	
Grand Haven, Michigan	29.33	745.0	29.09	761.7	43	6.1	83	SE	13	5.8			10s		Calm	0.54	13.7	Cloudy	
Hatteras, North Carolina	30.44	773.2	30.46	773.7	41	5.0	82	NE	16	7.2		2c	o	Calm		o	o	Fair	
Helena, Montana	25.57	649.5			28	— 2.2	11	SW	16	7.2			10s		Calm	o	o	Cloudy	
Henrietta, Texas	28.92	734.6	29.90	759.4	31	— 0.6	79	Calm	o	o		o	o			o	o	Clear	
Indianapolis, Indiana	29.27	743.4	30.06	763.5	43	6.1	92	SE	5	2.2			1on		Calm	1.46	37.1	Light rain	
Indianola, Texas	29.95	760.7	29.98	761.5	47	8.3	70	N	16	7.2		o	2s		Calm	Inap.	Inap.	Fair	
Jacksboro, Texas	28.77	730.7	29.95	760.7	33	0.6	70	W	2	0.9		o	o			o	o	Clear	
Jacksonville, Florida	30.18	766.6	30.22	767.6	61	16.1	77	E	16	7.2		2cs	8s	Calm	SE	Inap.	Inap.	Cloudy	
Keokuk, Iowa	29.28	743.7	29.95	760.7	37	2.8	90	W	6	2.7			10s		Calm	0.15	3.8	Cloudy	
Key West, Florida	30.06	763.5	30.10	764.5	71	21.7	75	SE	20	8.9		8k	o	SE		0.01	0.3	Cloudy	
Kittyhawk, North Carolina	30.52	775.2	30.54	775.7	39	3.9	82	NE	20	8.9		8ck	o	Calm		o	o	Cloudy	
Knoxville, Tennessee	29.14	740.1	30.16	766.1	48	8.9	78	NE	5	2.2			10s		SW	0.06	1.5	Cloudy	
La Crosse, Wisconsin	29.11	739.4	29.86	758.4	33	0.6	70	SW	16	7.2			10s		SW	0.12	3.0	Cloudy	
La Mesilla, New Mexico	25.92	658.4	30.07	763.8	34	1.1	79	Calm	o	o		o	o			Inap.	Inap.	Clear	
Laredo, Texas	29.54	750.3	29.89	759.2	44	6.7	84	Calm	o	o		o	o			o	o	Clear	
Leavenworth, Kansas	29.06	738.1	29.94	760.5	28	— 2.2	77	SW	2	0.9		o	o			0.06	1.5	Clear	
Lewiston, Idaho	29.15	740.4	29.81	757.2	33	0.6	69	SW	1	0.4		2k	o	SW		0.01	0.3	Clear	
Little Rock, Arkansas	29.64	752.8	29.96	761.0	49	9.4	93	Calm	o	o			10s;fg		Calm	0.02	0.5	Cloudy	
Los Angeles, California	29.64	752.8	30.01	762.2	53	11.7	86	SW	4	1.8		o	2s		Calm	o	o	Fair	
Louisville, Kentucky	29.50	749.3	30.07	763.8	46	7.8	92	E	6	2.7			1on		Calm	1.16	29.5	Light rain	
Lynchburg, Virginia	29.81	757.2	30.54	775.7	36	2.2	71	NE	2	0.9			10s		Calm	o	o	Cloudy	
Madison, Wisconsin	28.87	733.3	29.86	758.4	38	3.3	91	S	10	4.5			Fog		Calm	0.24	6.1	Light fog	
Marquette, Michigan	29.08	738.6	29.80	756.9	35	1.7	90	S	16	7.2			10s		Calm	Inap.	Inap.	Cloudy	
Mason, Texas	28.30	718.8	30.14	765.5	31	— 0.6	79	NW	6	2.7		o	o			o	o	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.66	753.4	30.00	762.0	48	8.9	100	E	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Milwaukee, Wisconsin	29.19	741.4	29.93	760.2	38	3.3	100	S	9	4.0	.....	.....	Fog	.....	.....	0.27	6.9	Dense fog	
Mobile, Alabama	29.83	757.7	29.91	759.7	60	15.6	88	E	8	3.6	.....	.....	10s	.....	Calm	1.61	40.9	Cloudy	
Montgomery, Alabama	29.85	758.2	30.08	764.0	54	12.2	93	SE	14	6.3	.....	.....	10n	.....	Calm	1.81	46.0	Light rain	
Moorhead, Minnesota	28.58	725.9	29.56	750.8	25	— 3.9	94	W	10	4.5	.....	.....	10s	.....	W	0.14	3.6	Cloudy	
Morgantown, W. Virginia	29.29	744.0	30.32	770.1	43	6.1	59	SE	12	5.4	.....	.....	10s	.....	SW	0	0	Cloudy	
Mt. Washington, N. H.	24.09	611.9	30.45	773.4	24	— 4.4	61	SW	10	4.5	.....	10c	0	SW	.....	0	0	Cloudy	
Nashville, Tennessee	29.52	749.8	30.06	763.5	49	9.4	93	E	3	1.3	.....	.....	10n	.....	SE	0.65	16.5	Light rain	
New Haven, Connecticut	30.54	775.7	30.66	778.7	22	— 5.6	43	Calm	0	0	.....	5cs	Sm'e	Calm	Calm	0	0	Fair	
New London, Connecticut	30.63	778.0	30.68	779.3	22	— 5.6	72	N	4	1.8	.....	1cs	1s	Calm	Calm	0	0	Fair	
New Orleans, Louisiana	29.82	757.4	29.88	758.9	57	13.9	94	NE	7	3.1	.....	.....	10s	.....	Calm	0.12	3.0	Cloudy	
Newport, Rhode Island	30.61	777.5	30.66	778.7	28	— 2.2	66	N	3	1.3	.....	7k	Haze	N	.....	0	0	Fair	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	30.63	778.0	30.67	779.0	29	— 1.7	78	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
New York, New York	30.48	774.2	30.67	779.0	29	— 1.7	89	E	2	0.9	.....	2cs	5s;fg	Calm	Calm	0	0	Fair	
Norfolk, Virginia	30.48	774.2	30.54	775.7	41	5.0	74	E	8	3.6	.....	2ck	2s	NE	Calm	Inap.	Inap.	Fair	
North Platte, Nebraska	26.82	681.2	29.54	750.3	12	—11.1	90	W	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Olympia, Washington T'y	29.85	758.2	29.89	759.2	35.5	1.9	95	S	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Omaha, Nebraska	28.72	729.5	29.88	758.9	18	— 7.8	68	SW	4	1.8	.....	0	8s	.....	Calm	0.15	3.8	Fair	
Oswego, New York	30.04	763.0	30.38	771.6	31	— 0.6	69	SE	16	7.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Pensacola, Florida	29.92	760.0	29.95	760.7	57	13.9	94	NE	18	8.0	.....	.....	10n	.....	NE	4.72	119.9	Light rain	
Philadelphia, Pa	30.59	777.0	30.65	778.5	24	— 4.4	87	NE	6	2.7	.....	10cs	Fog	Calm	Calm	0	0	Cloudy	
Phœnix, Arizona	28.77	730 7	30.62	777.7	41	5.0	82	E	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.39	441.7	29.60	751.8	— 4	—20.0	63	NE	34	15.2	.....	2c	2s	N	Calm	0	0	Fair	
Pilot Point, Texas	29.18	741.2	30.07	763.8	32	0.0	89	W	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Pioche, Nevada	23.85	605.8	29.62	752.3	28	— 2.2	66	N	1	0.4	.....	0	0	.....	.....	0.02	0.5	Clear	
Pittsburg, Pennsylvania	29.48	748.8	30.32	770.1	40	4.4	56	E	5	2.2	.....	.....	10n	.....	SE	0	0	Cloudy	
Port Huron, Michigan	29.47	748.5	30.15	765.8	37	2.8	90	S	12	5.4	.....	.....	10n	.....	Calm	0.18	4.6	Light rain	
Portland, Maine	30.57	776.5	30.03	778.0	25	— 3.9	75	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Portland, Oregon	29.81	757.2	29.89	759.2	37	2.8	95	SE	5	2.2	.....	.....	10s	.....	SE	0	0	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	45	7.2	84	NE	19	8.5	.....	5k	0	Calm	.....	0	0	Fair	
Prescott, Arizona	24.60	624.8	29.96	761.0	42	5.6	34	S	6	2.7	.....	.....	10s	.....	S	0	0	Cloudy	
Punta Rassa, Florida	30.08	764.0	30.10	764.5	64	17.8	73	E	14	6.3	.....	5c	0	SW	.....	0	0	Fair	
Red Bluff, California	29.60	751.8	29.94	760.5	52.5	11.4	93	S	8	3.6	.....	.....	10s	.....	Calm	0.37	9.4	Cloudy	
Rio Grande City, Texas	29.79	756.7	30.01	762.2	51	10.6	72	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Rochester, New York	29.70	754.4	30.35	770.9	37	2.8	90	SW	4	1.8	.....	.....	10n	.....	Calm	Inap	Inap.	Light rain	
Roseburg, Oregon	29.40	746.7	29.97	761.2	41	5.0	91	E	1	0.4	.....	.....	10n	.....	Calm	0.09	2.3	Light rain	
Sacramento, California	29.95	760.7	30.02	762.5	53	11.7	93	SE	7	3.1	.....	.....	10s	.....	Calm	0.34	8.6	Cloudy	
St. Louis, Missouri	29.38	746.2	29.96	761.0	43	6.1	93	S	4	1.8	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
St. Paul, Minnesota	28.87	733.3	29.72	754.9	30	— 1.1	89	SW	4	1.8	.....	.....	10s	.....	SW	0.56	14.2	Cloudy	
Salt Lake City, Utah	25.49	647.4	29.82	757.4	32	0.0	50	Calm	0	0.	.....	0	0	.....	.....	0.04	1.0	Clear	
San Antonio, Texas	29.29	744.0	30.02	762.5	37	2.8	81	N	1	0.4	.....	0	1s	.....	Calm	0	0	Fair	
San Diego, California	29 95	760.7	30.02	762.5	54	12.2	87	E	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Sandusky, Ohio	29.47	748.5	30.16	766.1	42	5.6	83	S	19	8.5	.....	.....	10n	.....	Calm	0.25	6.3	Light rain	
Sandy Hook, New Jersey	30.62	777.7	30.66	778.7	25	— 3.9	62	Calm	0	0	.....	8cs	Haze	Calm	Calm	0	0	Cloudy	
San Francisco, California	29.96	761.0	30.02	762.5	56	13.3	97	NW	1	0.4	.....	.....	10n;fog	.....	Calm	0.30	7.6	Light rain	
Santa Fé, New Mexico	22.98	583.7	29.52	749.8	30	— 1.1	57	N	8	3.6	.....	0	Haze	.....	.....	0	0	Dense haze	
Savannah, Georgia	30.23	767.8	30.32	770.1	54	12.2	87	E	12	5.4	.....	.....	10ks	.....	E	0.21	5.3	Cloudy	
Shreveport, Louisiana	29.73	755.1	29.98	761.5	45	7.2	84	NW	4	1.8	.....	0	10s	.....	Calm	0	0	Cloudy	
Silver City, New Mexico	24.08	611.6	30.34	770.6	37	2.8	71	W	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Smithville, North Carolina	30.41	772.4	30.44	773.2	48	8.9	85	NE	13	5.8	.....	.....	10s	.....	SE	0	0	Cloudy	
Socorro, New Mexico	25.18	639.6	29.24	742.7	42	5.6	74	NW	5	2.2	.....	0	5s	.....	NW	0	0	Fair	
Springfield, Illinois	29.29	744.0	29.97	761.2	42	5.6	91	S	6	2.7	.....	.....	10n;fg	.....	Calm	0.07	1.8	Light rain	
Springfield, Massachusetts	30.53	775.4	30.68	779.3	16	— 8.9	66	Calm	0	0	.....	0	Haze	.....	Calm	0	0	Clear	
Stockton, Texas	29.81	681.0	29.81	757.2	32	0.0	79	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	28.66	728.0	29.47	748.5	24	— 4.4	100	NW	12	5.4	.....	.....	10n	.....	Calm	0.15	3.8	Light snow	
Thatcher's Island, Mass	30.60	777.2	30.66	778.7	32	0.0	79	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Toledo, Ohio	29.45	748.0	30.15	765.8	42	5.6	83	E	12	5.4	.....	.....	10n	.....	Calm	0.51	13.0	Light rain	
Tucson, Arizona	27.43	696.7	29.98	761.5	40	4.4	39	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.61	752.1	30.13	765.3	24	— 4.4	100	W	1	0.4	.....	.....	Fog	.....	Calm	0	0	Dense fog	
Uvalde, Texas	29.01	736.8	29.87	758.7	33	0 0	70	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Vicksburg, Mississippi	29.72	754.9	29.98	761.5	49	9.4	93	E	6	2.7	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Visalia, California	29.64	752.8	30.01	762.2	53	11.7	93	SE	3	1.3	.....	.....	10s	.....	SE	0.23	5.8	Cloudy	
Washington, D. C.	30.47	773.9	30.60	777.2	27	— 2.8	70	NE	4	1.8	.....	5ck	Fog	SW	Calm	0	0	Fair	
Wickenburg, Arizona	.....	.....	.....	.....	35	1.7	53	N	.....	.....	1	1c	1s	Calm	Calm	0	0	Clear	
Wilmington, N. Carolina	30.40	772.1	30.46	773.7	47	8.3	85	NE	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Winnemucca, Nevada	25.49	647.4	29.85	758.2	33	0.6	89	S	6	2.7	.....	0	2ks	.....	SW	0.59	15.0	Clear	
Wood's Holl, Mass	30.62	777.7	30.66	778.7	29	— 1.7	67	Calm	0	0	.....	2c	8s	NW	NW	0	0	Cloudy	
Yankton, Dakota	28.49	723.6	29.90	759.4	4	—15.6	74	Calm	0	0	.....	0	0	.....	.....	0.04	1.0	Clear	
Yuma, Arizona	29.71	754.6	29.85	758.4	50	10.0	65	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.09	561.1	.....	.....	49.0	9.4	81	Calm	0	0	.....	2c;cs	0	.....	.....	0	0	Fair	Thomas Herran.
Buff Bay Town, Jam ica‡	29.86	758.4	30.18	766.6	69	20.6	95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Havana, Cuba, W. I	30.01	762.2	30.06	763.5	70	21.1	71	SE	2.4	1.1	.....	2cs	0	SW	.....	0	0	Fair	Charles Hasselbrink.
Jakobshavn, Greenland	29.82	757.4	29.88	758.9	— 1.8	—18.8	.....	W	.....	.....	2	.....	0	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I	30.01	762.2	30.02	762.5	71.8	22.1	84	Calm	0	0	.....	0	0	.....	.....	0	0	.....	Robert Johnstone.
Navassa, W. I	29.91	759.7	29.99	761.7	73.5	23.1	81	N	2.5	1.1	.....	5k	2s	E	N	0	0	Fair	F. M. Everett.
Paramaribo, S. A	29.95	760.7	29.95	760.7	75	23.9	90	NE	.....	.....	1	3c	4k	E	.....	0	0	Clear	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.47	748.5	30.03	762.7	76	24.4	94	Calm	.....	.....	0	.....	.....	.....	.....	0	0	Dense fog	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	71.6	22.	.....	S	.....	.....	0	0	10ks	.....	S	0	0	.....	Earl Flint.
Santiago de Cuba, W. I	30.04	763.0	30.06	763.5	71	21.7	60	NNE	3.6	1.6	.....	0	0	.....	.....	0	0	Clear	Robert Mason.
St. Thomas, W. I	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	29.94	760.4	30.00	762.0	— 0.4	—18.	.....	Calm	.....	.....	0	.....	1	.....	.....	0	0	.....	K. Elberg.
York Factory, B. A	30.30	769.0	30.36	771.1	--32.0	—35.6	.....	NW	22	9.8	.....	3k	1s	NW	NW	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.91	759.7	60	15.6	71	N			3		1							Blue sky	Capt. Lord Walter Kerr.
H. M. S. Antelope, N. 39° 55′, E. 26° 09′	29.96	761.0	49	9.4		NE			2–3		10	NE				Sm'h		D. clouds	Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 27° 09′, E 56° 16′	30.28	769.1	76	24.4	68	SSE			2		1	NE						Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			45	7.2		N			1–2		10					1	N	Misty	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.83	757.7	80	26.7	73	S			1		3	S				2	S	D. clouds	Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 27° 27′, E. 121° 04′	30.11	764.8	57	13.9	87	NE			1		9							D. clouds	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.19	766.8	56	13.3	75	NNE			6–7		3	N						Squally	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 18° 29′, W. 77° 57′	30.03	762.7	78	25.6	78	E			3–4		5	E				3	E	Showery	Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J.Garforth.
H. M. S. Egeria, Singapore, Malay Peninsula	29.90	759.4	81	27.2		NE			2		10	SE				2	E	Misty	Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter, Shanghai, China	30.21	767.3	45	7.2	88	Calm			0		0							Blue sky	Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.91	759.7	84	28.9	54	WNW			2		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 2° 20′, W. 80° 40′	29.98	761.5	82	27.8	79	NW			0–1		5	N				0–1	Sw'l	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.54	750.3				SW			2									D. clouds	Capt. L. F. Jones.
H. M. S. Griffin, N. 18° 36′, W. 62° 12′	29.92	760.0	73	22.8	90	NNW			6		3	NNW				6	NNW	Squally	
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P.Fitzgerald.
H. M. S. Iris, Treiste, Austria	29.84	757.9	40	4.4	100	Calm			0		10	ENE						Overcast	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 149° 57′	30.24	768.1	62	16.7	88	NE			1		5	NE						D. clouds	Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Zanzibar, Africa	29.85	758.2	82	27.8	87	ENE			2		3	N		Blank		1	N	D. clouds	Capt. C. J. Brownrigg.
H. M. S. Magpie																			Capt. R. H. Napier.
H. M. S. Malabar, N. 36° 20′, E. 13° 40′	29.95	760.7	61	16.1	77	NW			6–7		9	NW				7	NW	Squally	Capt. J. F. G. Grant.
H. M. S. Minotaur, Vigo, Spain	30.37	771.4	56.5	13.6	90	NNW			2		9	NW						Showery	Capt. H. Rawson.
H. M. S. Modeste, N. 5° 24′, E. 100° 20′	29.97	761.2	82	27.8	79	SW			1–2		2							D. clouds	Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron. C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 12° 09′, W. 61° 53′	29.90	759.4	77	25.0	91	NW			3		0							Blue sky	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, Clarence Bay, Africa	29.92	760.0	81.5	27.5	89	SSE			2		6	SE				2	NW	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.92	760.0	84	28.9	98	N			2-3		5							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Spain	30.38	771.6	62	16.7	66	NNE			2-3		3	NNE						D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.62	752 3	77	25.0	86	SE			2 3		1k					3	SE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	30.04	763.0	70	21.1	95	S			2		8	SE				1	S	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, N. 36° 49′, E. 11° 24′	29.95	760.7	60	15.6	71	NNW			6		7					6	NNW	Squally	Capt. P. H. Colomb.
H. M. S. Triumph, S. 17° 25″ W. 75° 15′	30.03	762.7	76	24.4	79	NE			3		2					1	NE	D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.02	762.5	74	23.3		N			1		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, Palestine	30.18	765.6	69.5	20.8	52	S			1-2		1	S						Blue sky	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Bulama, Senegambia	29.88	758.9	80.6	27.0	90	NW			1		4							D. clouds	S. C. da Silva Costa, Comd't.
Sado, S. 6° 08′, E. 12° 09′	29.88	759.0	82.9	28 3	75	W			3		4		W			2	W	D. clouds	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡ N. 39° 40′, E. 14° 15′						WNW			4										Com. Th. Ulner.

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

UNITED STATES NAVAL SERIES.

By authority of the Secretary of the Navy.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

N. Yard, Pensacola, Fla	29.81	757.2	63	17.2	83	E	10	4.5			10		E	3.81	95.8			Cloudy	
N. Yard, Portsmouth, N. H.	30.64	778.2	22	— 5.6	86	Calm	0	0		10c		NW		0	0			Cloudy	
Naval Hospital, Yokohama, Japan	29.97	761.2	38.5	3.6	45	N			3		5		W	0	0			Fair	
Adams, S. 8° 05′, W. 79° 34′	29.98	761.5	75	23.9	90	NW			1		10		NW			Sm'h	SW	Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	29.96	761.0	54	12.2	93	Calm			0		5		S	0.2	5.			Fair	
Alert, Hong-Kong, China *	30.05	763.3	64	17.8	83	E			1		10		Calm			Sm'h		Drizzling	
Alliance, N. 28° 42′, W. 87° 50′	29.92	760.0	66	18.9	100	NNW			2		10			Hea	vy	Mod.		Cloudy	
Ashuelot, Tientsin, China	30.13	755.3	32	0.0	90	E			1		0							Clear	
Colorado, New York, N. Y.	30.64	778.2	27	— 2.8	100	Calm	0	0			5k			0	0			Hazy	
Constitution, N. Yard, League I'd., Pa			23	— 5.0		Calm	0	0			8							Hazy	
Franklin, Norfolk, Va	30.49	774.4	40	4.4	73	SSE	6	2.7			10		SE	0	0			Overcast	
Galena, Villafranca, France	29.76	755.9	55	12.8	56	SW			2		0					Sm'h		Clear	
Independence, N. Yard, Mare I'd, Cal.	30.02	762.5	54	12.2	93	SW	1.2	0.5			8		SW	0.02	0.5			Cloudy	
Jamestown, Sitka, Alaska *	29.52	749.8	40	4.4	91	SE			3		10			0	0			Cloudy	
Kearsarge, N. 28° 40′, W. 87° 20′	29.94	760.5	66	18.9	94	NE			5		10		NE			R'gh	E	Cloudy	
Lackawanna, Callao, Peru †.	30.14	765.5	72	22.2	90	Calm			0		5			0	0			Fair	
Marion, Sandy P't, Terra del Fuego	29.60	751.8	48	8.9	70	SSE			1		8		Calm	0	0	Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	30.14	765.5	37	2.8		S	9	4.0			10		S					Cloudy	
Minnesota, New York, N. Y.	30.66	778.7	31	— 0.6		NE			1		10		S					Foggy	
Monocacy, Shanghai, China	30.21	767.3	45	7.2	84	Calm			0		0							Clear	
New Hampshire, Port Royal, S. C.	30.28	769.1	51	10.6	93	NE	9	4.0			0			0.03	0.8			Clear	
Nipsic, N. 43° 17′, E. 5° 14′	29.96	761.0	54	12.2	74	NW			4		2					Sm'h		D. clouds	
Onward, Callao, Peru †.	29.97	761.2	70	21.1	95	SSE			2		8					Long	W	Cloudy	
Palos, Shanghai, China	30.29	769.4	44	6.7	92	SSE			1		0							Clear	
Passaic, Washington, D. C.	30.64	778.2	27	— 2.8	88	NE			1		8		NE					Cloudy	
Pensacola, N. 11° 04′, W. 87° 22′	30.00	762.0	77	25.0	82	Calm			0					0	0	Long	S	Hazy	
Portsmouth, Washington, D. C.	30.60	777.2	27	— 2.8	100	NE			2		8							Cloudy	
Powhatan, New York, N. Y.	30.65	778.5	24	— 4.4	100	Calm			0		5							Hazy	
Quinnebaug, Villafranca, France	29.73	755.1	57	13.9	47	W			1		2		Calm			Sm'h		Fair	
Richmond, Hong-Kong, China	30.19	756 8	63	17.2	89	ENE			2		8		ENE	0	0			Cloudy	
Saratoga, Baltimore, Md	30.64	778.2	29	— 1.7	100	NE			1		8		W	0	0			Fair	
Shenandoah, Montevideo, Uruguay *	29.89	759.2	77	25.0	53	NNW			3		5					Sm'h		Fair	
St. Louis, League Island, Pa	30.66	778.7	23	— 5.0	100	NE	3	1.3			8		E	0	0			Cloudy	
Swatara, Nagasaki, Japan †	30.18	766.6	44	6.7	76	NNE			1		2					Sm'h		Hazy	
Tennessee, N. 20° 52′, W. 84° 25′	29.98	761.5	80	26.7	96	ESE	26	11.6			5		Calm	1.01	25.6	Mod.	SE	Fair	
Ticonderoga, N. Yard, Mare Id., Cal.	30.02	762.5	54	12.2	100	S			1		2		Calm	0	0			D. clouds	
Trenton, Villafranca, France *	29.73	755.1	61	16.1	45	SW			2		0			0	0	Sm'h		Clear	
Vandalia, Port of Spain, Trinidad, W. I	29.93	760.2	77	25.0	86	NNW			1		2		N					Fair	
Wabash, Boston, Massachusetts	30.71	780.0	22	— 5.6	72						8		NW	0	0			Misty	
Wachusetts, Panama, Panama *	29.61	752.1	76	24.4	91	Calm			0		0					Sm'h		Clear	
Wyoming, Villafranca, France	29.74	755.4	57	13.9	75	S			2		2		S			Mod.	SSE	Clear	

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

BRITISH MERCHANT-MARINE SERIES.

Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.

S. S. Algeria																		Capt. W. Gill.
Barque Astarte																		Capt. G. F. Parson.
Ship Baroda, ‡																		
S. 9° 20′, W. 14° 40′	29.97	761.2	80.9	27.2	80	ESE		4		9							Misty	Capt. C. J Russell.
S. S. Bateshire																		Capt. John Arbuckle
Barque Belleisle,																		
N. 20° 16′, W. 34° 50′	30.03	762.7	73.5	23.1	76	ESE		4		8							D. clouds	Capt. A. J. Brown.
British Merchant. ‡																		Capt. E. J. Molony.
Chin Yang, ‡																		
N. 13° 29, W. 41° 42′	29.89	759.2	79.2	26.2	70	E		4		4							D. clouds	Capt. H. Youlden.
S. S. Cipero																		Capt W. N. Lailey.
City of Agra, ‡																		
S. 24° 22′, W. 29° 06′	30.12	765.0	84.7	29.3	68	NNE		2		4							D. clouds	Capt. T. Young.
Barque Commewyne, ‡																		
N. 31° 45′, W. 55° 14′	29.58	751.3	57.8	14.3	78	NNE		9		10							Drizzling	Capt. W. Scott.
Barque Coppename																		Capt. A. Buchan.
Denbighshire																		Capt. H. Y. Murdock.
Barque Dochra, ‡																		
S. 16° 07′, W. 60 21′	30.02	762.5	84	28.9	60	SE		3		3							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart,																		
N. 11° 38′, E. 91° 58′	29.97	761.2	78.5	25.8	74	NE		4		0							Blue sky	Capt. J. E. C. Patterson.
Barque Elissa																		Capt. A. Watson.
S. S. Ethiopia, ‡																		
N. 42° 28′, W. 59° 17′	30.54	775.7	35	1.7	100	NNE		4		3					3	NNE	D. clouds	Capt. A. Campbell.
S. S. Fleurs Castle																		Capt J. Kidder.
Barque Gem																		Capt. H. Park.
S. S. Gordon Castle																		Capt. W. Waring.
Barque Harvest Home																		Capt. H. H. Williams.
Barquentine Hope ‡																		Capt. Jas. Campbell.
Ship Iron Cross																		Capt. W. Randall.
S. S. Kangaroo																		Capt. A. Kellett.
Krfolith																		Capt. Alex. Wilson.
S. S. Lamperts																		Capt. G. H. Jones.
Laomene																		Capt. W. P. Hughes.
Ship Lochee ‡																		Capt. J. Raeburn, R.N.R.
S. S. Lusitania																		Capt. C. A. F. Powell.
Majestic																		Capt. W. Ellery.
Barque Markland, ‡																		
N. 20° 22′, W. 51° 26′	29.65	753.1	72.5	22.5	76	W		7		9							Overcast	Capt. H. W. Dyke.
Barque Merlola,																		
N. 37° 00′, W. 9° 03′	30.35	770.9	57.2	14.0	91	N		6		1							Blue sky	Capt. E. W. Turner.
Nairnshire																		Capt. W. Niven.
S. S. Nizam																		Capt. G. W. Brady.
Queen of Cambria																		Capt. M. Parry.
S. S. Richmond																		Capt. W. H. Stuart.
Barque Shun Lee, ‡																		
N. 5° 19′, W. 23° 10′	29.91	759.7	82.3	27.9	89	N		3		3					Slt	S	D. clouds	Capt. John M. Gray.
S. S. Seine																		Capt. H. Manning.
S. S. Strathleven ‡																		Capt. C. W. Pearson.
Sch'r. Traveller																		Capt. A. Simpson.
S. S. Wyberton,																		
N. 34° 13′, E. 21° 12′	29.69	754.1	60	15.6	82	ESE		2		4							Showery	Capt. R. J. Blacklin.
S. S. Yorkshire,																		
N. 40° 30′, E. 5° 50′	30.08	764.0	56	13.3	81	W		5		10					4	NW	Overcast	
ALLAN LINE.																		
A. Schumacher & Co.																		
S. S. Hibernian																		Capt. F. Archer.
S. S. Nova Scotian																		Capt. Wm. Richardson.
CUNARD LINE.																		
Ch. G. Francklyn.																		
S. S. Algeria																		Capt. W. Watson.
S. S. Bothnia																		
S. S. Scythia																		Capt. W. H. P. Hains.
WHITE STAR LINE.																		
Ismay, Imrie & Co.																		
S. S. Adriatic																		Capt. J. W. Jennings.
S. S. Baltic																		Capt. H. Parsell.
S. S. Britanic,																		
N. 41° 21′, W. 53° 43′ †	30.39	771.9	41	5.0		NNE		6		10		NE			Mod.	NE	D. clouds	Capt. H. Perry.
S. S. Celtic																		Capt. Benj. Gleadell.
S. S. Germanic,																		
N. 47° 56′, W. 36° 13′ †	29.69	754.1	51	10.6		NNE		5		10		N	Showers		Mod.	NE	Misty	Capt. Ch. W. Kennedy.
S. S. Republic,																		
N. 48° 31′, W. 32° 32′ *†	29.75	755.9	57	13.9	94	SSW		4		10		SW	10 hours Drizzles		Mod.	N	Cloudy	Capt. B. I. Irving.

GERMAN MERCHANT-MARINE SERIES.

NORTH GERMAN LLOYD—OF BREMEN.																		
A. Schumacher & Co.																		
S. S. Hermann																		Capt. H. Baur.
S. S. Köln, ‡																		
N. 49° 45′, W. 11° 53′	29.94	760.5	50.0	10.0		WNW		7-9		7		WNW	H'vy squalls	rain	H'vy	W	Fair	
S. S. Leipzig,																		
N. 46° 36′, W. 33° 10′	29.71	754.6	46.5	8.1	92	S		5		10		S	5 hours		Mod.	Var.	Raining	Capt. F. Pfeiffer.
S. S. Ohio																		Capt. G. Meyer.

SWEDISH MERCHANT-MARINE SERIES.

Barque Adolf Fredholm, ‡																		Capt. Albert Fredholm.
Ship Peru ‡																		Capt. O. F. Skotdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 50° 55′, W. 13° 11′	29.87	758.7	51	10.6	93	NNW			6		5?		W			H'vy	N	Clear?	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 49° 44′, W. 32° 35′ †‡	29.88	758.9	42	5.6	83	NE			3		8		E	0	0	Mod.	N	Cloudy	Capt. R. W. Sargent.
S. S. Ohio ‡																			Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, † Delaware Breakwater, Del.	30.53	775.4	31	— 0.6	89	SE			2		2		E	0	0	Sm'h		Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 29° 23′, W. 116° 40′ †‡	30.08	764.0	64	17.8	73	NW			4		8		NW	0	0	Mod.	WNW	Cloudy	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ Yokohama, Japan †	30.06	763.5	44	6.7	45	NNW			3		5		NE	0	0	Sm'h		Clear	Capt. H. Davison.
S. S. Gaelic, N. 35° 16′, E. 148° 20′ *†	30.07	763.8	49	9.4	96	NW			6		8		NW			High	NW	Raining	Capt. W. H. Kidley.
S. S. Oceanic, San Francisco, Cal.	29.98	761.5	56	13.3	87	SSE			1		8		S					Raining	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, Ft. Stevenson, Columbia R †	29.78	756.4	41	5.0	74	ENE			4		10		E					Light rain	Capt. Fred. Bolles
S. S. Oregon																			Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal. †	29.99	761.7	54	12.2	93	Calm			0		10		Calm					Rainy	Capt. J. N. Ingalls.
S. S. Idaho, Seattle, Wash. Ter. †	29.94	760.5	42	5.6	100	S			2		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba..																			
S. S. Senator, N. 36° 30′, W. 122° 15′ †	30.10	764.5	57	13.9	100	W			1		10		W			Sm'h		Drizzling	Thos. Wallace.
S. S. State of California, Portland, Oregon †	29.90	759.4	37	2.8	90	NE			3		8		E					Cloudy	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal. †	29.96	761.0	55	12.8	100	NW			1		10		Calm					Drizzling	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 7° 57′, W. 168° 07′	29.82	757.4	80	26.7	100	NW			2		8		N			Sm'h		Threatening	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W. †	30.10	764.5	73	22.8	95	ESE			2		0			0	0			Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Panama, Panama †	30.09	764.3	74	23.3	90	NW			1		0			0	0			Clear	Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China †	30.12	765.0	58	14.4	58	ESE			2		10		SW	0	0	Sm'h		Cloudy	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 37° 33′, W. 129° 39′ †	30.23	767.8	55	12.8	80	NNW			6		5		N			Long	W	Fair	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 24° 58′, W. 112° 48′ †	30.04	763.0	65	18.3	84	NW			3		0			0	0	Mod.	NW	Misty	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, N. 17° 00′, W. 100° 16′ †	29.88	758.9	70	21.1	70	WNW			3		0			0	0	Sm'll	WSW	Clear	
S. S. Zealandia, S. 34° 14′, E. 177° 06′	30.13	765.3	71	21.7	80	ESE			2		8		S			Sm'h	ESE	Cloudy	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland, ‡ N. 50° 32′, W. 0° 13′ †	29.48	748.8	49	9.4	71	WSW			9		5		W			H'vy	SW	Threatening	Capt. Sam'l Jackson.
S. S. Nederland, N. 48° 46′, W. 13° 04′ †	30.30	769.6	54	12.2		WNW			5		2		WNW	0	0	High	WNW	Fine	Capt. S. Stokes.
S. S. Rhynland, ‡ Antwerp, Belgium	29.17	740.9	48	8.9		WSW			7		10		WSW	0.4	10.			Rainy	Capt. W. Geo. Randle.
S. S. Vaderland ‡																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Jacksonville, Florida †	30.14	765.5	65	18.3		SE			2		10			⅓ ho	ur			Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va	30.52	775.2	40	4.4	82	E	7	3.1		2ck				0	0			Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, N. 20° 11′, W. 55° 34′ †	29.69	754.1	72	22.2		NW			7		8		W	Ra sqa	in ulls	H'vy Cross	WSW; NW	Raining	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 37° 35′, W. 0° 34′ †*	30.31	769.9	63	17.2		SW			3		0					Sm'h		Fair	Capt B. F. Woodbury.
Brigantine George, ‡ N. 22° 45′, W. 70° 05′ †	30.33	770.4	70	21.1		NNE			7		8		NE	Sho	wers	R'gh	NNE	Squally	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	30.54	775.7	41	5.0		ESE	1	0.4		2s	2s			0	0			Clear	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 35° 08′, W. 15° 06′ †	30.37	771.4	62	16.7	100	NE			6		8		NE	0	0	Mod.	NW	Clearing	Capt. Jos. Hand.

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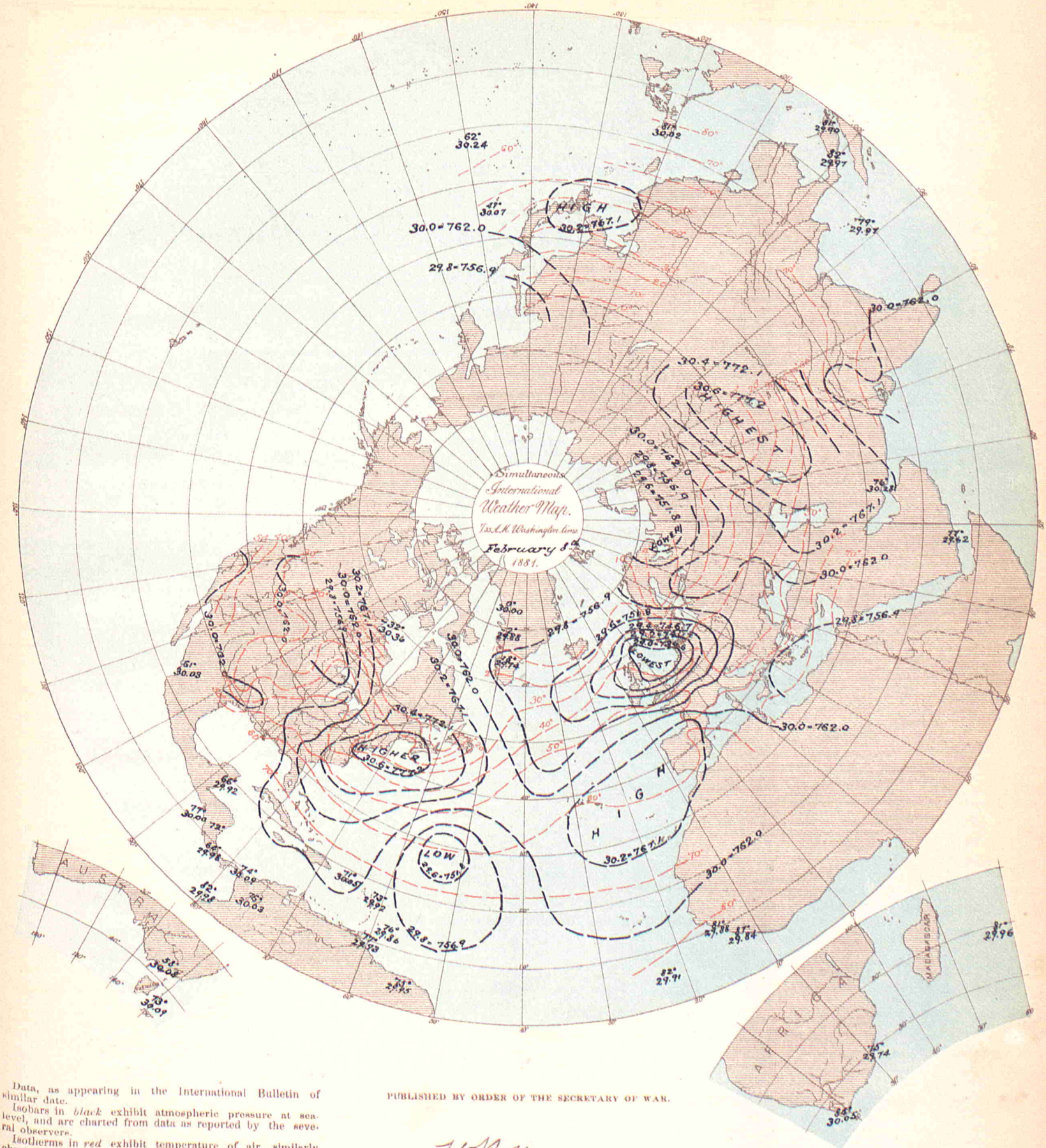
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 9, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.21	767.4	65.8	18.8	79	NE			2		2			0	0	Fair	Dr. Ollive.
Nemours			30.20	767.0	65.7	18.7	64	NW			3		0			0	0	Clear.	Raynard.
Algiers			30.16	766.0	62.6	17.0	72	W			4		2			0	0	Fair	Nicolas.
La Calle			30.08	763.9	58.6	14.8	85	NW			4		6			0	0	Cloudy	Fonfrède.
Tunis			29.97	761.3															Jacques.
Sfax			30.02	762.4															Gau.
Saida			30.21	767.3	64.8	18.2	37	NW			5		0			0	0	Clear	Dumas.
Tebessa			30.12	765.1	52.9	11.6	51	NW			4		5			0.012	0.3	Cloudy	Watrin.
Geriville																			Lonchamp.
Laghouat			30.16	766.1	67.6	19.8	46	WSW			3		0			0	0	Clear	Herbin.
Biskra			30.13	765.4															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.82	757.4	29.91	759.7	76.5	24.7	48	N	12	5.4		2				0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.50	749.3	77	25.0		NW			2		5ks			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.06	738.1	29.63	752.6	33.1	0.6	94	Ca'm			0		10			0	0	Foggy	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.73	729.7	29.50	749.3	42.8	6.0	76	WSW	4.3	1.9			10			0	0		Dr. Wiersbicki.
Eperies	28.66	728.0	29.56	750.8	35.6	2.0	85	S			1		n		N	0	0		Julius Mikolik.
Gratz‡	28.34	719.7	29.61	752.0	39.9	4.4	66	SW			1		3			0	0		Andreas Rospini.
Hermannstadt	28.08	713.1	29.53	750.0	36.7	2.6	89	S			2		10			0.126	3.20	Rain & snow	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.25	717.6	29.62	752.3	38.5	3.6	90	W			3		10			0.118	3.0		The Staff.
Lemberg	28.51	724.1	29.52	749.8	36.0	2.2	91	SE			1		10			0.067	1.7		Dr. T. Stanecki.
Pola	29.50	749.2	29.61	752.1	44.1	6.7	70	NW			4		0			0	0		I. R. Hydrographic Office
Szathmar	29.32?	744.7?	29.77?	756.1?	37.6	3.1	70	NW			2		10			0	0	Foggy	Beicht Peter, S. J.
Szegedin	29.30	744.2	29.59	751.5	34.3	1.3	98	Calm			0		10			0	0		Karl Stancel.
Trieste	29.68	753.9	29.78	756.5	37.4	3.0	72	WNW			1		5			0	0		P. Busin.
Vienna	28.84	732.6	29.56	750.9	41.9	5.5	71	W			4		10			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.44	747.8	29.64	752.9	42.6	5.9	73	W			4		10		WNW	0.303	7.7		Royal Observatory.
Furnes	29.62	752.3	29.64	752.9	42.4	5.8	79	NW			4		7			0.256	6.5	Light rain	M. E. de Cae.
Maeseyck	29.48	748.8	29.61	752.0	42.6	5.9	80	W			2		10			0.299	7.6		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 11, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.57	751.1	29.67	753.6	35.2	1.8	74	NW	11	4.9			7			0.585	14.86	D. clouds	W. Boswell.
Armagh, Observatory	29.39	746.5	29.63	752.6	41.7	5.4	83	SSE	8	3.6			10					Gloomy	S. Call.
Bidston, Liverpool Obs'y			29.69	754.1	41.2	5.1	75	SE	6	2.7			9					Overcast	John Hartnup.
Bolton, Sharples	29.12	739.6	29.66	753.4	37.7	3.2	88	NW					10					Overcast	Thomas Mackereth.
Bradford, Yorkshire	29.29	744.0	29.69	754.1	38.4	3.6	81	NE			1		8			0.78	19.8	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.86	758.4	29.90	759.4	78	25.6	69				3		2					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			29.72	754.9	42.6	5.9	78	NW			1.0		9					Overcast	John McLaren.
Chatham, School M. E.	29.62	752.3	29.75	755.6	43.1	6.2	69	NW			2		9					Gloomy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.53	750.0	29.76	755.9	46.5	8.1	94	S			3		10					Raining	The Staff.
Fort Napier, Natal	27.66	702.6	29.87	758.7	68.4	20.2	74	NE			1		8					Overcast	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	87	30.6	92	SE			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			29.38	746.2				SSW			5		10					Raining	J. O'Donaghadue.
Gibraltar, Mediterranean	30.16	766.1	30.21	767.3	63.6	17.6	92	NW			2		0					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.46	748.3	29.66	753.4	36.1	2.3	79	NE			2		10					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.57	751.1	29.75	755.6	43.0	6.1	69	NNW			2		4					D. clouds	The Staff.
Guernsey	29.60	751.8	29.82	757.4	47.5	8.6	89	SW			2		10					Raining	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.72	754.9	29.76	755.9	44.0	6.7	62	NNW	12	5.4			7					D. clouds	The Met'g'l Office.
Leicester, Museum	29.46	748.3	29.72	754.9	39.8	4.3	76	SW			2		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.54	750.3	29.62	752.3	54	12.2	74	NE			3		6					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas			30.10	764.5	71.0	21.7	59	E			3		10					Overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.20	741.7	29.74	755.4	41.5	5.3	76	WNW			1		10					Overcast	Robert Pate.
Oxford, Radcliffe Obs'y	29.50	749.3	29.76	755.9	45.0	7.2	74	NW			1		9					Misty	The Staff.
Plymouth	29.70	754.4	29.77	756.1	45.8	7.7	94	SW			2		10					Drizzling	John Merrifield.
Sandwick Manse, Orkneys			29.70	754.4	34.1	1.2	79	NE	9	4.0			10					Squally	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.42	747.3	29.48	748.8	48.0	8.9	85	N			1		8					D. clouds	Serg't W. H. Lyne.
Sheffield	29.44	747.8	29.73	755.1	39.3	4.1	87	E			1		10			0.88	22.4	Overcast	W. F. Cooper.
Silloth Rectory	29.65	753.1	29.68	753.9	40.8	4.9	73	W			2		4			0.384	9.75	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.70	754.4	39.5	4.2	78	SE	4	1.8			10					Misty	Rev. S. J. Perry.
Strathfield Turgiss	29.54	750.3	29.76	755.9	46.5	8.1	73	NW			1		9					D. clouds	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	29.62	752.3	29.68	753.9	53	11.7	93	W			7		10					Raining	W. Newcombe.
Valencia, Observatory	29.53	750.0	29.56	750.8	50.8	10.4	94	SW	28	12.5			10					Drizzling	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.30	769.6	30.34	770.6	27	— 2.8	89	S	5	2.2			10s			0	0	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	30.19	766.8	30.25	768.3	31	— 0.6	89	SW	8	3.6			10s		SW	0	0	Cloudy	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	30.11	764.8	30.14	755.5	34	1.1	90	S	10	4.5			10n			0	0	Cloudy.	J. McWilliams.
Fort Garry, Manitoba*	29.10	739.1	30.01	762.2	4	—15.6	100	SW	4	1.8		5k	5n	W	W	0.110	2.79	Cloudy	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.34	770.6	30.48	774.2	31	— 0.6	87	SW	3	1.3			10ks			0	0	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.86	758.4	30.20	767.1	36	2.2	92	S	6	2.7			10n		Calm	0.23	5.8	Light rain	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	30.02	762.5	30.23	767.8	34	1.1	98	S	12	5.4			10s			0.03	0.8	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	29.36	745.7	30.07	763.8	37	2.8	95	SE	4	1.8			10n		SE	0.39	9.9	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.41	747.0	30.12	765.0	39	3.9	100	Calm	0	0			10n			0.50	12.7	Threatening	H. Morgan.
Port Stanley, Ontario	29.43	747.5	30.10	764.5	38	3.3	98	E	6	2.7			10n		SE	0.89	22.6	Light rain	M. Payne.
Quebec, Quebec*	29.91	759.7	30.25	768.6	31	— 0.6	100	W			1		10n		W	0.02	0.5	Light rain	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.63	752.6	30.10	764.5	35	1.7	92	E	2	0.9			Fog			0	0	Foggy	K. Stewart.
Saugeen, Ontario*	29.31	744.5	30.04	763.0	37	2.8	100	S	11	4.9			10s			0.24	6.1	Cloudy	W. H. McIntyre.
St. Andrews	29.29	744.0	30.35	770.9	36	2.2	79	SW	5	2.2			10n			0	0	Cloudy	
St. John's, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.39	771.9	30.43	772.9	25	— 3.9	84	SW	6	2.7			10s			0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.74	755.4	30.14	765.5	35	1.7	100	E	3	1.3			Fog			0.34	8.6	Light rain	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.42	772.7	30.48	774.2	34	1.1	88	SW	5	2.2		10ks	0	W		0	0	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	30.29	769.4	30.56	776.2	20	— 6.7	85	NE	0	0		0	0			0	0	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			John Duthie.
Cape St. Francis Lt. House	29.99	761.7			69.5	20.8	89	S	22.4	10.0			2k			0	0	Fine	The Staff, for D. Gill.
Cape Town, C. G. H. Obs'y	29.87	758.7	29.91	759.7	76.5	24.7	59	SSW	21.9	9.8		0	0			0	0	Clear	
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.15	765.8	30.18	766.5	44.4	6.9	91	ESE	2.5	1.1			0			0	0	Clear	M. Marc Dechevrens, S J.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

COSTA RICA SERIES.

By authority of the MINISTER OF FOREIGN AFFAIRS.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.22	666.0	29.94	760.5	63.5	17.5	92	Calm			0		0			0	0	Clear	Federico Maison.

DANISH SERIES.

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

Copenhagen	29.26	743.1	29.30	744.3	32.9	0.5	83	N	13	6			9						Oversergent Fischer.
Fanöe	29.48	748.8	29.50	749.3	26.4	— 3.1	82	N			6		9						Overloerer Lauridsen.
Godthaab, Greenland	29.78	756.5	29.83	757.6	18.3	— 7.6	92	Calm			0		10					Snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.60	751.7	29.64	752.8	3.9	—15.6	90	E			7		2						A. O. Thorlacius.
Thorshavn,	29.77	756.1	29.80	757.0	36.0	2.2	70	ESE	13	6			10						Overloerer Bergh.
Vestervig	29.44	747.7	29.53	750.1	23.9	— 4.5		NNE			4		10						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.51	749.5	30.17	766.3	48.2	9	95	W			1		8		E			Light rain	M. Labroue, Director.
Alençon	29.41	747.0	29.96	761.0	47.5	8.6	92	SW			3		8n		SW	0.189	4.8	Very cloudy	M. Nicot, Director.
Arras, Engineer School	29.46	748.2	29.72	754.8	45.7	7.6	69	NW	17.7	7.9			k					Hazy	M. Klein, Commandant.
Avignon, Normal School	29.92	759.9	30.00	761.9	54.3	12.4	45	NW			2		5		NW	0	0	Cloudy	M. Giraud, Director.
Bar-sur-Seine	29.30	744.3	29.87	758.7	45.5	7.5	71	WNW			2		8		NW	0.362	9.2	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.55	750.5	29.82	757.4	48.6	9.2	61	W			2		8		W	0.020	0.50	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.02	737.0	29.93	760.2	42.8	6	85	W			3		10		W	1.10	28.	Covered	M. Gobin, Director.
Bordeaux, Observatory	29.87	758.8	30.14	765.6	50.2	10.1	96	NW			1		10		W	0.083	2.1	Covered	M. Rayet, Director.
Bourges, Normal School	29.37	746.0	29.93	760.2	48.2	9	75	WSW			1		n		WSW	0.138	3.5		M. Postel, Director.
Brest, Naval Observatory	29.69	754.0	29.93	760.2	51.1	10.6	97	WSW			2		10		WSW	0.039	1.00	Raining	M. de Rermaree, Dir.
Caen, Normal School	29.72	754.9	29.80	756.9	52.0	11.1	97	W			1		10			0.020	0.5	Covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.49	749.1	29.82	757.3	46.0	7.8	83	WSW			1		10		W	0.047	1.2	Covered	M. Jadot, Director.
Charleville, Normal School	29.19	741.4	29.74	755.4	44.6	7.0	80	N			3		8			0.118	3.0	¾ covered	M. Grimard.
Clermont-Ferrand Obs'y	28.63	727.1	30.01	762.2	45.7	7.6	69	WNW			2		10		NW	0.205	5.2	Light haze	M. Alluard, Director.
Cluny, Normal School	29.12	739.7	29.98	761.5	47.3	8.5	70	NW			3		7		S	0	0		M. de Villemontée, Dir.
Commercy, Normal School	28.92	734.5	29.80	756.9	42.1	5.6	88	W			6		n		W	0.307	7.8		Dr. Coulet, Director.
Gap, Normal School	27.37	695.1	29.95	760.6	42.4	5.8	70	SE			1		2		S	0.059	1.5	¾ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.82	732.1	29.97	761.1	50.0	10.0	42	NW			4		5		NW	6	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.21	741.8	29.95	760.7	44.6	7	60	N			1		10n		NE	0.705	17.90	Raining	M. Ablard, Director.
Guéret, Normal School	28.41	721.7	30.03	762.8	44.1	6.7	56	SW			4		10n		NE	0.47	12.	Raining	M. Rivoir, Director.
Lamballe, Normal School	29.61	752.1	29.90	759.4	45.5	7.5	97	W			6		10		W			Raining	M. Ollitrault, Director.
Lescar, Normal School	29.63	752.7	30.32	770.1	50.2	10.1	86	WSW			1		10			0.016	0.4	Covered	M. Chauvin, Director.
Lorient, Naval Observatory	29.87	758.6	29.97	761.2	50.0	10.0	97	W			2		10	W	WSW	0.079	2.0	Raining	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.93	734.7	29.99	761.7	35.6	2.0	59	WNW			1		8n		WNW	0.051	1.3	Very cloudy	M. André, Director.
Mans, Normal School	29.65	753.2	29.97	761.2	48.0	8.9	92	W			1		8		NW	0.087	2.2	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.69	754.0	29.96	760.9	54.1	12.3	52	NW			4		2		NW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.78	629.4	30.02	762.4	38.8	3.8	51	W	9.4	4.2			6		SSE	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.90	759.4	30.01	762.2	55.4	13	55	NW			6		5		NW	0	0	Cloudy	M. Galzin, Director.
Nancy, Normal School	29.00	736.7	29.79	756.6	42.4	5.8	82	SW			2		10kn		W	0.008	0.2	Covered	M. Hasse.
Nantes, Observatory	29.86	758.4	30.02	762.4	48.2	9	89	WSW			2		10		SW			Rainy	M. Larocque, Director.
Nice	29.65	753.0	29.68	753.8	59.0	15.0	30	N			8		1	NW	N	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.96	760.9	30.06	763.6	53.6	12.0	57	N	20.6	9.2			8		NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.54	572.4			22.3	—5.4							10		NW	0.142	3.6	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.91	734.3	29.98	761.6	49.6	9.8	44	NW			3		2n	NW	NW	0	0	Slightly cl'dy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.00	634.9			29.1	—1.6	100	W			8		10			0.854	21.7	Snow and fog	M. Alluard, Director.
Rochefort, Naval Obs'y	30.09	764.2	30.12	765.0	50.2	10.1	85	WSW			1		10		W	0.28	7.	Raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.85	758.1	30.06	763.6	48.6	9.2	89	SW			1		10					Light rain	M. Mouillot, Director.
Rodez, Normal School	27.88	708.1	30.08	764.0	40.3	4.6	87	W			3		9			0.331	8.4	Raining	M. Richard, Director.
Rouen, Normal School	29.74	755.3	29.82	757.4	47.8	8.8	63	N			2		2		NNW	0	0	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	29.75	755.6	29.91	759.6	46.2	7.9	75	W			3		10		W	0.04	1.	Raining	M. Delaplanche, Dir.
Saint Maur, Observatory	29.68	753.8	29.84	758.0	48.9	9.4	68	W			3		9		NW	0.047	1.2		M. Renou, Director.
Toulouse, Observatory	29.47	748.5	30.20	767.0	47.3	8.5	94	W			2		10			0.303	7.7	Sprinkling	M. Bailland, Director.
Tours	29.75	755.7	29.95	760.7	50.0	10.0	72	W			1		8		W	0.008	0.2	¾ covered	M. de Tastes.
Versailles, Observatory	29.39	746.6	29.81	757.1	48.2	9.0	63	NW			4					0.165	4.21		Dr. A. Bérigny, Director
SUB-SERIES.																			
Paris, Montsouris Obs'y																			M Marié Davy, Director

GERMAN SERIES.

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

Bamberg	28.71	729.2	29.56	750.8	41.0	5.0	73	S			5		8k	SW		0.177	4.5	Raining	Prof. Dr. Hoh.
Berlin	29.25	743.0	29.43	747.4	38.7	3.7	85	SW			2		10			0.102	2.6	Raining	Prof. Dr. Arndt.
Breslau	28.95	735.4	29.48	748.7	39.6	4.2	80	SW			1		10			0.020	0.50		Royal University Obs'y.
Carlsruhe	29.28	743.8	29.72	754.8	43.9	6.6	80	SW			3		10	SW		0.102	2.6	Raining	Albert Senz.
Cassel	28.89	733.8	29.49	749.0	40.5	4.7	84	W			2		8	W		0.362	9.20		Dr. H. Möhl.
Frankfort on the Main	29.34	745.1	29.71	754.5	43.2	6.2	78	WSW			2		9			0.055	1.4		Physical Society.
Friedrichshafen	28.35	720.2	29.82	757.3	41.0	5.0	84	SW			3		9	SW		0.209	5.3		Chief Telegrapher Wilhelm.
Hamburg	29.39	746.6	29.47	748.4	30.9	—0.6	72	NW			5		10			0.122	3.1		Dr. R. Kleeman.
Kiel	29.39	746.5	29.41	746.9	30.9	—0.6	93	WNW			3		10			0.040	1.03		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.09	738.8	29.51	749.6	42.8	6.0	75	SW			2		9	W		0	0		Prof. Dr. Bruhns.
Magdeburg	29.23	742.5	29.46	748.3	39.9	4.4	84	W			6		10ks	W		0.016	0.4		Dr. Assmann.
Memel	29.32	744.6	29.36	745.8	34.3	1.3	92	S			5		10n						Reinbrecht & Issermann.
Munich	27.85	707.5	29.70	754.3	35.8	2.1	84	W			5		10	W		0.039	1.0	Rain & snow	Central Station.
Neufahrwasser	29.32	744.7	29.34	745.1	37.8	3.2	83	SW			2		10			0.004	0.1		A Lothes.
Neustadt, Palatinate	29.11	739.4	29.63	752.6	43.7	6.5	79	W			4		10			0.217	5.5		Dicknether.
Stuttgart	28.75	730.3	29.66	753.3	42.4	5.8	76	W			2		10			0.268	6.8		Prof. Dr. Schoder.
Thorn	29.19	741.5	29.38	746.2	41.0	5.0	80	SW			4		7			0.004	0.1		Dr. O. Cunerth.
Weissenburg, Bavaria	28.16	715.3	29.66	753.3	38.3	3.5	90	W			6		10	W		0.114	2.9		Prof. Kemlein.
Wustrow	29.39	745.0	29.35	745.6	30.6	—0.8	96	W			5		10			0.091	2.3	Foggy	Profs. Brandes & Reimer.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.02	737.0	29.41	747.0	56.3	13.5		S			2.0		10					Covered	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.89	759.1	29.94	760.4	81.1	27.3	43	S	15.0	6.7			0			0	0	Blue sky.	
Deesa	29.39	746.6	29.86	758.5	87.1	30.6	10	WSW	6.2	2.8			0			0	0	Blue sky.	
Bombay	29.84	758.0	29.88	759.0	83.3	28.5	55	WNW	13.0	5.8			0			0	0	Blue sky.	
Poona, Yarrowda	28.02	711.7	29.86	758.4	85.8	29.9	11	NW	3.0	1.3			0			0	0	Blue sky.	
Belgaum	27.36	694.8	29.87	758.7	81.8	27.7	22	SW	2.0	0.9			0			0	0	Blue sky.	
Lahore	29.12	739.6	29.87	758.7	73.8	23.2	40	NE	1.7	0.8			2			0	0	Blue sky.	
Roorkee	29.00	736.7	29.92	759.9	73.8	23.2	40	Calm	2.6	1.2			2			0	0		
Agra	29.34	745.3	29.91	759.6	81.7	27.6	28	SE	2.8	1.2			0			0	0		
Nagpur	28.88	733.4	29.92	759.8	83.5	28.6	30	Calm	2.4	1.1			0			0	0	Blue sky.	
Jubbulpore	28.58	725.8	29.98	761.4	67.1	19.5	49	NE	1.4	0.6			0			0	0	Blue sky.	
Lucknow	29.57	751.0	29.94	760.6	79.4	26.3	29	Calm	0.3	0.1			0			0	0	Blue sky.	
Allahabad	29.63	752.6	29.95	760.7	73.8	23.2	47	Calm	0.9	0.4			0			0	0	Blue sky.	
Patna	29.83	757.7	30.02	762.4	73.2	22.9	57	W	0.7	0.3			6	W	W	0	0	D. clouds.	
Hazaribagh	27.91	709.0	29.96	760.9	71.0	21.7	30	NNW	4.2	1.9			1		W	0	0	D. clouds.	
Cuttack	29.89	759.2	29.97	761.3	78.6	25.9	43	Calm	0.1	0.04			0			0	0	Blue sky.	
Calcutta, Alipore	29.93	760.3	29.96	760.9	73.4	23.0	50	W	0.5	0.2			0			0	0	Blue sky.	
Goalpara	29.54	750.3	29.95	760.8	72.8	22.7	56	Calm	2.7	1.2			2	SW		0	0	D. clouds.	
Chittagong	29.88	759.0	29.98	761.4	73.6	23.1	59	W	4.9	2.2			0			0	0	Blue sky.	
Sibsagar	29.67	753.6	30.02	762.4	67.2	19.6	74	NE	2.3	1.0			2			0	0	Blue sky.	
ITALIAN SERIES. By authority of the MINISTER OF AGRICULTURE, INDUSTRY AND COMMERCE. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.24	742.7	29.66	753.4	41.4	5.2	56	Calm	0	0			9			0.008	0.2		Prof. Giovanni Clodig
Milan	29.12	739.7	29.66	753.3	39.7	4.3	75	SSW	8.7	3.9			2			0	0		Prof. Schiaparelli.
Padua	29.55	750.6	29.66	753.4	35.8	2.1	91	NNW	2.5	1.1			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.75	730.3	29.69	754.2	48.2	9.0	44	NW	16.3	7.3			0			0	0		Prof. P. F. Denza.
Genoa	29.50	749.2	29.69	754.1	54.0	12.2	65	SW	3.8	1.7			0			0	0		Prof. G. M. Garibaldi.
Mondovi	27.78	705.5	29.74	755.4	47.7	8.7	28	NE			2		0			0	0		Prof. D. C. Bruno.
Pesaro	29.61	752.1	29.66	753.4	41.0	5.0	81	NW	9.4	4.2			1	N		0	0		Prof. Luigi Guidi.
Florence	29.40	746.8	29.66	753.4	44.6	7.0	74	NE			2		3	S		0.024	0.6		Cav. F. Meucci.
Leghorn	29.57	751.1	29.65	753.2	48.9	9.4	76	WNW	5.8	2.6			3			0	0		Prof. P. Monte.
Rome	29.43	747.4	29.60	751.9	54.0	12.2	41	N	8.7	3.9			0			0	0		Prof. P. S. Ferrari.
Lecce	29.19	741.4	29.45	747.9	48.7	9.3	76	NW	21.7	9.7			5	NW		0.378	9.6		Prof. C. de Giorgi.
Cosenza	28.62	727.0	29.52	749.8	50.9	10.5	71	NNW	9.8	4.4			9	NW		0.327	8.3		Prof. D. Conti.
Cagliari	29.58	751.3	29.78	756.3	55.0	12.8	48	NW			6		9	N		0.016	0.4		Prof. A. Pacinotti.
Palermo	29.40	746.7	29.65	753.1	50.9	10.5	64	NW	8.1	3.6			9			0.370	9.4		Prof. G. Ciacciatore.
Syracuse	29.52	749.7	29.56	750.8	54.3	12.4	62	WNW	12.5	5.6			7	WNW		0	0		Prof. Vincenzo Guiliano
SUB-SERIES.																			
Naples, S. E.	29.04	737.6	29.56	750.9	51.4	10.8	59	WSW	2.5	1.1			0			0.287	7.3		Prof. F. Brioschi
Stelvio	21.96	557.7			17.8	— 7.9	80	NE			7		10n		NW	0	0	Misty	P. F. Denza.
Valdobbia	21.80	553.7			21.0	— 6.1	90	E			2		10			0	0	Covered	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.17	766.3	30.19	766.8	36.5	2.5	85	NNE	3.8	1.7			0			0	0	Clear	K. Sasaki.
Kioto	30.00	762.0	30.18	766.6	30.1	— 1.1	81						0			0	0	Clear	
Nagasaki, I. M. Obs'y	30.01	762.2	30.22	767.6	37.6	3.1	86	Calm	0	0			0			0	0	Clear.	S. Takehayashi.
Tokei Obs'y, Yeddo	30.06	763.5	30.13	765.3	38.7	3.7	90	SSE	3.5	1.6		0	0			0	0	Clear.	The Staff.
Wakayama	30.14	765.5	30.19	766.8	36.2	2.3	78	E	4.2	1.9			0			0	0	Clear.	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.74	755.4	29.92	760.0	81.5	27.5	61	SSE	6.5	2.9		0	4		S	0.34	8.6	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the SECRETARY of PUBLIC WORKS. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.36	618.8	30.28	769.2	40.5	4.7	84	N			1	0	0			0	0	Fair	Prof. M. Leal.
Mazatlan	29.75	755.7	30.02	762.4	63.0	17.2	70	NE	1.6	0.8		0	0			0	0	Light haze.	F. Quijano, C. E.
Mexico, Central Obs'y					39.2	4.0	45	Calm	0	0		0	0			0	0	Fine	The Staff.
Pabellon, Aguascalientes	23.79	604.2	29.91	759.6	38.1	3.4	67	NNW			1	0	0			0	0		M. V. de Leon, M. E.
Puebla, Catholic Institute	23.24	590.3	30.26	768.5	34.7	1.5	33	Calm	0	0		0	0			0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.24	615.7	30.28	768.9	48.7	9.3	58	WSW	0.9	0.4		0	0			0	0	Clear.	G. Barroeta, M. D.
Tlacotalpam	29.89	759.2	29.90	759.5	65.8	18.8	89	S	1.7	0.8			10		SW	0	0	Overcast	Prof. M. Cházaro.
Zacatecas	22.38	568.3	30.16	766.1	34.3	1.3	62	Calm	0	0		0	0			0	0	Fine	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.63	752.5	29.63	752.5	41.0	5.0		W			5					0.256	6.5		
Groningen	29.48	748.8	29.54	750.2	34.7	1.5		N			1					0.205	5.2		
Helder	29.54	750.3	29.54	750.3	33.4	0.8		NNE			4					0.350	8.9		
Hellevoetsluis	29.56	750.8	29.56	750.8	40.1	4.5	87	W			5					0	0		
Utrecht	29.52	749.7	29.56	750.9	39.7	4.3	92	W			2		10			0.130	3.3	Dull	H. van der Brink.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.54	750.2	29.60	751.8	27.3	— 2.6	58	E	1.1	0.5			0			0	0		
Christiania	29.49	749.0	29.65	753.0	19.9	— 6.7	65	N	11	5			5			0.012	0.3		
Gjæsvær	29.58	751.2	29.60	751.8	9.5	—12.5		SSE			6		10						
Lodingen	29.65	753.0	29.69	754.2	21.6	— 5.8	65	S			8		10			0.043	1.1		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.17	766.4	30.33	770 4	59.7	15.4	81	S	13.7	6.1			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.29	743.9	30.30	769.6	59.4	15.2	69	WNW	1.3	0.6			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.21	767.2	30.29	769.4	66.2	19.0	61	SE	8.1	3.6			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.01	762.3	30.38	771.6	58.3	14.6	56	NNE	8.7	3.9			0			0	0		The Staff.
Ponta Delgada, Azores	30.32	770.0	30.39	771.8	59.7	15.4	66	S	2.5	1.1			10			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.28	743.7	30.48	774.2	4.3	—15.4	77	SW	13	6			10					Light clouds	Capt. Lasarew.
Archangel	30.27	768.8	30.29	769.3	— 2.6	—19.2	80	S	2	1			10						Capt. Sœllwerstow.
Astrakhan	30.17	766.4	30.09	764.3	34.5	1.4	80	E	2	1			10cp					Heavy cl'ds	Capt. Wisganow.
Barnaul	29.97	761.2	30.52	775.3	7.0	—13.9	61	SW	4	2			7						Meteorological Obs'y.
Dorpat	29.38	746.2	29.63	752.7	21.9	— 5.6	93	SE	9	4			10n						Observatory.
Ekaterinburg	29.19	741.4	30.26	768.5	5.2	—14.9	62	W	11	5			10s;s					Light clouds	Meteorological Obs'y.
Kasan	30.12	765.0	30.42	772.7	3.9	—15.6	68	NNE	2	1			10s						Observatory.
Kertch	29.69	754.0	29.71	754.5	49.1	9.5	82	ESE	4	2			1						Lagorio.
Kieff	28.99	736.3	29.57	751.0	29.5	— 1.4	96	ESE	2	1			10					Foggy	Cand. Fatjanow.
Lugan	29.65	753.0	29.85	758.3	39.4	4.1	79	E	9	4			3					Light clouds	Meteorological Obs'y.
Moscow	29.51	749.5	30.11	764.8	10.6	—11.9	56	ESE	10.1	4.5			10s						Meteorological Obs'y.
Nertchinsk	27.76	705.2	30.30	769.6	2.1	—16.6	58	NW	11	5			8					Light clouds	Meteorological Obs'y.
Nikolaiev	29.60	751.8	29.67	753.6	33.6	0.9	92	NE	9	4			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.64	752.8	29.72	755.0	— 7.6	—22.0	77	Calm	0	0		10							Lieut. Iwanow.
Nukuss	30.10	764.4	30.34	770.5	39.2	4.0	48	SE	4.5	2.0			2s						Dr. Dobrochotow.
Pekin, China	30.38	771.6	30.52	775.2	25.3	— 3.7	23	NW	20	9			4cs						Physical Observatory.
St. Petersburg	29.84	757.8	29.85	758.2	14.5	— 9.7	58	SE	20	9			10s;n						Central Physical Obs'y.
Tashkend, Laboratory	28.80	731.5	30.49	774.5	26.6	— 3	87						10						Teich, A. M.
Tiflis	28.50	723.8	29.89	759.2	63.0	17.2	39	Calm	0	0			90s					Light clouds	Physical Observatory.
Warsaw	29.03	737.3	29.46	748.2	36.1	2.3	84	S	7	3			10ks						Astronomical Obs'y.
Wilna	29.13	739.9	29.56	750.9	34.0	1.1	83	SSE	7	3			10					Heavy cl'ds	Berg, Assistant.
Yeniseisk	29.81	757.1	30.12	765.0	10.9	—11.7	65	SW	11	5			10					Light clouds	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.72	754.9	37.2	2.9	73	NE			1		0			0	0	Fine	Andrew Gibb.
Monach Lt. House, Hebrides			29.70	754.4	39	3.9	91	SE			6		10			0	0	Overcast	J. Youngclause.
North Unst, Shetland Isl'ds			29.64	752.8				E			3		8			0	0		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.94	760.4	30.04	763.1	54.7	12.6	72	NE	4.5	2.0			0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.23	767.7	30.28	769 1	57.4	14.1	69	N	3.6	1.6			10			0.051	1.3	Covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.28	693.0			46.4	8.0	75	SW	3.6	1.6		0	1			0	0	Almost clear	Domingo Mantiny Perez
Madrid, Royal Obs'y	28.01	711.4	30.25	768.3	57.9	14.4	54	S	5.1	2.3		1	0			0	0	Light clouds	The Staff.
Murcia, Met. Obs'y ‡	30.00	762.1	30.15	765.9	71.4	21.9	32	NW	8.1	3.6		0	0			0	0	Clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.41	747.1	30.33	770.4	50.5	10.3	98	SW	0	0			10			0.012	0.3	Covered	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	29.91	759.8	29.98	761.5	70.0	21.1	72	ESE	10.7	4.8		2ck	4ks;n	SW		0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.91	759.8	29.97	761.1	82.4	28.0	71	ESE	3.1	1.4			1s			0	0	Fair	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.17	766.4	30.27	768.9	62.4	16.9	70	NW	10.7	4.8		0	0			0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.90	759.4	29.99	761.7	70.9	21.6	72	N	18.0	8.06		5ks	3kn	N	N	0	0	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.89	759.2	30.04	762.9	74.9	23.8	87	NW	6.3	2.8			9ks		NW	0	0	Covered	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.01	762.3	30.05	763.3	— 8.3	—22.4	100	N			2		0			0	0		
Umea	29.85	758.1	29.90	759.4	5.0	—15.0	100	NE			4		9			0	0		
Hernosand	29.78	756.5	29.84	757.8	9.9	—12.3	89	NNE			6		9			0.102	2.6		
Stockholm	29.26	743.3	29.42	747.8	15.6	— 9.1	91	NE			7		10			0.063	1.6	Snowing	
Wisby	29.14	740.2	29.20	741.7	33.8	1.0	96	SE			4		10			0.315	8.0	Snowing	
SUB-SERIES.																			
Upsala	29.42	747.2	29.50	749.4	15.1	— 9.4	94	NNE	13.7	6.1			10			0.058	1.47	Snowing	Nils Ekholm.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.49	723.6	29.95	760.6	43.9	6.6	57	SW			4		10			0.362	9.2	Covered	The Observatory.
Zurich	28.18	715.8	29.87	758.7	38.8	3.8	85	W			5		10			0.512	13.0	Raining	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —3.0 mm.; Ther. +3°.6 cent.; Hum. —16 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.54	750.2	47.3	8.5	88	NE	4	2.0			7		N	0.110	2.8	Raining	The Observatory.
Valona			29.43	747.6	46.0	7.8		NW			1		10			0	0	Covered	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.73	755.1	63.1	17.3	68	WNW			3		9n		WNW	0.02	0.5		Prof. C. V. A. van Dyck.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
UNITED STATES SERIES.																			
By authority of the SECRETARY OF WAR.																			
Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	30.28	769.1	30.37	771.4	41	5.0	82	S	4	1.8			10s		Calm	0.02	0.5	Cloudy	
Alpena, Michigan	29.33	745.0	29.99	761.7	33	0.6	100	SE	4	1.8			Fog		Calm	0.38	9.7	Light fog	
Atlanta, Georgia	28.67	728.2	29.79	756.7	56	13.3	93	E	16	7.2			1on		Calm	3.33	84.6	Light rain	
Atlantic City, New Jersey	30.39	771.9	30.40	772.1	38	3.3	91	SE	12	5.4		10k	0	SW		0	0	Cloudy	
Atton Id., Alaska	28.81	731.8			45	7.2	90	S	51	22.8			10s		SE	0.43	10.9	Cloudy	
Augusta, Georgia	29.84	757.9	30.04	763.0	57	13.9	100	SE	6	2.7			1on		Calm	0.46	11.7	Light rain	
Baltimore, Maryland	30.32	770.1	30.38	771.6	41	5.0	82	NE	3	1.3			10s		Calm	0	0	Cloudy	
Barnegat, New Jersey	30.37	771.4	30.40	772.1	36	2.2	90	SE	10	4.5		10ck	Haze	W	Calm	0	0	Cloudy	
Benton, Montana	27.20	690.4			25	— 3.9	100	NW	8	3.6			1on		Calm	0.03	0.8	Light snow	
Bismarck, Dakota	28.06	712.7	29.92	760.0	19	— 7.2	84	NW	8	3.6			10s		Calm	0	0	Cloudy	
Boise City, Idaho	27.08	687.8	30.04	763.0	29	— 1.7	89	NW	3	1.3			10s		Calm	0.05	1.3	Cloudy	
Boston, Massachusetts	30.28	769.1	30.44	773.2	34	1.1	79	S	2	0.9			10s		W	0	0	Cloudy	
Brackettville, Texas	28.55	725.2	29.62	752.3	42	5.6	74	E	1	0.4		0	0			0	0	Clear	
Brownsville, Texas																			
Buffalo, New York	29.40	746.7	30.11	764.8	43	6.1	83	SW	4	1.8			1on		Calm	0.08	2.0	Light rain	
Burlington, Vermont	30.00	762.0	30.30	769.6	38	3.3	81	S	14	6.3			10s		S	0.11	2.8	Cloudy	
Cairo, Illinois	29.29	744.0	29.67	753.6	52	11.1	100	NE	2	0.9			1on;fg			0.74	18.8	Light rain	
Campo, California	27.36	694.9	29.93	760.2	38	3.3	91	SW	5	2.2			10s		W	0.22	5.6	Cloudy	
Camp Thomas, Arizona	27.01	685.0			47	8.3	85	N			1		10ks		Calm	0.01	0.3	Cloudy	
Cape Henry, Virginia	30.34	770.6	30.36	771.1	47	8.3	92	SE	10	4.5			10s		Calm	0	0	Cloudy	
Cape May, New Jersey																			
Castroville, Texas	28.96	735.1	29.65	753.1	42	5.6	83	SW	2	0.9		0	0			0	0	Clear	
Cedar Keys, Florida	29.90	759.4	29.92	760.0	63	17.2	83	SE	28	12.5			10s		SE	0.09	2.3	Cloudy	
Champaign, Illinois	28.97	735.8	29.76	755.9	43	6.1	91	Calm	0	0			1on		NE	0.20	5.1	Light rain	
Charleston, S. Carolina	30.06	763.5	30.11	764.8	55	12.8	93	E	12	5.4		0	8s		E	0.03	0.8	Cloudy	
Charlotte, N. Carolina	29.25	742.9	30.08	764.0	50	10.0	93	E	16	7.2			10s		SE	0.09	2.3	Cloudy	
Chattanooga, Tennessee	28.99	736.3	29.77	756.1	56	13.3	87	SE	13	5.8			10ks		SE	1.25	31.7	Cloudy	
Cheyenne, Wyoming	23.79	604.3	29.73	755.1	14	—10.0	64	NW	8	3.6		0	0			0	0	Clear	
Chicago, Illinois	29.17	740.9	29.88	758.9	36	2.2	80	N	8	3.6			1on		Calm	0.13	3.3	Light rain	
Chincoteague, Virginia	30.36	771.1	30.38	771.6	38	3.3	100	SE	14	6.3		8k	Fog	SW	Calm	0	0	Cloudy	
Cincinnati, Ohio	29.27	743.4	29.92	760.0	48	8.9	85	E	4	1.8			1on		E	1.09	27.7	Cloudy	
Cleveland, Ohio	29.29	744.0	30.02	762.5	43	6.1	92	SE	18	8.0			1on		Calm	0.64	16.3	Light rain	
Coleman City, Texas	27.89	708.4	29.58	751.3	35	1.7	61	SW	8	3.6		0	0			0	0	Clear	
Columbus, Ohio	29.13	739.9	29.98	761.5	44	6.7	92	E	11	4.9			10n		E	0.94	23.9	Light rain	
Concho, Texas	27.76	705.1	29.45	748.0	39	3.9	73	W	8	3.6		0	0			0	0	Clear	
Corsicana, Texas	29.30	744.2	29.77	756.1	40	4.4	82	Calm	0	0		0	0			0	0	Clear	
Davenport, Iowa	29.22	742.2	29.89	759.2	26	— 3.3	75	NE	6	2.7		0	1s		Calm	0.01	0.3	Clear	
Dayton, Washington T'y	28.29	718.6	30.03	762.7	28	— 2.2	88	Calm	0	0			10s		Calm	0	0	Cloudy	
Deadwood, Dakota	25.07	636.8			18	— 7.8	68	N	1	0.4			10s		Calm	0.14	3.6	Cloudy	
Decatur, Texas	28.52	724.4	29.70	754.4	40	4.4	73	E	6	2.7		0	0			0	0	Clear	
Delaware Breakwater, Del.	30.34	770.6	30.37	771.4	40	4.4	91	SE	13	5.8			10s		Calm	0	0	Cloudy	
Denison, Texas	28.94	735.1	29.80	756.9	37	2.8	81	N	4	1.8		0	2s		Calm	0	0	Fair	
Denver, Colorado	24.60	624.8	29.82	757.4	24	— 4.4	61	SE	2	0.9			10s		Calm	0	0	Cloudy	
Des Moines, Iowa	29.00	736.6	29.93	760.2	23	— 5.0	86	SW	1	0.4		0	5s		Calm	0	0	Fair	
Detroit, Michigan	29.37	746.0	30.07	763.8	48	8.9	93	S	11	4.9			10n		Calm	0.65	16.5	Light rain	
Dodge City, Kansas	27.23	691.6	29.61	752.1	24	— 4.4	74	N	20	8.9		0	0			0	0	Clear	
Dubuque, Iowa	29.22	742.2	29.97	761.2	18	— 7.8	84	W	1	0.4		0	5s;fg		Calm	0	0	Fair	
Duluth, Minnesota	29.22	742.2	29.94	760.5	19	— 7.2	85	SW	1	0.4			10s		Calm	0	0	Cloudy	
Eagle Pass, Texas	28.96	735.6	29.71	754.6	40	4.4	82	W	1	0.4		0	0			0	0	Clear	
Eagle Rock, Idaho	25.08	637.0	29.72	754.9	0	—17.8	70	N	8	3.6		0	0			0	0	Clear	
Eastport, Maine	30.30	769.6	30.37	771.4	36	2.2	71	SW	9	4.0			10s		Calm	0	0	Cloudy	
Edinburg, Texas																			
El Paso, Texas	25.99	660.1			45	7.2	31	NW	8	3.6		0	1s		W	0	0	Clear	
Erie, Pennsylvania	29.34	745.2	30.06	763.5	44	6.7	84	S	20	8.9			1on		Calm	0.22	5.6	Light rain	
Escanaba, Michigan	29.30	744.2	29.98	761.5	27	— 2.8	88	Calm	0	0			10s		Calm	0.05	1.3	Cloudy	
Florence, Arizona	28.28	718.3	29.88	758.9	47	8.3	62	S	1	0.4			10ks		W	0	0	Threatening	
Fort Apache, New Mexico	24.75	628.6	30.20	767.1	32	0.0	69	NE	3	1.3			1on		Calm	0.01	0.3	Heavy snow	
Fort Assinniboine, Montana	27.13	689.1			20	— 6.7	70	SW	2	0.9			10s		Calm	0.02	0.5	Cloudy	
Fort Bennett, Dakota	28.31	719.1			20	— 6.7	85	NW	5	2.2			10s		Calm	0.41	10.4	Cloudy	
Fort Buford, Dakota	27.92	709.2	29.87	758.7	17	— 8.3	83	Calm	0	0			10s		Calm	0.04	1.0	Cloudy	
Fort Custer, Montana	26.74	679.2			21	— 6.1	81	N	2	0.9			1on		Calm	0.04	1.0	Cloudy	
Fort Davis, Texas	24.91	632.7	29.87	758.7	42	5.6	50	NW	4	1.8		0	0			0	0	Clear	
Fort Elliott, Texas	27.02	686.3	29.36	745.7	30	— 1.1	47	N	14	6.3		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.22	742.2	29.76	755.9	34	1.1	90	N	3	1.3			10s		N	0	0	Cloudy	
Fort Grant, Arizona	24.92	633.0	29.72	754.9	44	6.7	76	NW	4	1.8			10s		Calm	0	0	Cloudy	
Fort Griffin, Texas	28.30	718.8	29.58	751.3	37	2.8	71	SW	2	0.9		0	0			0	0	Clear	
Fort Keogh, Montana	27.44	697.0			21	— 6.1	85	Calm	0	0			10s		Calm	0	0	Cloudy	
Fort McKavett, Texas	27.44	697.0	29.37	746.0	40	4.4	65	W	4	1.8		0	0			0	0	Clear	
Fort Macon, North Carolina	30.28	769.1	30.29	769.4	51	10.6	86	SE	9	4.0			1on		SE	Inap.	Inap.	Light rain	
Fort St. Michaels	30.47	773.9	30.50	774.7	— 2	—18.9	100	NE	3	1.3		0	0						
Fort Missoula, Montana	26.66	677.2			25	— 3.9	87	SE	1	0.4			10s		Calm	0	0	Cloudy	
Fort Shaw, Montana	25.36	669.5			22	— 5.6	100	W	3	1.3			1on		Calm	0.06	1.5	Light snow	
Fort Sill, Indian Territory	28.50	723.9	29.63	752.6	37	2.8	81	NE	11	4.9		5k	0	Calm		0	0	Fair	
Fort Stevenson, Dakota	28.11	714.0			17	— 8.3	83	W	12	5.4			10ks		W	0	0	Cloudy	
Fort Verde, Arizona					34	1.1	61	W			1	0	0			0	0	Clear	
Fredericksburg, Texas	27.95	709.9	29.55	750.6	40	4.4	73	W	1	0.4		0	0			0	0	Clear	
Galveston, Texas	29.70	754.4	29.74	755.4	50	10.0	65	W	9	4.0		0	1s		Calm	0	0	Clear	
Grand Haven, Michigan	29.26	743.2	29.92	760.0	40	4.4	100	NE	1	0.4			10n;fog		Calm	0.17	4.3	Light rain	
Hatteras, North Carolina	30.28	769.1	30.30	769.6	45	7.2	92	E	5	2.2			10s		Calm	0	0	Cloudy	
Helena, Montana	25.75	654.0			24	— 4.4	61	NW	1	0.4			10s		Calm	0.05	1.3	Heavy snow	
Henrietta, Texas	28.69	728.7	29.63	752.6	40	4.4	82	E	6	2.7		0	5s		Calm	0	0	Fair	
Indianapolis, Indiana	29.02	737.1	29.80	756.9	47	8.3	92	E			1		10n;fog		Calm	0.75	19.1	Light rain	
Indianola, Texas	29.73	755.1	29.76	755.9	48	8.9	93	W	6	2.7		0	0			0	0	Clear	
Jacksboro, Texas	28.54	724.9	29 67	753.6	42	5.6	74	Calm	0	0		0	0			0	0	Clear	
Jacksonville, Florida	29.94	760.5	29.99	761.7	66	18.9	74	SE	24	10.7			10s		SE	0.03	0.8	Cloudy	
Keokuk, Iowa	29.18	741.1	29.85	758.2	33	0.6	84	N	8	3.6			10s		Calm	0	0	Cloudy	
Key West, Florida	29.98	761.5	30.01	762.2	73	22.8	72	SE	19	8.5		2k	0	SE		0	0	Fair	
Kittyhawk, North Carolina	30.32	770.1	30.35	770.9	41	5.0	82	SW	5	2.2			10s		SE	0	0	Cloudy	
Knoxville, Tennessee	28.85	732.8	29.84	757.9	52	11.1	93	NE	4	1.8			1on		Calm	0.67	17.0	Light rain	
La Crosse, Wisconsin	29.18	741.1	29.97	761.2	16	— 8.9	83	S	3	1.3			Fog			0	0	Dense fog	
La Mesilla, New Mexico	25.86	656.8	30.01	762.2	42	5.6	50	W	3	1.3		0	0			0	0	Clear	
Laredo, Texas	29.30	744.2	29.64	752.8	51	10.6	79	S	3	1.3		0	0			0	0	Clear	
Leavenworth, Kansas	28.99	736.3	29.86	758.4	32	0.0	79	Calm	0	0		0	5s		Calm	0	0	Fair	
Lewiston, Idaho	29.27	743.4	29.93	760.2	34	1.1	69	S	2	0.9			10s		Calm	0	0	Cloudy	
Little Rock, Arkansas	29.33	745.0	29.65	753.1	49	9.4	93	NW	12	5.4			10s		Calm	0	0	Cloudy	
Los Angeles, California	29.55	750.6	29.91	759.7	52	11.1	73	W	16	7.2		0	0			0	0	Clear	
Louisville, Kentucky	29.23	742.4	29.79	756.7	48	8.9	93	E	6	2.7			10n		Calm	0.69	17.5	Light rain	
Lynchburg, Virginia	29.59	751.6	30.30	769.6	42	5.6	83	Calm	0	0			10s		Calm	0	0	Cloudy	
Madison, Wisconsin	28.89	733.8	29.93	760.2	18	— 7.8	84	N	3	1.3		0	0			0	0	Clear	
Marquette, Michigan	29.24	742.7	29.98	761.5	26	— 3.3	88	W	3	1.3			10s		Calm	0	0	Cloudy	
Mason, Texas	28.06	712.7	29.83	757.7	40	4.4	86	W	1	0.4		0	0			0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
United States Series—Continued.																			
Memphis, Tennessee	29.25	742.9	29.58	751.3	52	11.1	100	NE	2	0.9			10n		Calm	0.60	15.2	Light rain...	
Milwaukee, Wisconsin	29.17	740.9	29.92	760.0	34	1.1	90	N	6	2.7			10s		Calm	0.05	1.3	Cloudy	
Mobile, Alabama	29.59	751.6	29.66	753.4	58	14.4	94	SW	16	7.2			10n		SW	0.06	1.5	Light rain...	
Montgomery, Alabama	29.50	749.3	29.72	754.9	60	15.6	91	SE	16	7.2			10ks		SE	1.22	31.0	Threatening	
Moorhead, Minnesota	28.91	734.3	29.95	760.7	5	—15.0	87	Calm	0	0			10s		Calm	0	0	Cloudy	
Morgantown, W. Virginia	29.10	739.1	30.10	764.5	48	8.9	78	Calm	0	0			10n		Calm	0.46	11.7	Light rain...	
Mt. Washington, N. H.	23.85	605.8	30.21	767.3	27	— 2.8	100	NW	60	26.8			10n;fog		NW;C	0.28	7.1	Sleeting	
Nashville, Tennessee	29.14	740.1	29.67	753.6	53	11.7	93	E	6	2.7			10n		E	0.31	7.9	Light rain...	
New Haven, Connecticut	30.30	769.6	30.43	772.9	32	0.0	84	Calm	0	0			10s;fg		Calm	0	0	Cloudy	
New London, Connecticut	30.42	772.7	30.47	773.9	36	2.2	90	Calm	0	0		10cs	Fog	E	Calm	0	0	Cloudy	
New Orleans, Louisiana	29.53	750.0	29.59	751.6	59	15.0	82	SW	25	11.2		0	8s		SW	0.29	7.4	Fair	
Newport, Rhode Island	30.41	772.4	30.46	773.7	37	2.8	90	SE	4	1.8			10s;fg		Calm	0	0	Cloudy	
New River, N. Carolina					52	11.1	86	E			4		10ks		S			Cloudy	
New Shoreham, Rhode I'd	30.41	772.4	30.44	773.2	43	6.1	75	S	12	5.4		0	8s		S	0	0	Fair	
New York, New York	30.25	768.3	30.44	773.2	35	1.7	90	NE	7	3.1			10s;fg		Calm	0	0	Cloudy	
Norfolk, Virginia	30.28	769.1	30.34	770.6	50	10.0	79	SE	3	1.3			10s;sm		S;C	0	0	Cloudy	
North Platte, Nebraska	26.96	684.8	29.70	754.4	12	—11.1	80	W	3	1.3			10s		Calm	0	0	Cloudy	
Olympia, Washington T'y	29.95	760.7	29.99	761.7	38.0	3.3	91	S	3	1.3		2k	2s	W	Calm	0.07	1.8	Fair	
Omaha, Nebraska	28.71	729.2	29.84	757.9	30	— 1.1	84	S	5	2.2			10n		Calm	Inap.	Inap.	Light snow.	
Oswego, New York	29.88	758.9	30.22	767.6	42	5.6	83	S	8	3.6			10n		Calm	0.21	5.3	Light rain...	
Pensacola, Florida	29.69	754.1	29.72	754.9	61	16.1	88	S	16	7.2		0	5ks		S	0.79	20.1	Fair	
Philadelphia, Pa	30.34	770.6	30.39	771.9	33	0.6	89	NE	9	4.0		10cs	Fog	Calm	Calm	0	0	Cloudy	
Phœnix, Arizona	28.39	726.2	30.41	772.4	46	7.8	62	E	4	1.8		0	0			0	0	Clear	
Pike's Peak, Colorado	17.32	439.9	29.53	750.0	— 3	—19.4	32	SW	10	4.5		0	0			0	0	Clear	
Pilot Point, Texas	28.94	735.1	29.82	757.4	38	3.3	81	E	3	1.3		0	0			0	0	Clear	
Ploche, Nevada	23.72	602.5	29.49	749.0	28	— 2.2	54	NW	9	4.0		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.30	744.2	30.12	765.0	45	7.2	84	E	4	1.8			10n		E	0.44	11.2	Light rain...	
Port Huron, Michigan	29.32	744.7	29.99	761.7	42	5.6	100	S	7	3.1			10n		Calm	0.65	16.5	Light rain...	
Portland, Maine	30.34	770.6	30.39	771.9	38	3.3	72	SW	9	4.0			10s		Calm	0	0	Cloudy	
Portland, Oregon	29.98	761.5	30.05	763.3	41.5	5.3	91	SE	3	1.3		0	9n		SW	0.12	3.0	Light rain	
Portsmouth, N. Carolina					48	8.9	78	SE	12	5.4			10s		Calm	0.02	0.5	Cloudy	
Prescott, Arizona	24.45	621.0	29.81	757.2	38	3.3	54	S	16	7.2		0	0			0	0	Clear	
Punta Rassa, Florida	29.95	760.7	29.97	761.2	68	20.0	74	SE	24	10.7		0	8ks		S	0	0	Fair	
Red Bluff, California	29.69	754.1	30.05	763.3	42.0	5.6	66	N	7	3.1		0	0			0.22	5.6	Clear	
Rio Grande City, Texas	29.60	751.8	29.82	757.4	46	7.8	77	Calm	0	0		0	0			0	0	Clear	
Rochester, New York	29.53	750.0	30.16	766.1	43	6.1	83	SW	3	1.3			10s;fg		Calm	0.02	0.5	Cloudy	
Roseburg, Oregon	29.50	749.3	30.06	763.5	35.5	1.9	95	E	3	1.3			10s		Calm	0.02	0.5	Cloudy	
Sacramento, California	29.99	761.7	30.07	763.8	45	7.2	84	E	3	1.3		0	0			0.03	0.8	Clear	
St. Louis, Missouri	29.17	740.9	29.75	755.6	39	3.9	100	N	10	4.5			10n;fg		Calm	0.06	1.5	Light rain...	
St. Paul, Minnesota	29.00	736.6	29.87	758.7	22	— 5.6	72	SE	1	0.4		0	0			0	0	Clear	
Salt Lake City, Utah	25.33	643.4	29.66	753.4	32	0.0	79	Calm	0	0			10n		Calm	0.12	3.0	Heavy snow	
San Antonio, Texas	29.07	738.4	29.78	756.4	43	6.1	83	Calm	0	0		0	0			0	0	Clear	
San Diego, California	29.92	760.0	30.00	762.0	55	12.8	74	W	12	5.4		0	5ks		W	0	0	Fair	
Sandusky, Ohio	29.31	744.5	29.99	761.7	45	7.2	92	SE	14	6.3			10n		Calm	0.61	15.5	Light rain...	
Sandy Hook, New Jersey	30.38	771.6	30.42	772.7	31	— 0.6	79	Calm	0	0		10cs	Fog	Calm	Calm	0	0	Cloudy	
San Francisco, California	30.04	763.0	30.10	764.5	48	8.9	49	NW	10	4.5		0	0			0.05	1.3	Clear	
Santa Fé, New Mexico	22.96	583.2	29.50	749.3	26	— 3.3	63	Calm	0	0		0	5s		Calm	0	0	Fair	
Savannah, Georgia	29.95	760.7	30.04	763.0	62	16.7	88	SE	20	8.9			10n		SE	0.03	0.8	Light rain...	
Shreveport, Louisiana	29.38	746.2	29.63	752.6	51	10.6	93	NW	6	2.7			10s		Calm	0	0	Cloudy	
Silver City, New Mexico	24.00	609.6	30.27	768.8	36	2.2	80	Calm	0	0			10n		Calm	0.01	0.3	Light snow.	
Smithville, North Carolina	30.20	767.1	30.23	767.8	55	12.8	93	E	16	7.2			10s		Calm	Inap.	Inap.	Cloudy	
Socorro, New Mexico	25.12	638.0	29.18	741.1	38	3.3	72	NW	2	0.9			10s		NW	0	0	Cloudy	
Springfield, Illinois	29.13	739.9	29.81	757.2	38.5	3.6	95	N	11	4.9			10n;fg		Calm	0.03	0.8	Light rain...	
Springfield, Massachusetts	30.29	769.4	30.43	772.9	33	0.6	61	Calm	0	0			10s		Calm	0	0	Cloudy	
Stockton, Texas	26.68	677.7	29.68	753.9	44	6.7	52	W	8	3.6			10s		W	0	0	Cloudy	
St. Vincent, Minnesota	29.02	737.1	29.88	758.9	6	—14.4	100	SE	3	1.3			10s		Calm	0.01	0.3	Cloudy	
Thatcher's Island, Mass	30.39	771.9	30.45	773.4	35	1.7	80	SW	11	4.9			10s		Calm	0	0	Cloudy	
Toledo, Ohio	29.28	743.7	29.97	761.2	45	7.2	100	S	8	3.6			10s		S	0.55	14.0	Threatening	
Tucson, Arizona	27.34	694.4	29.89	759.2	46	7.8	54	SE	2	0.9		5k	0	N		0	0	Fair	
Umatilla, Oregon	29.76	755.9	30.37	768.8	32	0.0	94	W	2	0.9			10s		Calm	0.17	4.3	Cloudy	
Uvalde, Texas	28.75	730.2	29.38	751.3	39	3.9	82	NE	1	0.4		0	0			0	0	Clear	
Vicksburg, Mississippi	29.21	741.9	29.46	748.3	53	11.7	100	NE	10	4.5			10n		Calm	1.00	25.4	Light rain...	
Visalia, California	29.64	752.8	30.02	762.5	43.5	6.4	79	NW	6	2.7		0	2s		Calm	0.02	0.5	Clear	
Washington, D. C.	30.23	767.8	30.35	770.9	37	2.8	90	NE	3	1.3			10s		W	0	0	Cloudy	
Wickenburg, Arizona					33	0.6	79	N			1	0	2s		Calm	0	0	Clear	
Wilmington, N. Carolina	30.17	766.3	30.23	767.8	57	13.9	81	SE	11	4.9		5ck	5s	SW	Calm	0	0	Cloudy	
Winnemucca, Nevada	25.50	647.7	29.86	758.4	27	— 2.8	76	Calm	0	0		0	0			0.11	2.8	Clear	
Wood's Holl, Mass	30.42	772.7	30.46	773.7	36	2.2	90	SE	2	0.9			10s		W	0	0	Cloudy	
Yankton, Dakota	28.58	725.9	29.94	760.5	20	— 6.7	85	N	6	2.7		0	0			0	0	Clear	
Yuma, Arizona	29.62	752.3	29.76	755.9	58	14.4	64	SW	6	2.7		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.07	560.6			45.0	7.2	80	Calm	0	0		0	0			0	0	Clear	Thomas Herran.
Buff Bay Town, Jam ica.‡	29.84	757.9	30.16	766.1	66	18.9	90	E				2k	8k						
Havana, Cuba, W. I.	29.95	760.7	30.00	762.0	71	21.7	71	SE	2.4	1.1		0	8ks		S	0	0	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	29.85	758.3	29.91	759.8	—10.5	—23.6		Calm			0		0			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.98	761.5	29.99	761.7	70.7	21.5	78	N	1	0.4		0	0			0	0	Fine	Robert Johnstone.
Navassa, W. I.	29.89	759.2	29.97	761.2	73.5	23.1	72	NE	20	8.9		2k	5s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	29.92	760.0	29.92	760.0	70	21.1	90	NE			1	0	3c			0	0	Clear	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbn	29.45	748.0	30.01	762.2	75	23.9	89	Calm			0		10s		Calm	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					69.8	21.		SW			0	0	0			0	0		Earl Flint.
Santiago de Cuba, W. I.	30.02	762.5	30.04	763.0	71	21.7	67	N	3.6	1.6		0	0			0	0	Clear	Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	29.89	759.2	29.95	760.8	—15.9	—26.6		Calm			0		0			0	0		K. Elberg.
York Factory, B. A.	30.26	768.6	30.31	769.9	—14.0	—25.6	100	W	14	6.3			10n		W	0.04	1.0	Snowing	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.65	753.1	59.8	15.4	66	WNW			4-6		5	WNW						Squally	Capt. Lord Walter Kerr
H. M. S. Antelope, Basika Bay, Turkey	29.50	749.3	59	15.0		S			2		9	S				1	SW	D. clouds	Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 26° 30′, E. 55° 47′	30.26	768.6	75	23.9	64	ESE			2		4	E				1	E	Misty	Comm. G. Hand.
H. M. S. Bittern, Constantinople, Turkey			47	8.3		N			1		3	N				1	N	D. clouds	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.98	761.5	76	24.4	77	SE			2-3		10	E				4	E	Overcast	Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer, N. 37° 15′ E. 15° 25′	29.54	750.3	51	10.6		NW			6		8	NNW				3	NW	Squally	Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 28° 28′, E. 122° 07′	30.08	764.0	53	11.7	86	Calm			0		0							Misty	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt; C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.23	767.8	60	15.6	65	NE			5-6		2	NE						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N 17° 30′, W. 77° 24′	30.00	762.0	80	26.7	70	N			3		1					2	ENE	Blue sky	Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, Singapore, Malay Peninsula	29.80	756.9	82	27.8		NE			2		2	SE				1	E	D. clouds	Capt. W. H. Maxwell.
H. M. S. Emerald																			Comm. C. Johnstone.
H. M. S. Encounter, Shangbai, China	30.15	765.8	48.5	9.2	85	SE			1		0							Blue sky	Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.85	758.2	81	27.2	62	NW			2-3		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 4° 10′ W. 80° 40′	29.94	760.5	83	28.3	77	Calm			0		1					1	Swell	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.08?	738.6?				NE			5									D. clouds	Capt. L. F. Jones.
H. M. S. Griffin, N. 19° 14′, W. 61° 05′	29.84	757.9	70.5	21.4	90	N			6		2	N				6	N	Squally	
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris, N. 45° 31′, E. 13° 28′	29.65	753.1	45	7.2	100	SW			1		8	SW						D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 149° 57′	30.15	765.8	64	17.8	83	NE			1		3	NE						D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Africa	29.86	758.4	82	27.8	87	NNW			1-2		2			Blank				D. clouds	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 29° 53′, E. 121° 34′	30.16	766.1	52.5	11.4	80	Calm			0		0							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 37° 13′, E. 11° 00′	29.75	755.6	60	15.6	76	NNW			8		9	NW				9	NW	Misty	Capt. J. F. G. Grant.
H. M. S. Minotaur, Vigo, Spain	30.34	770.6	57	13.9	84	NE			1		9	NW						D. clouds	Capt. H. Rawson.
H. M. S. Modeste, N. 5° 24′, E. 100° 20′	29.86	758.4	84	28.9	75	Var.			1		2							D. clouds	Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Trinidad, W. I.	29.89	759.2	77	25.0	75	NNE			4		2	E						D. clouds	Capt. E. Drummond.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, Clarence Bay, Africa	29.86	758.4	81	27.2	?	SSE			3-4		4	SE				3	NW	Squally	Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.90	759.4	83.5	28.6	94	N			2-3		2			Blank				D. clouds	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	30.36	771.1	59	15.0	76	SSE			1		0							Blue sky	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.63	752.6	77	25.0	86	E			2		1k					3	SE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	30.02	762.5	69.5	20.8	92	Calm			0		3					1	S	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, N. 37° 03′, E. 10° 44′	29.75	755.6	58	14.4	82	NW			9		8					8	NW	Misty	Capt. P. H. Colomb.
H. M. S. Triumph, S. 19° 21′, W. 74° 45′	30.09	764.3	73.5	23.1	74	E			3		2	E				2	E	D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 34° 48′, E. 19° 07′	29.56	750.8	63	17.2		WNW			6		7					4	WNW	Squally	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I	29.99	761.7	72	22.2		N			1		0							Blue sky	Comm. W. S. Browa.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, Palestine	30.03	762.7	67.5	19.7	60	SE			1-2		8	S						Squally	Capt. F. Negham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard

GERMAN NAVAL SERIES.

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

PORTUGUESE NAVAL SERIES.

Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Rio Lima, Bulama, Senegambia	29.91	759 7	84.2	29.0	88	SE			1		3?			1	hour			Drizzling?	S. C. da Silva Costa, Comd't.
Sado.																			
St. Paul de Loando, Africa	29.87	758.6	82.8	28 2	79	W			3		5		W			2	W	D' clouds	G. A. de Brito Capello, Comd't.
Tamega																			

SWEDISH NAVAL SERIES.

Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.

H. M. Frigate Vanadis, ‡ N. 40° 25′, E. 14° 19′	29.53	750.1	54.9	12.7	60	NW			4		2							Blue sky	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.	Force	Amount and kind.		Direction							
									Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.			
N. Yard, Pensacola, Fla	29.97	761.2	58	14.4	88	SW	1	0.4		0			0.45	11.4			Clear	
N. Yard, Portsmouth, N. H.	30.41	772.4	33	0.6	89	SE	2	0.9	10c		Calm		0	0			Foggy	
Naval Hospital, Yokohama, Japan	29.98	761.5	40.5	4.7	82	Calm			0	0			0	0			Clear	
Adams, S. 6° 04′, W. 81° 19′	30.00	762.0	72	22.2	95	E			1	5		SE			Long	SW	Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.00	762.0	45	7.2	68	W			3	0			0	0			Clear.	
Alert, Hong-Kong, China *.	29.98	761.5	67	19.4	79	ESE			1	8		Calm	0	0	Sm'h		Fair	
Alliance, South Pass, Miss.	29.70	754.4	67	19.4	74	SW			5	5			Heavy		Sm'h		Fair	
Ashuelot, Tientsin, China	30.47	773.9	27	— 2.8	100	NNW			3	5		NW					Fair	
Colorado, New York, N. Y.	30.46	773.7	33	0.6	100	SW	1	0.4		10		Calm					Misty	
Constitution, N. Yard, League I'd., Pa			34	1.1	90	ENE	1	0.4		10							Foggy	
Franklin, Norfolk, Va	30.29	769.4	51	10.6	79	SSE	3	1.3		10			0	0			Cloudy	
Galena, N. 41° 36′, E. 10° 47′	29.66	753.4	57	13.9	75	NE			2	0					Sm'h	NE	Clear	
Independence, N. Yard, Mare I'd, Cal.	30.05	763.3	48	8.9	92	WNW	10.8	4.8		0			0	0			Clear	
Jamestown, Sitka, Alaska *	29.81	757.2	37	2.8	72	ESE			1	8			0	0			Fair	
Kearsarge, N. 29° 10′, W. 87° 40′	29.73	755 1	67	19.4	79	SSW			5	5		SW			Mod.	SW	Fair	
Lackawanna, Callao, Peru †.	30.10	764.5	70	21.1	90	SE			1	5			0	0			Fair	
Marion, Sandy P't, Terra del Fuego	29.51	749.5	48	8.9	85	N			0-1	5		Calm	Light		Sm'h		Fair	
Michigan, Erie, Pennsylvania	30.07	763.8	43	6.1		S	5	2.2		10							Raining	
Minnesota, New York, N. Y.	30.44	773.2	34	1.1	90	NE			1	10		SE					Misty	
Monocacy, Shanghai, China	30.17	766.3	48	8.9	78	SE			1	0							Clear	
New Hampshire, Port Royal, S. C.	30.17	766.3	60	15.6	94	ESE	24	10.7		10		Calm	0.03	0.8			Overcast	
Nipsic, N. 41° 53′, E. 3° 17′	30.05	763.3	57	13.9	75	WSW			2	8		WSW			Sm'h		D. clouds	
Onward, Callao, Peru †.	29.96	761.0	65	18.9	?	Calm			0	5		NNW			Long	W	Fair	
Palos, Shanghai, China	30.22	767.6	46	7.8	92	SE			1	0							Clear	
Passaic, Washington, D. C.	30.43	772.9	37	2.8	81	NE			1	10		Calm					Cloudy	
Pensacola, N. 9° 34′, W. 85° 21′	29.93	760.2	80	26.7	78	NNE			1	2			0	0	Sm'h		Hazy	
Portsmouth, Washington, D. C.	30.35	770.9	37	2.8	90	NE			1	10		W					Cloudy	
Powhatan, New York, N. Y.	30.42	772.7	34	1.1	90	NNE			1	10		W					Hazy	
Quinnebaug, Villafranca, France	29.65	753.1	59	15.0	29	W			2	2		Calm			Sm'h		Fair	
Richmond, Hong-Kong, China	30.15	765.8	65	18.3	89	W			1	0			0	0			Clear	
Saratoga, Baltimore, Md	30.36	771.1	36	2.2	100	ESE			1	10		SSE	0	0			Misty	
Shenandoah, Montevideo, Uruguay *	29.89	759.2	76	24.4	82	W			2	2					Sm'h		Fair	
St. Louis, League Island, Pa	30.43	772.9	33	0.6	79	NNE	4	1.8		8		NE	0	0			Cloudy	
Swatara, Nagasaki, Japan †.	30.14	765.5	44	6.7	76	Calm			0	0					Sm'h		Hazy	
Tennessee, N. 23° 06′, W. 85° 55′	29.92	760.0	77	25.0	100	WSW	13	5.8		8		W	1.26	32.0	Mod.	SE	Cloudy	
Ticonderoga, N. Yard, Mare Id., Cal.	30.04	763.0	46	7.8	92	NW			1	0			0.01	0.3			Blue sky	
Trenton, Villafranca, France *	29.62	752.3	60	15.6	29	N			4	0			0	0	Sm'h		Clear	
Vandalia, N. 10° 30′, W. 61° 35′	29.93	760.2	77	25.0	86	NW			4	2		WNW			Mod.	NW	Fair	
Wabash, Boston, Massachusetts	30.48	774.2	36	2.2	90	SE	7	3.1		10		SE	0	0			Hazy	
Wachusetts, Panama, Panama *.	29.58	751.3	77	25.0	86	NW			1-2	2		N			Sm'h		Clear	
Wyoming, Villafranca, France	29.64	752.8	57	13.9	75	NNW			4	2		NNW			Mod.	NNW	Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
S. 8° 05′, W. 16° 25′	29.91	759.7	82.5	28.1	79	ESE			4		5							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 19° 13′, W. 37° 55′	30.00	762.0	77.5	25.3	82	ESE			5		0							Blue sky	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang, ‡																			
N. 12° 33′, W. 43° 47′	29.90	759.4	79	26.1	82	SSE			4		10							Overcast	Capt. H. Youlden.
S. S. Cipero																			W. N. Lailey.
City of Agra, ‡																			
S. 22° 30′, W. 28° 58′	30.13	765.3	82.5	28.1	86	ESE			4		2							Blue sky	Capt. T. Young.
Barque Commewyne, ‡																			
N. 30° 57′, W. 54° 34′	29.46	748.3	63.7	17.6	86	NE			7		8							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 14° 45′, W. 7° 44′	29.95	760.7	84	28.9	62	SE			4		3							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart, ‡																			
N. 9° 41′, E. 91° 30′	29.89	759.2	80.5	26.9	83	NE			4		7							D. clouds	Capt. J. E. C. Patterson.
Barque Elisa																			Capt. A. Watson.
S. S. Ethiopia, ‡																			
N. 44° 31′, W. 53° 16′	30.26	768.6	31	— 0.6	95	SSW			2		7					3	NNE	D. clouds	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope ‡																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 19° 17′, W. 50° 57′	29.73	755.1	68.5	20.3	90	SW			6		9					5	WNW	Showery	Capt. H. W. Dyke.
Barque Mertola,																			
N. 37° 01′, W. 7° 25′	30.32	770.1	60.5	15.8	84	NNE			1		0							Blue sky	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee, ‡																			
N. 3° 51′, W. 23° 15′	29.90	759.4	82.0	27.8	91	ESE			3		2							D. clouds	Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven																			Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡																			
N. 33° 06′, E. 25° 15′	29.65	753.1	63	17.2	75	SW			5		6							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire,																			
N. 38° 20′, E. 2° 25′	30.08	764.0	56	13.3	81	W			4		3					4	WNW	D. clouds	
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian ‡																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic ‡																			
S. S. Baltic ‡																			Capt. J. W. Jennings.
S. S. Britannic,																			Capt. H. Parsell.
N. 43° 19′, W. 47° 00′ †	30.49	774.4	39	3.9		ENE			5		5		ENE			Mod.	ENE	Squally	
Off Roches Point, England †	29.63	752.6	44	6.7		SW			3		10		SW	6h'rs	fine	Sm'h		Overcast	Capt. H. Perry.
S. S. Germanic, ‡																			Capt. Benj. Gleadell.
N. 45° 26′, W. 43° 43′ †	30.38	771.6	40	4.4		NW			4		8?		NW	0	0	Mod.	N	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic,																			
N. 49° 56′, W. 24° 26′ *†	29.70	754.4	55	12.8	87	W			4		10		W	0	0	H'vy	wsw	Cloudy	Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Hermann ‡																			Capt. H. Baur.
S. S. Köln,																			
N. 49° 44′, W. 15° 48′	29.69	754.1	54.5	12.5		WSW			6–7		10		WSW	H'vy squ	rain alls	H'vy	wsw	Cloudy	
S. S. Leipzig,																			
N. 48° 08′, W. 26° 41′ †	29.72	754.9	50.0	10.0	93	WNW			3		10		W	6 ho	urs	Mod.	wsw; NW	Raining	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm ‡																			Capt. Albert Fredholm
Ship Peru ‡																			Capt. O. F. Skötdebran.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, ‡ N. 52° 44′, W. 5° 36′....†*	29.63	752.6	48	8.9	92	SE	.....	.....	6	.....	10	.....	SE	.....	.....	Mod.	SE	Raining.....	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 49° 02′, W. 34° 12′.....†	29.76	755.9	41	5.0	74	WNW	.....	.....	4	.....	8	.....	W	0	0	R'gh	NW	Cloudy.....	Capt. R. W. Sargent.
S. S. Ohio.....																			Wm. Shakford, 1st Off'r
S. S. Pennsylvania, Philadelphia, Pa.....†	30.31	769.9	31	— 0.6	89	NE	.....	.....	1	.....	8	.....	NE	0	0	.....	.....	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 26° 10′, W. 113° 39′....†	30.02	762.5	62	16.7	88	NW	.....	.....	4	.....	10	.....	NW	Light		G'tl	WNW	Cloudy.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, Yokohama, Japan.....†	30.09	764.3	42	5.6	83	SW	.....	.....	2	.....	5	.....	S	0	0	Sm'h	.....	Clear.....	Capt. H. Davison.
S. S. Gaelic, N. 34° 55′, E. 144° 22′..†*	30.26	768.6	51	10.6	96	WNW	.....	.....	2	.....	2	.....	WNW	.....	.....	Sl't	NW	Clear.....	Capt. W. H. Kidley.
S. S. Oceanic, N. 37° 09′, W. 125° 08′.....	30.22	767.6	53	11.7	93	NW	.....	.....	3	.....	2	.....	NW	0.04	1.02	Mod.	WNW	Clear.....	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 42° 05′, W. 124° 36′....†	30.03	762.7	47	8.3	81	SSW	.....	.....	5	.....	10	.....	S	.....	.....	Long	WSW	Raining	Capt. Fred. Bolles.
S. S. Oregon.....																			Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, Port Harford, Cal.....†	30.01	762.2	48	8.9	78	NW	.....	.....	7	.....	0	.....	.....	.....	.....	H'vy	SW	Clear.....	Capt. J. N. Ingalls.
S. S. Idaho, ‡ Seattle, Wash. Ter.....†	29.76	755.9	35	1.7	90	E	.....	.....	1	.....	5?	.....	.....	.....	.....	.....	.....	Clear.....	C. E. Lyons, 1st Officer.
S. S. Orizaba.....																			
S. S. Senator, San Francisco, Cal.....†	30.22	767.6	47	8.3	70	N	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	Thos. Wallace.
S. S. State of California, Portland, Oregon.....†	30.01	762.2	42	5.6	83	SE	.....	.....	2	.....	8	.....	SE	Rain		.....	.....	Raining.....	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal.....†	30.05	763.3	47	8.3	48	NW	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 3° 29′, W. 167° 16′....†	29.82	757.4	80	26.7	100	N	.....	.....	3	.....	8	.....	N	.....	.....	Mod.	NW	Cloudy	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.....†	30.03	762.7	68	20.0	100	W	.....	.....	2	.....	10	.....	W	0	0	.....	.....	Cloudy.....	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Panama, Panama.....†	30.05	763.3	74	23.3	90	NW	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	Clear.....	Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China.....†	30.09	764.3	62	16.7	72	E	.....	.....	3	.....	0	.....	.....	0	0	Sm'h	.....	Clear.....	Capt. G. G. Berry.
S. S. City of Sidney.....																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 37° 41′, W. 124° 14′....†	30.28	769.1	52	11.1	73	N	.....	.....	6	.....	5	.....	N	.....	.....	Long	W	Fair	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 22° 57′, W. 108° 56′....†	29.97	761.2	69	20.6	85	S	.....	.....	4	.....	0	.....	.....	0	0	Mod.	SW	Misty.....	Capt. R. R. Searle.
S. S. Dakota.....																			Capt. D. E. Griffiths.
S. S. Granada, N. 19° 00′, W. 104° 30′....†	29.92	760.0	70	21.1	61	NW	.....	.....	2	.....	0	.....	.....	0	0	Light	W	Clear.....	.....
S. S. Zealandia, S. 36° 07′, E. 174° 44′.....	30.12	765.0	72	22.2	85	NNW	.....	.....	3	.....	5	.....	NW	.....	.....	Sm'h	SE	.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland, ‡ N. 49° 53′, W. 5° 43′.....†	29.82	757.4	48	8.9	92	WNW	.....	.....	6	.....	8	.....	SW	.....	.....	R'gh	WSW	Light rain...	Capt. Sam'l Jackson.
S. S. Nederland, ‡ N. 49° 36′, W. 6° 28′.....†	29.96	761.0	52	11.1	.....	WSW	.....	.....	5	.....	10	.....	W	12 hours		High	W	Misty.....	Capt. S. Stokes.
S. S. Rhyland, ‡ Antwerp, Belgium.....	29.55	750.6	43	6.1	.....	W	.....	.....	7	.....	10	.....	W	0.3	8.	.....	.....	Threatening	Capt. W. Geo. Randle.
S. S. Vaderland.....																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, ‡ Jacksonville, Florida...†	29.95	761.0	60	15.6	.....	SE	.....	.....	7	.....	10	.....	.....	1-16	hour	.....	.....	Threatening	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va.....	30.35	770.9	48	8.9	78	Calm	0	0	.....	.....	10k	.....	.....	0	0	.....	.....	Overcast.....	Capt J. Jorgensen.
Sch'r Annie R. Lewis, N. 18° 09′, W. 55° 40′.....†	29.72	754.9	74	23.3	.....	NW	.....	.....	7	.....	8	.....	WNW	Rain Squalls		H'vy	NW	Cloudy.....	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 36° 55′, W. 10° 20′.....†*	30.32	770.1	63	17.2	.....	SW	.....	.....	3	.....	Fog	.....	SW	.....	.....	Sm'h	.....	Fair.....	Capt. B. F. Woodbury.
Brigantine George, ‡ N. 23° 15′, W. 70° 40′.....†	30.32	770.1	70	21.1	.....	NE	.....	.....	7	.....	8	.....	NE	Showers		R'gh	NE	Squally.....	Capt. W H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va.†	30.39	771.9	53	11.7	80	Calm	0	0	.....	.....	10n?	.....	.....	0	0	.....	.....	Clear?.....	.....
Ship Jumna.....																			Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 33° 39′, W. 17° 48′.. .††	30.37	771.4	62	16.7	100	ENE	.....	.....	5	.....	10	.....	E	0	0	Mod.	NW	Cloudy.....	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 10, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direc-tion.	Velocity.		Force	Clouds. Amount and kind.		Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.18	766.6	65.1	18.4	80	Calm			0		5			0	0	Cloudy	Dr. Ollive.
Nemours			30.12	765.1	67.1	19.5	80	NW			4		2			0	0	Fair	Raynard.
Algiers			30.10	764.4	64.8	18.2	47	WSW			3		0			0	0	Clear	Nicolas.
La Calle			30.02	762.4	60.8	16.0	81	NW			4		6			0.039	1.0	Cloudy	Fonfrède.
Tunis			29.91	759.7															Jacques.
Sfax			30.02	762.4															Gau.
Saida			30.17	766.2	71.6	22.0	24	W			3		0			0	0	Clear	Dumas.
Tebessa			30.09	764.3	55.0	12.8	15	W			5		9			0	0	Covered	Watrin.
Geriville																			Lonchamp.
Laghouat			30.13	765.3	69.1	20.6	41	ESE			1		0			0	0	Clear	Herbin.
Biskra			30.11	764.7															Baudasse.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.74	755.4	29.84	757.9	66.0	18.9	77	SW	12	5.4			3			0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.80	756.9	78	25.6		SE			2		6ks			0	0	Hazy	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.17	740.8	29.73	755.2	36.7	2.6	79	Calm			0		2			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.74	730.0	29.51	749.6	42.1	5.6	75	WSW	3.8	1.7			10			0	0		Dr. Wiersbicki.
Eperies	28.72	729.5	29.63	752.6	32.4	0.2	89	S			1		0			0	0		Julius Mikolik.
Gratz‡	28 38	720.9	29.65	753.1	41.4	5.2	61	SW			2		3			0	0		Andreas Rospini.
Hermannstadt	28.25	717.5	29.72	754.8	36.0	2.2	91	SE			1		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.17	715.6	29.53	750.1	39.6	4.2	92	SW			1		10			0.165	4.2		The Staff.
Lemberg	28.58	725.9	29.58	751.2	40.6	4.8	84	SW			1		8			0	0		Dr. T. Stanecki.
Pola	29.63	752.7	29.75	755.6	49.1	9.5	83	SW			1		10			0	0		I. R. Hydrographic Office
Szathmar	29.28	743.6	29.72	755.0	33.6	0.9	89	W			2		10			0	0		Beicht Peter, S. J.
Szegedin	29.42	747.2	29.71	754.5	39.0	3.9	82	S			1		0			0	0		Karl Stancel.
Trieste	29.65	753.0	29.75	755.6	45.1	7.3	78	Calm			0		0			0.150	3.8	Clear	P. Busin.
Vienna	28.86	733.0	29.58	751.4	45.3	7.4	64	S			2		10			0.051	1.3		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	28.89	733.7	29.08	738.7	48.9	9.4	92	SW			7		10		SW	0.654	16.6	Raining	Royal Observatory.
Furnes	29.00	736.5	29.02	737.1	49.8	9.9	93	WSW			8		10			0.165	4.2	Raining	M. E. de Cae.
Maeseyck	28.97	735.7	29.09	738.9	48.4	9.1	95	SW			4		10			0.882	22.4	Raining	M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 13, 1882.

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

BRITISH SERIES.

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

Aberdeen	28.60	726.4	28.70	729.0	34.1	1.2	100	ESE	38	17.0			10			0.630	16.00	Rain & snow	W. Boswell.
Armagh, Observatory	28.44	722.4	28.68	728.5	40.8	4.9	89	SW	22	9.8			10					Squally	S. Call.
Bidston, Liverpool Obs'y			28.76	730.5	43.2	6.2	76	WSW	32	14.3			8					Overcast	John Hartnup.
Bolton, Sharples	28.25	717.5	28.77	730.7	38.7	3.7	93	WSW	1	0.4			10					Raining	Thomas Mackereth.
Bradford, Yorkshire	28.38	720.8	28.78	731.0	40.4	4.7	96	SW			1		10			0.34	8.6	Raining	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.89	759.2	29.92	760.0	80	26.7	66				2		3					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			28.86	733.0	49.0	9.4	85	W			6.0		6					Showery	John McLaren.
Chatham, School M. E.	28.84	732.5	28.96	735.6	49.1	9.5	87	W			1		6			Blank		Gloomy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	28.99	736.3	29.22	742.2	45.3	7.4	51	W			7		2					Squally	The Staff.
Fort Napier, Natal	27.52	699.0	29.72	754.9	82.4	28.0	79	NW			1		2					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.61	752.1	29.85	758.2	87	30.6	84	SW			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			28.70	729.0				NW			6		8					Showery	J. O'Donaghadue.
Gibraltar, Mediterranean	30.12	765.0	30.17	766.3	63.4	17.4	94	W			1		0					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	28.44	722.4	28.64	727.4	41.0	5.0	82	S			3		10					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	28.79	731.3	28.95	735.3	48.8	9.3	88	WSW			5		10					Raining	The Staff.
Guernsey	29.05	737.9	29.28	743.7	48.5	9.2	78	WSW			6		7					Squally	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	28.93	734.8	28.97	735.8	49.0	9.4	67	WSW	32	14.3			10					Raining	The Met'g'l Office.
Leicester, Museum	28.65	727.7	28.90	734.0	46.2	7.9	85	SW			4		10					Drizzling	J. E. Carryer.
Malta, Mediterranean	29.71	754.6	29.79	756.7	62	16.7	61	NW			3		0					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			30.03	762.7	72.5	22.5	74	SE			1		6					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.34	719.8	28.85	732.8	44.3	6.8	75	WSW			6		5					Squally	Robert Pate.
Oxford, Radcliffe Obs'y	28.72	729.5	28.98	736.1	47.6	8.7	72	WSW			7		10					Raining	The Staff.
Plymouth	29.08	738.6	29.16	740.7	45.8	7.7	68	W			5		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			28.94	735.1	32.8	0.4	100	ESE	43	19.2			10					Snowing	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.51	749.5	29.57	751.1	43.4	6.3	94	NNW			2		10					Drizzling	Serg't W. H. Lyne.
Sheffield	28.52	724.4	28.80	731.5	41.0	5.0	90	SW			1		10			0.18	4.6	Showery	W. F. Cooper.
Silloth Rectory	28.69	728.7	28.72	729.5	42.9	6.1	81	W			3		6			0.205	5.21	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			28.78	731.0	38.7	3.7	93	WSW	17	7.6			10					Raining	Rev. S. J. Perry.
Strathfield Turgiss	28.80	731.5	29.02	737.1	46.3	7.9	68	W			5		7					Raining	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	29.12	739.6	29.17	740.9	50	10.0	79	W			8		5					D. clouds	W. Newcombe.
Valencia, Observatory	28.95	735.6	28.99	736.3	45.5	7.5	75	WSW	45	20.1			7			Blank		Misty	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.10	764.5	30.14	765.5	34	1.1	98	SW	2	0.9			10s			0.026	0.64	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	30.05	763.3	30.12	765.0	36	2.2	95	SW	2	0.9			10s		SW	0.04	1.0	Cloudy	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.98	761.5	30.00	762.0	35	1.7	85	SW	10	4.5			10n	SW		0.20	5.1	Threatening	J. McWilliams.
Fort Garry, Manitoba*	29.24	742.7	30.13	765.3	16	— 8.9	100	N	16	7.2			10n			0.080	2.03	Light snow	James Stewart.
Fredericton, N. B.																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.12	765.0	30.25	768.3	33	0.6	99	S	1	0.4		5ck	0	SW		0.015	0.38	Fair	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.41	747.0	29.74	755.4	41	5.0	89	SE	8	3.6			10n		Calm	0.19	4.8	Light rain	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.69	754.1	29.89	759.2	38	3.3	100	S	18	8.0			10n			0.42	10.7	Heavy rain	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	28.89	733.8	29.59	751.6	41	5.0	100	SE	20	8.9		2k	8n	SE	SE	0.37	9.4	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	28.93	734.8	29.62	752.3	43	6.1	94	S	10	4.5		8ks	2n	S		0.54	13.7	Cloudy	H. Morgan.
Port Stanley, Ontario	28.94	735.1	29.59	751.6	40	4.4	90	E	28	12.5			10n		SW	0.85	21.6	Cloudy	M. Payne.
Quebec, Quebec*	29.69	754.1	30.02	762.5	36	2.2	100	Calm			0		Fog			0.19	4.8	Light rain	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.24	742.7	29.70	754.4	38	3.3	92	E	5	2.2			Fog			0.61	15.5	Light rain	K. Stewart.
Saugeen, Ontario*	28.79	731.3	29.50	749.3	43	6.1	95	S	32	14.3		5k	0			0.42	10.7	Fair	W. H. McIntyre.
St. Andrews	30.10	764.5	30.15	765.8	34	1.1	88	Calm	0	0			10n			0.08	2.0	Cloudy	
St. John's, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.15	765.8	30.19	766.8	35	1.7	90	SW	3	1.3			10n			0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.27	743.4	29.66	753.4	38	3.3	92	NE	10	4.5			10n		SW	0.40	10.2	Cloudy	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.18	766.6	30.25	768.3	36	2.2	86	SE	2	0.9		8ck	0	W		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	30.05	763.3	30.31	769.9	33	0.6	89	SW	1	0.4		2c	5s			0	0	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			
Cape St. Francis Lt. House	29.71	754.6			71.0	21.7	94	SE	12.1	5.4		0	0			0	0	Blue sky	John Duthie.
Cape Town, C. G. H. Obs'y	29.72	754 9	29.75	755.6	87.5	30.8	43	S	3.8	1.7		4	4cs			0	0		The Staff, for D. Gill.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.42	772.7	30.45	773.3	32.0	0.0	76	NNE	2.2	1.0		1ks		WNW		0.012	0.3	Clear	M. Marc Dechevrens, S. J.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
COSTA RICA SERIES. By authority of the MINISTER OF FOREIGN AFFAIRS. Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.20	665.5	29.92	760.0	60.8	16.0	87	NE			2		0			0	0	Clear	Federico Maison.
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.13	740.0	29.18	741.2	19.9	— 6.7	92	E	16	7			10					Snowing	Oversergent Fischer.
Fanöe	28.95	735.4	28.97	735.9	22.3	— 5.4	100	E			6		10					Snowing	Overloerer Lauridsen.
Godthaab, Greenland	29.69	754.2	29.74	755.3	16.5	— 8.6	85	ENE			2		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.45	747.9	29.49	749.0	0.3	—17.6	89	E			8		2						A. O. Thorlacius.
Thorshavn	29.30	744.1	29.33	745.0	36.9	2.7	60	E	34	15			10						Overfoerer Bergh.
Vestervig	29.01	736.8	29.10	739.2	16.2	— 8.8		NE			6		10					Snowing	Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.28	743.7	29.94	760.4	53.2	11.8	84	WSW			3	ck	2n	NE	NE	0.110	2.8		M. Labroue, Director.
Alençon	28.90	734.0	29.45	748.0	49.3	9.6	97	SW			3		1on		SW	0.213	5.4	Light rain	M. Nicot, Director.
Arras, Engineer School	28.90	734.1	29.15	740.5	49.3	9.6	94	SW	17.2	7.7			10					Raining	M. Klein, Commandant.
Avignon, Normal School	29.80	756.9	29.88	758.9	50.5	10.3	84	N			1		10			0	0	Covered	M. Giraud, Director.
Bar-sur-Seine	28.99	736.4	29.54	750.4	49.5	9.7	81	SW			2		10		SW	0.224	5.7	Covered	M. Saillard, Director.
Beauvais, Normal School	29.01	736.8	29.27	743.5	50.2	10.1	90	SW			3		10		WSW	0.224	5.70	Raining	M. Frère Eugene Marie.
Besançon, Normal School	28.82	732.1	29.72	754.8	50.7	10.4	65	S			4		n		W	0.350	8.9		M. Gobin, Director.
Bordeaux, Observatory	29.59	751.5	29.85	758.2	52.3	11.3	88	NW			3		10		WSW	0.114	2.9	Raining	M. Rayet, Director.
Bourges, Normal School	29.05	737.8	29.60	751.8	51.8	11	85	SSW			4		kn		SSW	0.39	10.		M. Grimard.
Brest, Naval Observatory	29.24	742.6	29.48	748.8	49.3	9.6	86	W			4		8		WSW	0.108	2.75		M. Postel, Director.
Caen, Normal School	29.12	739.7	29.20	741.7	52.9	11.6	100	SW			2		10			0.35	9.	Covered	M. de Rermaree, Dir.
Châlons-sur-Marne, N.Sch'l	29.10	739.2	29.43	747.5	48.2	9.0	86	SSW			3		10		SW	0.165	4.2	Covered	M. Biétrix, Director.
Charleville, Normal School	28.78	731.1	29.33	745.0	48.0	8.9	81	N			1		10			0.276	7.0	Raining	M. Jadot, Director.
Clermont-Ferrand Obs'y	28.38	720.8	29.73	755.1	51.8	11.0	60	SW			2		10		W	0.252	6.4	Covered	M. Grimard.
Cluny, Normal School	28.95	735.5	29.76	755.8	53.6	12	66	SW			2		4		S	0.283	7.2		M. Alluard, Director.
Commercy, Normal School	28.59	726.1	29.45	748.0	46.9	8.3	93	W			8		10n		W	0.240	6.1	Raining	M. de Villeimontée, Dir.
Gap, Normal School	27.29	693.2	29.85	758.2	45.0	7.2	75	NE			1		2		E	0	0	¼ covered	Dr. Coulet, Director.
Gréasque, du. Rhone	28.79	731.3	29.93	760.3	51.3	10.7	80	NW			3		8		NW	0	0	¼ covered	M. Jeanginard, Director.
Grenoble, Normal School	29.09	738.9	29.83	757.7	44.6	7	83	ENE			1	ck				0.413	10.50		M. Kina, Director.
Guéret, Normal School	28.13	714.4	29.71	754.6	46.4	8	57	SW			4		10n		NE	0.28	7.	Raining	M. Ablard, Director.
Lamballe, Normal School	29.10	739 2	29.39	746.5	52.5	11.4	73	SW			4		10		SW	0.150	3.8	Raining	M. Rivoir, Director.
Lescar, Normal School	29.41	747.0	30.09	764.3	54.5	12.5	70	NW			3		5		SE	0.134	3.4	Cloudy	M. Ollitrault, Director.
Lorient, Naval Observatory	29.38	746.3	29.48	748.9	50.7	10.4	100	WSW			8		10		SW	0.138	3.5	Raining	M. Chauvin, Director.
Lyon Obs'y, Park Station	28.74	730.1	29.77	756.1	50.0	10.0	74	S			1		10n			0.307	7.8	Covered	Lt. T Carré, Director.
Mans, Normal School	29.17	741.0	29.48	748.8	49.8	9.9	90	W			6		8		SW	0.067	1.7	Very cloudy	M. André, Director.
Marseille, Observatory	29.61	752.0	29.88	758.9	55.9	13.3	67	W			3		9		W	0	0		M. Piboen, Director.
Montlouis l'Instituteur	24.70	627.5	29.94	760.5	47.8	8.8	31	SW	11.2	5.0			0			0	0		M. Stephan, Director.
Montpellier, Normal School	29.76	755.9	29.87	758.7	60.4	15.8	62	WNW			3		5		WNW	0	0	Cloudy	M. Cave, for Dr. Fines.
Nancy, Normal School	28.69	728.8	29.47	748.4	47.5	8.6	83	S			3		10n		SW	0.346	8.8	Light rain	M. Galzin, Director.
Nantes, Observatory	29.42	747.3	29.58	751.4	52.5	11.4	83	WSW			4		10		SW			Rainy	M. Hasse.
Nice	29.71	754.7	29.74	755.4	56.8	13.8	67	NE			3		5	E	E	0	0	Cloudy	M. Larocque, Director.
Perpignan, Observatory	29.82	757.3	29.92	760.0	59.9	15.5	46	N	15.0	6.7			1	NW		0	0		Capt. Boissière, Director.
Pic-du-Midi, Plantade	22.45	570.2			39.2	4.0							1		SW	0.075	1.9	Clear	Dr. Fines.
Privas, Normal School	28.78	731.1	29.86	758.5	46.0	7.8	86	NW			1		10	NW	NW	0.08	2.	Covered	M. Baylac, for Gen'l de Nansouty.
Puy de Dôme Obs'y, Summit	24.74	628.4			33.6	0.9	100	WSW			8		10			0.811	20.6	Misty	M. Tallieu.
Rochefort, Naval Obs'y	29.92	759.9	29.75	755.7	54.0	12.2	85	SW			3		8		W	0.47	12.	¼ covered	M. Alluard, Director.
Roche-sur-Yon, N. School	29.43	747.4	29.64	752.9	52.5	11.4	85	SW			4		10			0.04	1.	Light rain	Lt. E. Decante, Director.
Rodez, Normal School	27.75	705.1	29.93	760.2	46.4	8.0	86	W			2		9n			0.47	12.0		M. Mouillot, Director.
Rouen, Normal School	29.17	740.9	29.26	743.1	50.0	10	86	S			2		10		S	0.79	20.	Covered	M. Richard, Director.
Saint Lô, Normal School	29.12	739.7	29.28	743.7	49.6	9.8	98	W			3		10		W	0.177	4.5	Raining	M. Platrier, Director.
Saint Maur, Observatory	29.21	741.9	29.37	746.1	50.4	10.2	83	S			4		10		SW	0.138	3.5		M. Delaplanche, Dir.
Toulouse, Observatory	29.29	743.9	30.01	762.3	54.5	12.5	70	W			2		8			0.039	1.0	Very cloudy	M. Renon, Director.
Tours	29.35	745.4	29.54	750.4	52.3	11.3	80	SW			4		8		SW	0.228	5.8	¾ covered	M. Baillard, Director.
Versailles, Observatory	28.87	733.4	29.37	745.9	50.0	10.0	84	SW			3					0.117	2.98		M. de Tastes.
SUB-SERIES. Paris, Montsouris Obs'y																			Dr. A. Bérigny, Director
																			M. Marié Davy, Director
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.43	722.1	29.27	743.4	47.8	8.8	74	S			7		9k	SW		0.236	6.0	Raining	Prof. Dr. Hoh.
Berlin	28.95	735.2	29.12	739.7	33.4	0.8	89	S			2		10			0.311	7.9	Raining	Prof. Dr. Arndt.
Breslau	28.86	733.1	29.38	746.3	42.1	5.6	69	S			3		10			0.008	0.20		Royal University Obs'y.
Carlsruhe	28.97	735.9	29.39	746.5	50.0	10.0	78	SW			8		10	SW		0.669	17.0	Rain & hail	Albert Senz.
Cassel	28.47	723.2	29.06	738.2	45.7	7.6	99	SW			2		10	W		0	0		Dr. H. Möhl.
Frankfort on the Main	28.95	735.3	29.31	744.5	48.9	9.4	81	SW			5		10			0.378	9.6		Physical Society.
Friedrichshafen	28.17	715.5	29.60	751.8	48.6	9.2	72	SW			6		10	SW		0.327	8.3		Chief Telegrapher Wilhelm.
Hamburg	28.90	734.0	28.97	735.8	30.9	—0.6	89	SE			3					0.161	4.1		Dr. R. Kleeman.
Kiel	28.99	736.3	29.00	736.7	28.4	—2.0	93	ESE			1		10			0.091	2.29	Snowing	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	28.76	730.4	29.18	741.1	38.8	3.8	93	SSW			2		9	SW		0.043	1.1	Raining	Prof. Dr. Bruhns.
Magdeburg	28.87	733.3	29.10	739.1	28.9	—1.7	93	SSE			5		10ks			0.138	3.5	Raining	Dr. Assmann.
Memel	29.34	745.1	29.38	746.3	32.2	0.1	87	W			3		10n					Snowing	Reinbrecht & Issermann.
Munich	27.70	703.5	29.53	750.0	48.4	9.1	62	W			6		5	W		0.146	3.7		Central Station.
Neufahrwasser	29.34	745.2	29.35	745.6	34.0	1.1	83	S			2		10	WSW		0.083	2.1		A Lothes.
Neustadt, Palatinate	28.76	730.6	29.26	743.2	49.5	9.7	79	SW			3		10			0.051	1.3		Dicknether.
Stuttgart	28.49	723.6	29.37	746.1	49.1	9.5	76	W			9		10			0.268	6.8		Prof. Dr. Schoder.
Thorn	29.17	741.0	29.36	745.7	34.0	1.1	75	SW			4		10			0.276	7.0		Dr. O. Cunerth.
Weissenburg, Bavaria	27.93	709.3	29.41	747.1	43.9	6.6	71	SW			4		10	SW		0.165	4.2		Prof. Kemlein.
Wustrow	29.09	738.9	29.11	739.5	27.5	—2.5	98	SSW			4		10			0.339	8.6	Snowing	Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.09	738.8	29.48	748.9	54.5	12.5	.....	NW	.....	.....	2.0	.....	0	.....	.....	.....	.....	Clear.	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.86	758.4	29.91	759.7	78.9	26.1	49	SSW	16.0	7.2	.....	.....	0	.....	.....	0	0	Blue sky	
Deesa	29.36	745.8	29.84	757.8	84.4	29.1	6	WNW	7.2	3.2	.....	.....	0	.....	.....	0	0	Blue sky	
Bombay	29.84	758.0	29.88	758.9	80.6	27.0	60	NW	16.0	7.2	.....	.....	0	.....	.....	0	0	Blue sky	
Poona, Yarrowda	28.01	711.4	29.84	757.9	85.8	29.9	12	W	18.0	8.0	.....	.....	0	.....	.....	0	0	Blue sky	
Belgaum	27.33	694.2	29.86	758.3	78.8	26.0	34	SW	3.0	1.3	.....	.....	2	.....	SW	0	0	D. clouds	
Lahore	29.04	737.6	29.80	756.8	70.7	21.5	39	NNE	2.7	1.2	.....	.....	0	.....	.....	0	0	Blue sky	
Roorkee	28.95	735.4	29.88	758.9	66.8	19.3	37	NE	4.7	2.1	.....	.....	8	.....	.....	0	0	Misty	
Agra	29.24	742.6	29.86	756.8	82.3	27.9	27	E	3.3	1.5	.....	.....	8	.....	E	0	0	.....	
Nagpur	28.83	732.2	29.87	758.6	83.6	28.7	42	Calm	3.3	1.5	.....	.....	0	.....	.....	0	0	Blue sky	
Jubbulpore	28.48	723.3	29.84	758.0	79.6	26.4	27	NE	2.9	1.3	.....	.....	4	.....	.....	0	0	D. clouds	
Lucknow	29.50	749.2	29.88	758.8	74.2	23.4	45	NNE	2.6	1.2	.....	.....	10	.....	.....	0	0	Overcast	
Allahabad	29.55	750.6	29.86	758.6	77.9	25.5	33	ENE	1.7	0.8	.....	.....	3	SW	.....	0	0	D. clouds	
Patna	29.84	757.9	30.02	762.6	72.6	22.6	58	W	0.6	0.3	.....	.....	4	W	W	0	0	D. clouds	
Hazaribagh	27.87	707.8	29.91	759.6	71.3	21.8	26	NW	4.3	1.9	.....	.....	0	.....	.....	0	0	Blue sky	
Cuttack	29.83	757.8	29.92	759.8	80.1	26.7	42	Calm	0.2	0.1	.....	.....	0	.....	.....	0	0	Blue sky	
Calcutta, Alipore	29.90	759.6	29.93	760.1	74.5	23.6	53	SW	2.0	0.9	.....	.....	0	.....	.....	0	0	Blue sky	
Goalpara	29.52	749.7	29.93	760.1	73.3	22.9	51	Calm	1.0	0.4	.....	.....	0	.....	.....	0	0	Blue sky	
Chittagong	29.84	758.0	29.93	760.3	73.8	23.2	61	WNW	1.6	0.7	.....	.....	0	.....	.....	0	0	Blue sky	
Sibsagar	29.62	752.4	29.98	761.4	66.5	19.2	76	NE	2.0	0.9	.....	.....	0	.....	.....	0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.33	744.9	29.75	755.6	47.3	8.5	52	Calm	0	0	.....	.....	2	.....	.....	0	0	.....	Prof. Giovanni Clodig
Milan	29.21	741.9	29.74	755.5	46.9	8.3	59	ESE	2.5	1.1	.....	.....	1	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.63	752.7	29.74	755.5	43.3	6.3	79	Calm	0	0	.....	.....	2	NW	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.80	731.4	29.74	755.3	43.3	6.3	58	E	0.7	0.3	.....	.....	6	N	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.56	750.7	29.75	755.6	54.3	12.4	62	E	7.4	3.3	.....	.....	10	.....	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	27.80	706.0	29.76	755.9	46.4	8.0	36	SW	.....	.....	2	.....	7	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.71	754.5	29.76	755.8	50.4	10.2	65	SW	4.9	2.2	.....	.....	0	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.52	749.7	29.78	756.3	51.4	10.8	61	W	.....	.....	2	.....	2	NW	.....	0	0	.....	Cav. F. Meucci.
Leghorn	29.69	754.1	29.77	756.2	51.1	10.6	84	NE	0.7	0.3	.....	.....	9	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.63	752.7	29.81	757.1	54.9	12.7	72	NNE	0	0	.....	.....	2	.....	.....	0	0	.....	Prof. P. S. Ferrari.
Lecce	29.43	747.5	29.69	754.0	53.4	11.9	51	NNW	22.4	10.0	.....	.....	1	.....	.....	0.008	0.2	.....	Prof. C. de Giorgi.
Cosenza	28.83	732.3	29.73	755.1	51.4	10.8	71	NNW	6.3	2.8	.....	.....	4	WNW	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.67	753.7	29.87	758.7	59.5	15.3	57	NW	.....	.....	6	.....	7	NW	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.61	752.2	29.87	758.6	57.9	14.4	60	N	13.6	6.1	.....	.....	1	.....	.....	0.484	12.3	.....	Prof. G. Ciaccintore.
Syracuse	29.69	754.1	29.73	755.2	61.3	16.3	34	WNW	13.6	6.1	.....	.....	3	WNW	.....	0	0	.....	Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.26	743.1	29.78	756.3	56.8	13.8	32	N	1.3	0.6	.....	.....	0	.....	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	21.94	557.3	.....	.....	24.4	— 4.2	86	SSW	.....	.....	4	.....	10u	.....	W	0.394	10.0	Misty	P. F. Denza.
Valdobbia	21.88	555.8	.....	.....	26.6	— 3.0	89	E	.....	.....	1	.....	3k	.....	N	0	0	Misty	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	29.93	760.2	29.95	760.7	45.2	7.3	59	WNW	6.7	3.0	.....	.....	9cs;ck	.....	.....	0	0	Cloudy	K. Sasaki.
Kioto	29.65	753.1	29.83	757.7	43.7	6.5	90	.....	.....	.....	.....	.....	7s;ct;cs	.....	.....	0.020	0.51	Fair	
Nagasaki, I. M. Obs'y	29.89	759.2	30.10	764.5	41.9	5.5	67	NW	6.1	2.7	.....	.....	10cs	.....	.....	0	0	Cloudy	S. Takehayashi.
Tokei Obs'y, Yeddo	29.58	751.3	29.65	753.1	40.7	4.8	78	W	3.3	1.5	.....	4cs;ck	5s	W	W	0	0	Cloudy	The Staff.
Wakayama	29.80	756.9	29.85	758.2	51.7	10.9	60	W	9.2	4.1	.....	.....	10s	.....	.....	0	0	Cloudy	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.69	754.1	29.88	758.8	82.4	28.0	54	SSE	19.0	8.5	.....	0	4	.....	S	0	0	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.34	618.3	30.24	768.0	41.9	5.5	82	N	.....	.....	1	0	0	.....	.....	0	0	Fair	Prof. M. Leal.
Mazatlan	29.69	754.0	29.95	760.7	63.3	17.4	83	ENE	0.9	0.4	.....	1cs	0	.....	.....	0	0	Hazy	F. Quijano, C. E.
Mexico, Central Obs'y	.....	.....	.....	.....	39.2	4.0	48	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	The Staff.
Pabellon, Aguascalientes	23.79	604.3	29.91	759.8	38.3	3.5	66	ENE	.....	.....	2	0	0	.....	.....	0	0	Fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.28	591.3	30.23	767.9	39.2	4.0	45	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.25	616.0	30.36	771.2	44.6	7.0	62	WSW	0.9	0.4	.....	.....	10	.....	SW	0	0	Covered	G. Barroeta, M. D.
Tlacotalpam	29.74	755.3	29.75	755.6	66.0	18.9	90	S	1.7	0.8	.....	0	0	.....	.....	0	0	Hazy	Prof. M. Cházaro.
Zacatecas	22.36	568.0	30.07	763.7	37.0	2.8	59	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.00	736.5	29.00	736.5	47.3	8.5	.....	WSW	.....	.....	7	.....	.....	.....	.....	0.579	14.7	.....	
Groningen	28.84	732.4	28.89	733.8	37.6	3.1	.....	SW	.....	.....	3	.....	.....	.....	.....	0.209	5.3	.....	
Helder	28.91	734.2	28.91	734.2	40.3	4.6	.....	SW	.....	.....	4	.....	.....	.....	.....	0.693	17.6	.....	
Hellevoetsluis	28.96	735.6	28.96	735.6	45.1	7.3	92	WSW	.....	.....	6	.....	.....	.....	.....	0	0	.....	
Utrecht	28.93	734.7	28.97	735.9	46.9	8.3	96	SW	.....	.....	5	.....	10	.....	.....	1.307	33.2	Dull	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.11	739.4	29.17	741.0	28.0	— 2.2	63	Calm	0	0			1			0	0		
Christiania	29.17	740.8	29.32	744.7	19.8	— 6.8	63	NNE	9	4			3			0	0		
Gjæsvær	29.34	745.3	29.37	745.9	23.0	— 5.0		SW			4		8						
Lodingen	29.43	747.6	29.48	748.8	19.2	— 7.1	75	Calm			0		0			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.10	764.5	30.26	768.5	59.0	15.0	82	SSW	7.4	3.3			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.17	741.0	30.19	766.9	54.3	12.4	74	WSW	4.2	1.9			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.17	766.2	30.25	768.4	65.3	18.5	58	SE	5.6	2.5			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.91	759.8	30.28	769.1	56.7	13.7	74	NW	9.4	4.2			3			0	0		The Staff.
Ponta Delgada, Azores	30.29	769.3	30.35	771.1	64.8	18.2	72	Calm	0	0			5			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.34	745.2	30.54	775.8	4.3	—15.4	81	SE	9	4			0						Capt. Lasarew.
Archangel	29.72	755.0	29.74	755.5	3.6	—15.8	76	ESE	18	8			10					Snow-drift..	Capt. Sseliwerstow.
Astrakhan	29.78	756.3	29.69	754.2	32.7	0.4	62	E	11	5			10cp			Blank		Heavy cld's	Capt. Wisganow.
Barnaul	30.03	762.7	30.60	777.2	— 3.1	—19.5	70	Calm	0	0			0						Meteorological Obs'y.
Dorpat	29.08	738.5	29.32	744.8	33.1	0.6	90	SSW	7	3			10n					Snowing	Observatory.
Ekaterinburg	29.47	748.6	30.56	776.1	— 0.2	—17.9	71	SE	9	4			10						Meteorological Obs'y.
Kasan	29.89	759.2	30.19	766.7	12.4	—10.9	74	S	7	3			9						Observatory.
Kertch	29.54	750.2	29.56	750.7	43.2	6.2	91	E	7	3			3						Lagorio.
Kieff	28.94	735.0	29.59	751.6	33.3	0.7	90	WSW	2	1			10ks;n						Cand. Fatjanow.
Lugan	29.45	748.1	29.67	753.5	32.0	0.0	81	ESE	31	14			8					Light clouds	Meteorological Obs'y.
Moscow	29.11	739.5	29.68	753.9	33.4	0.8	89	S	4	2			10s					Raining	Meteorological Obs'y.
Nertchinsk	28.02	711.7	30.64	778.3	— 9.6	—23.1	46	Calm	0	0			0						Meteorological Obs'y.
Nikolaiev	29.54	750.2	29.57	751.0	35.4	1.9	93	NE	9	4			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.67	753.5	29.75	755.7	—14.8	—26.0	73	Calm	0	0			0						Lieut. Iwanow.
Nukuss	29.70	754.3	29.93	760.3	51.1	10.6	42	E	8.9	4.0			0						Dr. Dobrochotow.
Pekin, China	30.36	771.1	30.50	774.7	26.6	— 3.0	28	Calm	0	0			0						Physical Observatory.
St. Petersburg	29.35	745.5	29.37	745.9	21.9	— 5.6	93	SE	9	4			10n						Central Physical Obs'y.
Tashkend, Laboratory	28.59	726.2	30.21	767.4	42.4	5.8	64						0						Teich, A. M.
Tiflis	28.27	718.1	29.70	754.3	45.9	7.7	90	Calm	0	0			10					Light rain	Physical Observatory.
Warsaw	29.95	737.9	29.48	748.9	33.6	0.9	85	SW	7	3			10ks						Astronomical Obs'y.
Wilna	29.04	737.7	29.47	748.6	35.1	1.7	93	S	4	2			10					Heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.19	766.8	30.51	775.0	4.6	—15.2	68	SW	18	8			3						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			28.71	729.2	43.5	6.4	71	SW			2		10k			0.17	4.3	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			28.50	723.9	37	2.8	90	ESE			8		10			0.5	13.	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds			29.14	740.1				ESE			4		5			0	0		Robert Burnet.
SPANISH SERIES. Furnished by the Co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.80	756.9	29.91	759.6	58.3	14.6	70	SSW	4.7	2.1			0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.96	761.0	30.02	762.4	60.4	15.8	48	S	2.2	1.0		3	0	NE		0	0	Almost clear	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.11	688.6			46.6	8.1	75	SW	3.8	1.7		1	2	NE		0	0	Light clouds	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.87	707.8	30.11	764.8	55.0	12.8	73	S	8.7	3.9		0	0			0	0	Clear	The Staff.
Murcia, Met. Obs'y ‡	29.90	759.4	30.04	763.1	75.0	23.9	32	W	2.9	1.3		0	0			0	0	Clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.15	740.3	30.05	763.2	52.9	11.6	90	SW	12.5	5.6			10			0.130	3.3	Misty	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.92	759.9	29.98	761.6	66.6	19.2	94	SE	3.4	1.5		10k	s			2.504	63.6	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.92	760.0	29.97	761.3	81.0	27.2	70	E	4.4	2.0			s			0	0	Fair	Federico Faura, S. J
San Fernando, Naval Obs'y	30.10	764.5	30.20	767.1	62.6	17.0	70	WNW	7.7	3.4		0	i		NW	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.91	759.7	30.00	762.0	70.2	21.2	81	NE	9.6	4.27		8s	3k	NE	NE	0.049	1.25	Clear	Enrique Gaden, Chief Engineer.
Tuguegarao, Philippine Ids	29.87	758.8	30.02	762.5	74.2	23.4	87	NNW	5.4	2.4			7ks		NW	0	0	Covered	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.57	751.1	29.61	752.1	—16.6	—27.0	100	N			2		0			0	0		
Umea	29.41	747.0	29.46	748.3	3.2	—16.0	100	N			6		10			0	0		
Hernosand	29.40	746.8	29.45	748.1	8.4	—13.1	88	NNE			2		10			0.024	0.6		
Stockholm	29.09	738.8	29.26	743.3	11.1	—11.6	85	N			4		10			0.031	0.8	Snowing	
Wisby	29.24	742.8	29.30	744.3	17.6	— 8.0	94	W			2		10			0.291	7.4	Snowing	
Sub-Series.																			
Upsala	29.17	741.0	29.26	743.2	9.8	—12.8	90	N	14.3	6.4			10			0.026	0.65	Snowing	Nils Ekholm.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.35	720.0	29.78	756.3	53.4	11.9	61	SW			4		9			0.157	4.0	Covered	The Observatory.
Zurich	28.00	711.3	29.66	753.3	49.1	9.5	67	W			7		10			0.512	13.0	Covered	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —6.5 mm.; Ther. +8°.8 cent.; Hum. —12 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.58	751.3	42.8	6.0	96	N	27	12.0			10		N	0.130	3.3	Raining	The Observatory.
Valona			29.60	751.8	51.4	10.8		NW			1		2			0.75	19.	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.77	756.1	66.0	18.9	60	SW			3		8cs		SW	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.96	761.0	30.05	763.3	44	6.7	100	S	6	2.7			10n		Calm	0.27	6.9	Light rain	
Alpena, Michigan	28.73	729.7	29.37	746.0	35	1.7	100	SE	10	4.5			10s		Calm	0.95	24.1	Cloudy.	
Atlanta, Georgia	28.79	731.3	29.93	760 2	49	9.4	85	SW	6	2.7		10k	o	SW		0.61	15.5	Cloudy	
Atlantic City, New Jersey	30.04	763.0	30.05	763.3	40	4.4	100	SE	12	5.4			Fog		Calm	0.08	2.0	Dense fog	
Attou Id., Alaska‡	29.54	750.3			29	— 1.7	75	SE	4	1.8		o	8s		E	0.43	10.9	Cloudy	
Augusta, Georgia	29.80	756.9	30.00	762.0	56	13.3	94	Calm	o	o			Fog		Calm	1.58	40.1	Dense fog	
Baltimore, Maryland	29.92	760.0	29.97	761.2	49	9.4	93	SE	5	2.2			10n		Calm	1.50	38.1	Light rain	
Barnegat, New Jersey	30.01	762.2	30.04	763.0	41	5.0	100	S	23	10.3			Fog		S	0.03	0.8	Dense fog	
Benton, Montana	27.38	695.4			15	— 9.4	100	N	9	4.0			10n		Calm	0.18	4.6	Light snow.	
Bismarck. Dakota	28.17	715.5	30.03	762.7	10	—12.2	100	NW	6	2.7			10n		Calm	0.02	0.5	Light snow.	
Boise City, Idaho	27.18	690.4	30.14	765.5	27	— 2.8	82	NW	1	0.4		o	o			0	0	Clear	
Boston, Massachusetts	30.00	762.0	30.16	766.1	46	7.8	92	S	2	0.9			Fog		Calm	0	0	Dense fog	
Brackettville, Texas	28.48	723.4	29.53	750.0	48	8.9	78	Calm	o	o		o	o			0.01	0.3	Clear.	
Brownsville, Texas	29.63	752.6	29.68	753.9	63	17.2	94	S	12	5.4		o	5ks		S	0	0	Fair	
Buffalo, New York	28.94	735.1	29.62	752.3	51	10.6	72	SE	8	3.6			10s		S	0.50	12.7	Cloudy	
Burlington, Vermont	29.67	753.6	29.96	761.0	44	6.7	92	S	15	6.7			10n		S	0.13	3.3	Light rain	
Cairo, Illinois	29.58	751.3	29.99	761.7	38	3.3	72	NW	4	1.8		o	o			0.44	11.2	Clear	
Campo, California	27.40	696.0	29.97	761.2	26	— 3.3	86	S	2	0.9		o	2ks		W	0	0	Fair	
Camp Thomas, Arizona	26.97	685.0			33	0.6	79	Calm			o	o	o			0.04	1.0	Clear	
Cape Henry, Virginia	30.01	762.2	30.02	762.5	45	7.2	100	SE	16	7.2			10n		SW	0.20	5.1	Light rain	
Cape May, New Jersey																			
Castroville, Texas	28.90	734.0	29.60	751.8	52	11.1	66	E	4	1.8		o	5s		Calm	Inap.	Inap.	Threatening	
Cedar Keys, Florida	29.97	761.2	29.99	761.7	59	15.0	94	S	5	2.2			Fog			0.28	7.1	Dense fog	
Champaign, Illinois	28.96	735.6	29.78	756.4	32	0.0	89	W	4	1.8			10s		W	0.89	22.6	Cloudy	
Charleston, S. Carolina	29.91	759.7	29.96	761.0	60	15.6	94	SW	3	1.3			Fog			0.73	18.5	Light fog	
Charlotte, N. Carolina	29.07	738.4	29.87	758.7	54	12.2	93	SW	4	1.8		o	2s;1g		S;Calm	1.58	40.1	Fair	
Chattanooga, Tennessee	29.14	740.1	29.93	760.2	53	11.7	73	SW	8	3.6		1k	2ks	SW	SW	0.13	3.3	Fair	
Cheyenne, Wyoming	23.85	605.8	29.79	756.7	8	—13.3	78	N	6	2.7		o	o			0.05	1.3	Clear	
Chicago, Illinois	28.90	734.0	29.59	751.6	36	2.2	80	W	12	5.4			10s		Calm	0.92	23.4	Cloudy	
Chincoteague, Virginia	30.00	762.0	30.02	762.5	42	5.6	100	SE	25	11.2			10n		SE	0.05	1.3	Heavy rain.	
Cincinnati, Ohio	29.18	741.1	29.82	757.4	48	8.9	70	SW	10	4.5			10ks		W	0.60	15.2	Cloudy	
Cleveland, Ohio	28.88	733.5	29.58	751.3	51	10.6	82	S	12	5.4			10ks		SW	0.17	4.3	Cloudy	
Coleman City, Texas	27.96	710.2	29.64	752.8	40	4.4	100	NW	11	4.9			10n		Calm	0.18	4.6	Light rain	
Columbus, Ohio	28.92	734.6	29.76	755.9	42	5.6	83	SW	17	7.6			10ks		SW	0.57	14.5	Cloudy	
Concho, Texas	27.80	706.1	29.49	749.0	41	5.0	91	NE	10	4.5			10n		Calm	0.12	3.0	Light rain	
Corsicana, Texas	29.33	745.0	29.81	757.2	45	7.2	76	N	1	0.4		o	5s		Calm	0	0	Fair	
Davenport, Iowa	29.13	739.9	29.78	756.4	28	— 2.2	88	W	11	4.9			10s		Calm	0.13	3.3	Cloudy	
Dayton, Washington T'y	28.41	721.6	30.16	766.1	30	— 1.1	100	S	6	2.7			10s		Calm	0	0	Cloudy	
Deadwood, Dakota	25.28	642.1			11	—11.7	80	W	2	0.9			10s		Calm	0.15	3.8	Cloudy	
Decatur, Texas	28.62	726.9	29.82	757.4	37	2.8	90	N	16	7.2		10c	o	Calm		0	0	Cloudy	
Delaware Breakwater, Del.	29.99	761.7	30.02	762.5	46	7.8	92	S	20	8.9			10s		SE	0.01	0.3	Cloudy	
Denison, Texas	29.05	737.9	29.87	758.7	38	3.3	81	NE	12	5.4			10s		NE	0	0	Threatening	
Denver, Colorado	24.63	625.6	29.85	758.2	17	— 8.3	83	NW	6	2.7			10n		Calm	0.20	5.1	Light snow.	
Des Moines, Iowa	29.02	737.1	29.96	761.0	18	— 7.8	84	NW	6	2.7			10s		N	0	0	Cloudy	
Detroit, Michigan	28.78	731.0	29.44	747.8	54	12.2	80	W	28	12.5			10s		W	0.67	17.0	Cloudy	
Dodge City, Kansas	27.32	693.9	29.77	756.1	16	— 8.9	66	NE	6	2.7			10s		Calm	0	0	Cloudy	
Dubuque, Iowa	29.02	737.1	29.74	755.4	28	— 2.2	88	W	8	3.6			10s		Calm	0.19	4.8	Cloudy	
Duluth, Minnesota	29.11	739.4	29.81	757.2	29	— 1.7	89	NW	6	2.7			10s		Calm	0.05	1.3	Cloudy	
Eagle Pass, Texas	28.90	734.0	29.63	752.6	52	11.1	60	NW	4	1.8		o	o			0	0	Clear	
Eagle Rock, Idaho	25.17	639.9	29.82	757.4	— 7	—21.7	59	N	8	3.6		o	o			0	0	Clear	
Eastport, Maine	30.10	764.5	30.17	766.3	37	2.8	100	S	2	0.9			Fog		Calm	0.01	0.3	Dense fog	
Edinburg, Texas																			
El Paso, Texas	25.90	687.8			42	5.6	34	SW	14	6.3		o	o			Inap.	Inap.	Clear	
Erie, Pennsylvania	28.86	733.0	29.55	750.6	50	10.0	79	SE	22	9.8		10cs	o	SW		0.15	3.8	Cloudy	
Escanaba, Michigan	28.74	730.0	29.39	746.5	34	1.1	100	N	12	5.4			10n		Calm	0.42	10.7	Light rain	
Florence, Arizona	28.49	723.6	30.09	764.3	33	0.6	67	S	1	0.4		o	o			0	0	Clear	
Fort Apache, New Mexico	24.70	627.4	30.15	765.8	18	— 7.8	37	E	1	0.4		o	2s		N	0.57	14.5	Fair	
Fort Assiniboine, Montana	27.36	694.9			10	—12.2	100	NE	12	5.4			10n		NE	0.13	3.3	Light snow.	
Fort Bennett, Dakota	28.44	722.4			3	—16.1	73	NW	2	0.9		o	o			0	0	Clear	
Fort Buford, Dakota	28.10	713.7	30.09	764.3	12	—11.1	100	W	8	3.6			10n		Calm	0.24	6.1	Light snow.	
Fort Custer, Montana	26.92	683.8			15	— 9.4	100	N	4	1.8			10n		Calm	0.04	1.0	Light snow.	
Fort Davis, Texas	24.85	631.2	29.81	757.2	37	2.8	81	NW	12	5.4		o	5s		Calm	0	0	Fair	
Fort Elliott, Texas	27.06	687.3	29.46	748.3	20	— 6.7	70	NE	28	12.5			10n		NE	0.03	0.8	Light snow.	
Fort Gibson, Indian T'y	29.40	746.7	29.95	760.7	34	1.1	79	N	4	1.8			10s		N	0	0	Cloudy	
Fort Grant, Arizona	24.88	631.9	29.68	753.9	33	0.6	61	NW	12	5.4		o	o			Inap.	Inap.	Clear	
Fort Griffin, Texas	28.45	722.6	29.75	755.6	35	1.7	90	N	10	4.5			10s		Calm	0.26	6.6	Light rain	
Fort Keogh, Montana	27.58	700.5			14	—10.0	100	W	8	3.6			10n		Calm	0.06	1.5	Light snow.	
Fort McKavett, Texas	27.43	696.7	29.34	745.2	42	5.6	83	N	8	3.6		1k	o	Calm		Inap.	Inap.	Clear	
Fort Macon, North Carolina	30.02	762.5	30.03	762.7	53	11.7	100	S	24	10.7			10n		Calm	0.42	10.7	Light rain	
Fort St. Michaels	30.69	779.5	30.73	780.5	3	—16.1	100	NE	6	2.7		o	o						
Fort Missoula, Montana	26.81	681.0			20	— 6.7	85	E	6	2.7			10s		Calm	0.08	2.0	Cloudy	
Fort Shaw, Montana	26.53	673.8			14	—10.0	100	NW	9	4.0			10n		Calm	0.03	0.8	Light snow.	
Fort Sill, Indian Territory	28.63	727.2	29.82	757.4	16	— 8.9	83	N	20	8.9			10s		Calm	Inap.	Inap.	Cloudy	
Fort Stevenson, Dakota	28.15	715.0			13	—10.6	81	NW	12	5.4			10ks		NW	0	0	Cloudy	
Fort Verde, Arizona					30	— 1.1	78	NW			1	o	o			0.01	0.3	Clear	
Fredericksburg, Texas	27.95	709.9	29.51	749.5	45	7.2	84	E	2	0.9		1k	o	Calm		0	0	Clear	
Galveston, Texas	29.72	754.9	29.76	755.9	60	15.6	94	S	3	1.3			10s		NW	Inap.	Inap.	Threatening	
Grand Haven, Michigan	28.77	730.7	29.41	747.0	38	3.3	81	W	26	11.6			10n		Calm	0.85	21.6	Light rain	
Hatteras, North Carolina	30.05	763.3	30.08	764.0	47	8.3	100	SE	10	4.5			10n		Calm	0.68	17.3	Light rain	
Helena, Montana	25.89	657.6			14	—10.0	100	Calm	o	o			10n		Calm	0.05	1.3	Light snow.	
Henrietta, Texas	28.94	735.1	29.91	759.7	32	0.0	100	NE	16	7.2			10n		Calm	Inap.	Inap.	Sleeting	
Indianapolis, Indiana	28.99	736.3	29.77	756.1	38	3.3	81	W	12	5.4			10s		W	1.66	42.2	Cloudy	
Indianola, Texas	29.67	753.6	29.70	754.4	62	16.7	94	S	3	1.3		o	8s		S	0	0	Fair	
Jacksboro, Texas	28.66	728.0	29.82	757.4	37	2.8	71	N	8	3.6			10s		Calm	0	0	Cloudy	
Jacksonville, Florida	29.96	761.0	30.01	762.2	64	17.8	89	S	5	2.2			10s		S	0.03	0.8	Cloudy	
Keokuk, Iowa	29.20	741.7	29.88	758.9	30	— 1.1	78	NW	13	5.8			10s		Calm	0	0	Cloudy	
Key West, Florida	29.96	761.0	30.00	762.0	71	21.7	85	S	3	1.3		o	2s		Calm	0.06	1.5	Fair	
Kittyhawk, North Carolina	30.06	763.5	30.08	764.0	52	11.1	79	S	18	8.0			10n		Calm	0.07	1.8	Light rain	
Knoxville, Tennessee	28.91	734.3	29.91	759.7	50	10.0	86	SW	5	2.2			10n		Calm	0.12	3.0	Light rain	
La Crosse, Wisconsin	28.96	735.6	29.70	754.4	30	— 1.1	78	NW	8	3.6			10n		Calm	Inap.	Inap.	Light snow.	
La Mesilla, New Mexico	25.78	654.8	29.93	760.2	35	1.7	53	N	3	1.3		o	o			0	0	Clear	
Laredo, Texas	29.22	742.2	29.55	750.6	59	15.0	88	SW	2	0.9		o	o			0	0	Clear	
Leavenworth, Kansas	29.14	740.1	30.05	763.3	16	— 8.9	83	NW	13	5.8		o	o			0	0	Clear	
Lewiston, Idaho	29.47	748.5	30.16	766.1	32	0.0	100	E	1	0.4			10n		Calm	0.10	2.5	Light snow.	
Little Rock, Arkansas	29.59	751.6	29.92	760.0	41	5.0	82	E	4	1.8		o	8ks		Calm	0	0	Fair	
Los Angeles, California	29.64	752.8	30.01	762.2	48	8.9	56	W	13	5.8		o	o			0	0	Clear	
Louisville, Kentucky	29.27	743.4	29.83	757.7	45	7.2	84	SW	15	6.7			10s		SW	0.46	11.7	Cloudy	
Lynchburg, Virginia	29.16	740.7	29.83	757.7	57	13.9	87	S	3	1.3			10s		S	0.56	14.2	Cloudy	
Madison, Wisconsin	28.58	725.9	29.57	751.1	31	— 0.6	89	W	12	5.4			10s		Calm	0.34	8.6	Cloudy	
Marquette, Michigan	28.80	731.5	29.51	749.5	30	— 1.1	89	N	12	5.4			10n		Calm	0.35	8.9	Light snow.	
Mason, Texas	28.05	712.5	29.80	756.9	45	7.2	92	E	4	1.8		2k	o	SE		0.12	3.0	Fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0=10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.61	752.1	29.96	761.0	46	7.8	54	Calm	0	0		0	1s		Calm	0.45	11.4	Clear	
Milwaukee, Wisconsin	28.79	731.3	29.52	749.8	34	1.1	90	W	17	7.6			10s		NW	0.44	11.2	Cloudy	
Mobile, Alabama	29.89	759.2	29.97	761.2	48	8.9	91	N	3	1.3		0	Fog			0.01	0.3	Clear	
Montgomery, Alabama	29.77	756.1	30.01	762.2	48	8.9	92	Calm	0	0		0	Fog			0.04	1.0	Clear	
Moorhead, Minnesota	28.87	733.3	29.89	759.2	10	—12.2	79	NW	6	2.7			10s		NW	0.03	0.8	Cloudy	
Morgantown, W. Virginia	28.74	730.0	29.70	754.4	56	13.3	75	SW	8	3.6			10n		SW	0.21	5.3	Light rain	
Mt. Washington, N. H.	23.75	603 2	30.11	764.8	32	0.0	100	SW	50	22.4			10n;fog		C;SW	0.29	7.4	Sleeting	
Nashville, Tennessee	29.40	746.7	29.94	760.5	48	8.9	85	SW	5	2.2			10ks		SW	0.23	5.8	Cloudy	
New Haven, Connecticut	29.99	761.7	30.10	764.5	40	4.4	100	E	2	0.9			10n;fg		Calm	0.08	2.0	Light rain	
New London, Connecticut	30.09	764.3	30.14	765.5	41	5.0	91	S	7	3.1			10s;fg		S;C	0	0	Cloudy	
New Orleans, Louisiana	29.85	758.2	29.91	759.7	53	11.7	86	SE	6	2.7		2c	0	NW		0.01	0.3	Fair	
Newport, Rhode Island	30.09	764.3	30.14	765.5	47	8.3	100	SE	16	7.2			Fog			0	0	Dense fog	
New River, N. Carolina					55	12.8	100	SE			4		10n		Calm			Light rain	
New Shoreham, Rhode I'd	30.13	765.3	30.16	766.1	47	8.3	92	S	16	7.2			10s		S	0	0	Cloudy	
New York, New York	29.89	759.2	30.07	763.8	44	6.7	100	SE	9	4.0			Fog		Calm	0	0	Dense fog	
Norfolk, Virginia	29.94	760.5	30.00	762.0	58	14.4	88	S	18	8.0			10n		S	0.23	5.8	Light rain	
North Platte, Nebraska	27.04	686.8	29.78	756.4	15	— 9.4	74	N	10	4.5		0	5s		Calm	0	0	Fair	
Olympia, Washington T'y	30.06	763.5	30.10	764.5	40.5	4.7	96	Calm	0	0			10s		Calm	0.14	3.6	Cloudy	
Omaha, Nebraska	28.83	732.3	30.00	762.0	16	— 8.9	83	NW	15	6.7		0	0			Inap.	Inap.	Clear	
Oswego, New York	29.44	747.8	29.76	755.9	47	8.3	85	SE	12	5.4			10n		SW	0.53	13.5	Heavy rain	
Pensacola, Florida	29.97	761.2	30.01	762.2	49	9.4	100	SW	1	0.4		0	Fog		Calm	Inap.	Inap.	Dense fog	
Philadelphia, Pa	29.98	761.5	30.03	762.7	47	8.3	100	SE	6	2.7			10n;fg		Calm	0.18	4.6	Light rain	
Phœnix, Arizona	28.76	730.5	30.63	778.0	38	3.3	63	W	3	1.3		0	0			0	0	Clear	
Pike's Peak, Colorado	17.16	435.8	29.37	746.0	— 9	—22.8	78	SW	12	5.4			Fog		SW	0.17	4.3	Light fog	
Pilot Point, Texas	29.03	737.3	29.90	759.4	39	3.9	64	NE	12	5.4		0	0			0	0	Clear	
Pioche, Nevada	23.81	604.8	29.58	751.3	16	— 8.9	57	NW	6	2.7		0	0			0	0	Clear	
Pittsburg, Pennsylvania	28.89	733.8	29.68	753.9	53	11.7	80	SE	13	5.8			10ks		S	0.44	11.2	Threatening	
Port Huron, Michigan	28.80	731.5	29.45	748.0	47	8.3	92	S	21	9.4			10n		SW	0.35	8.9	Light rain	
Portland, Maine	30.09	764.3	30.14	765.5	41	5.0	91	S	2	0.9			Fog			Inap.	Inap.	Dense fog	
Portland, Oregon	30.09	764.3	30.16	766.1	39	3.9	82	SE	5	2.2			10n		Calm	0.14	3.6	Light rain	
Portsmouth, N. Carolina					52	11.1	100	SW	18	8.0			10n		Calm	0.41	10.4	Light rain	
Prescott, Arizona	24.50	622.3	29.86	758.4	26	— 3.3	52	N	6	2.7		0	0			0.01	0.3	Clear	
Punta Rassa, Florida	29.96	761.0	29.98	761.5	68	20.0	90	SE	7	3.1			10ks		S	0.27	6.9	Cloudy	
Red Bluff, California	29.75	755 6	30.11	764.8	40.0	4.4	82	N	4	1.8		0	0			0	0	Clear	
Rio Grande City, Texas	29.46	748.3	29.67	753.6	62	16.7	88	SE	8	3.6		0	0			0	0	Clear	
Rochester, New York	29.09	738.9	29.70	754.4	50	10.0	86	S	10	4.5			10s		Calm	0.31	7.9	Cloudy	
Roseburg, Oregon	29.58	751.3	30.17	766.3	38.5	3.6	91	Calm	0	0			10ks		Calm	0.55	14.0	Cloudy	
Sacramento, California	30.04	763.0	30.11	764.8	46	7.8	84	N	6	2.7		0	0			0	0	Clear	
St. Louis, Missouri	29.31	744.5	29.90	759.4	33	0.6	89	NW	12	5.4			10s		Calm	0.88	22.4	Cloudy	
St. Paul, Minnesota	28.92	734.6	29.77	756.1	28	— 2.2	77	NW	6	2.7		5k	0	NW		0	0	Fair	
Salt Lake City, Utah	25.46	646.7	29.79	756.7	20	— 6.7	56	N	1	0.4		0	0			0.28	7.1	Clear	
San Antonio, Texas	29.02	737.1	29.71	754.6	51	10.6	72	NE	6	2.7		0	7s		Calm	0.10	2.5	Threatening	
San Diego, California	29.97	761.2	30.05	763.3	43	6.1	67	E	3	1.3		0	1ks		Calm	0	0	Clear	
Sandusky, Ohio	28.93	734.8	29.59	751.0	45	7.2	76	SW	36	16.1			10s		SW	0.31	7.9	Cloudy	
Sandy Hook, New Jersey	30.02	762.5	30.06	763.5	46	7.8	92	SE	16	7.2			Fog		Calm	0	0	Dense fog	
San Francisco, California	30.09	764.3	30.15	765.8	48	8.9	63	W	6	2.7		1k	0	NW		0.01	0.3	Clear	
Santa Fé, New Mexico	22.81	579.4	29.35	745.5	22	— 5.6	86	E	7	3.1			10s		Calm	0.06	1.5	Cloudy	
Savannah, Georgia	29.90	759.4	29.99	761.7	62	16.7	94	W	6	2.7		0	2s		Calm	0.44	11.2	Fair	
Shreveport, Louisiana	29.88	751.3	29.82	757.4	47	8.3	92	NE	4	1.8		0	5s		Calm	0	0	Fair	
Silver City, New Mexico	23.89	606.8	30.20	767.1	30	— 1.1	68	W	4	1.8		0	0			0.17	4.3	Clear	
Smithville, North Carolina	29.99	761.7	30.02	762.5	58	14.4	94	S	17	7.6			Fog			0.60	15.2	Dense fog	
Socorro, New Mexico	25.06	636 5	29.12	739.6	28	— 2.2	66	NW	3	1.3			10s		NW	0.01	0.3	Cloudy	
Springfield, Illinois	29.15	740.4	29.84	757.9	34	1.1	84	W	12	5.4			10s		NW	0.93	23.6	Cloudy	
Springfield, Massachusetts	29.98	761.5	30.11	764.8	40	4.4	91	Calm	0	0			10n;fg			0.08	2.0	Light rain	
Stockton, Texas	26.67	677.4	29.67	753.6	42	5.6	91	S	2	0.9		0	5s		S	0.13	3.3	Fair	
St. Vincent, Minnesota	29.10	739.1	29.94	760.5	22	— 5.6	86	N	10	4.5			10n		Calm	0.02	0.5	Light snow	
Thatcher's Island, Mass	30.11	764.8	30.17	766.3	39	3.9	100	S	3	1.3			Fog		Calm	0	0	Dense fog	
Toledo, Ohio	28.89	733.8	29.57	751.1	44	6.7	80	S	32	14.3			10s		SW	0.59	15.0	Cloudy	
Tucson, Arizona	27.33	694.2	29.86	758 9	42	5.6	42	N	2	0.9		0	0			0	0	Clear	
Umatilla, Oregon	29.89	759.2	30 42	772.7	26	— 3.3	88	W	2	0.9			10s		Calm	Inap.	Inap.	Cloudy	
Uvalde, Texas	28.68	728.5	29.49	749.0	53	11.7	61	SE	4	1.8		0	0			0	0	Clear	
Vicksburg, Mississippi	29.65	753.1	29.91	759.7	50	10.0	86	W	5	2.2		0	2s		W	0.67	17.0	Fair	
Visalia, California	29.70	754.4	30.08	764.0	43	6.1	93	NW	2	0.9		8k	0	Calm		0	0	Fair	
Washington, D. C.	29.80	756.9	29.91	759.7	50	10.0	100	S	4	1.8			10n		Calm	0.81	20.6	Heavy rain	
Wickenburg, Arizona					32	0.0	69	W			1	0	0			0	0	Clear	
Wilmington, N. Carolina	29.92	760.0	29.98	761.5	60	15.6	94	S	13	5.8			10n		Calm	0.73	18.5	Light rain	
Winnemucca, Nevada	25.54	648.7	29.90	759.4	28	— 2.2	77	Calm	0	0		0	5ks		SW	0	0	Fair	
Wood's Holl, Mass	30.12	765 0	30.16	766.1	44	6.7	92	SE	17	7.6			10s		SW	0	0	Cloudy	
Yankton, Dakota	28.66	728.0	30.04	763.0	16	— 8.9	83	NW	6	2.7			10s		Calm	0	0	Cloudy	
Yuma, Arizona	29.77	756.1	29.92	760.0	46	7.8	62	Calm	0	0		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.67	560.6			52.8	11.6	76	Calm	0	0		10c;ck	0			0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica‡																			
Havana, Cuba, W. I.	29.95	760.7	30.00	762.0	69	20.6	84	Calm	0	0		0	2s		S	2.09	53.1	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	29.82	757.6	29.89	759.1	— 2.9	—19.4		W			2		4			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.96	761.0	29.97	761.2	69.8	21.0	80	Calm	0	0		0	0			0	0	Fine	Robert Johnstone.
Navassa, W. I.	29.90	759.4	29.98	761.5	73.5	23.1	72	NE	14	6.3		5k	2s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	29.96	761.0	29.96	761.0	76	24.4	86	E			1	3c	5k	E		0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.41	747.0	29.96	761.0	78	25.6	89	Calm			0					0	0	Foggy	Francesco J. Cisneros.
Rivas, Nicaragua					75.2	24		SE			2	0	9ks		SW	0	0		Earl Flint.
Santiago de Cuba, W. I.	29.98	761.5	30.00	762.0	72	22 2	71	Calm	0	0		0	0			0	0	Clear	Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	29.82	757.3	29.88	758.9	—11.9	—24.4		Calm			0		0			0	0		K. Elberg.
York Factory, B. A.	30.19	762.8	30.25	768.3	—27 0	—32.8		W	4	1.8		3k	3s	SW	SW	0.07	1.8	Cloudy	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
H. M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.81	757.2	59.2	15.1	70	WNW			3-4		1							Blue sky	Capt. Lord Walter Kerr.
H. M. S. Antelope, Basika Bay, Turkey	29.45	748.0	53	11.7		NNE			4-5		10	NNE				2	N	D. clouds	Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 23′, E 55° 23′	30.26	768.6	75	23.9	76	NW			2		4	WNW				2	N	D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			44	6.7		N			1-2		10					1	N	Drizzling	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.81	757.2	78	25.6	73	ENE			6		5					4	ENE		Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser, N. 36° 54′, E. 15° 20′.	29.92	760.0	61	16.1		N			4		1	N				4	N	Squally	Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 29° 59′, E. 122° 04′	30.33	770.4	43	6.1	75	Calm			0		0							Misty	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.17	766.3	63	17.2	72	NE			4-5		4	NE						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St.J. Garforth.
H. M. S. Egeria, Singapore, Malay Peninsula	29.87	758.7	81	27.2		NE			2		1	SE				2	E	Blue sky	Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter, Shanghai, China	30.27	768.8	33	0.6	89	N			1-2		0							Blue sky	Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.90	759.4	81	27.2	62	NW			1-4		0							Squally	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 6° 20′, W. 80° 20′	29.93	760.2	79.5	26.4	82	NNE			4		0					1		Blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.64	752.8				SSW			4									Squally	Capt. L. F. Jones.
H. M. S. Griffin, N. 19° 57′, W. 61° 07′	29.92	760.0	72.5	22.5	95	N			3		3	N				4	N	Squally	
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, N. 40° 50′, E. 18° 06′	29.66	753.4	57	13.9	94	NE			3-4		0							Blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 149° 57′	30.11	764.8	64	17.8	83	E			1		0							Blue sky	Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Zanzibar, Africa	29.90	759.4	84	28.9	87	Calm			0		4	N						D. clouds	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 29° 53′ E. 121° 34′	30.42	772.7	40.1	4.5	69	NNE			2		0							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 37° 45′, E. 9° 26′	29.97	761.2	61	16.1	82	NW			6		6	NW				7	WNW	Squally	Capt. J. F. G. Grant.
H. M. S. Minotaur, Vigo, Spain	30.12	765.0	56	13.3	87	WSW			3		8	W						Misty	Capt. H. Rawson.
H. M. S. Modeste, N. 5° 24′, E. 100° 20′	29.83	757.7	79	26.1	95	Calm			0		2							D. clouds	Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Trinidad, W. I.	29.90	759.4	77	25.0	77	N			2		2	NE						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, Clarence Bay, Africa	29.87	758.7	82	27.8	100	SSE			1-2		5	SE				1		D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.88	758.9	85	29.4	92	NNW			2		2							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Spain	30.26	768.6	64	17.8	62	NW			2		1	NW						D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 42′, E. 49° 35′	29.64	752 8	78	25.6	78	SE			1-2		1ck					2	SE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	29.96	761.0	68	20.0	92	Calm			0		10					1	SW	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 10° 19′, W. 59° 16′	29.86	758.4	78	25.6	76	NNW			2		3					7	N	D. clouds	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, N. 36° 50′, E. 10° 22′	29.99	761.7	59	15.0	100	NNW			6		9					4	NNW	Showery	Capt. P. H. Colomb.
H. M. S. Triumph, S. 21° 57′, W. 74° 15′	30.07	763.8	72	22.2	71	SE			3		1	SE				2	SE	D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne, N. 32° 25′, E. 23° 52′	29.54	750.3	62	16.7		W			4-5		5					2	WNW	D. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	29.97	761.2	72	22.2		N			1		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, Palestine	29.91	759.7	69.5	20.8	66	SSE			5-6		4	S						Squally	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm G. W. Pollard
GERMAN NAVAL SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Bulama, Senegambia	29.89	759.2	84.2	29.0	85	ESE			1		3							D. clouds	S. C. da Silva Costa, Comd't.
Sado, St Paul de Loando, Africa	29.89	759.2	82.8	28 2	76	WSW			3		8					2	SW	Gloomy	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Mahmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡ Bay of Naples, Italy	29.76	755 9	58.5	14.7	51	WNW			3		0							Blue sky	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.		Force	Amount and kind.		Direction							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.05	763.3	64	17.8	78	SE	6	2.7			8		SE	0	0			Fair	
N. Yard, Portsmouth, N. H.	30.14	765.5	35	1.7	70	Calm	0	0		10c?		Calm		0	0			Clear?	
Naval Hospital, Yokohama, Japan	29.55	750.6	50	10.0	52	SW			3		2		W	0	0			Hazy	
Adams, S. 3° 08′, W. 81° 13′	30.08	764.0	78	25.6	73	E			2		10		NNW			Sm'h	NNW	Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.04	763.0	46	7.8	77	W			3		0			0	0			Clear	
Alert, Hong-Kong, China *	29.97	761.2	68	20.0	84	E			1		0			0	0	Sm'h		Hazy	
Alliance, New Orleans, La	29.93	760.2	53	11.7	86	Calm			0		2			Light		Sm'h		Clear	
Ashuelot, Tientsin, China	30.46	773.7	31	— 0.6	100	NW			1		0							Clear	
Colorado, New York, N. Y	30.09	764.3	44	6.7	100	SE	2	0.9			10			0	0			Dense fog	
Constitution, N. Yard, League I'd., Pa			46	7.8	92	ESE	3	1.3			10							Raining	
Franklin, Norfolk, Va	29.95	760.7	57	13.9	87	SSE	19.2	8.6			10		S	0.25	6.3			Raining	
Galena, Naples, Italy	29.78	756.4	58	14.4	48	ENE			2		0					Sm'h		Clear	
Independence, N. Yard, Mare I'd, Cal	30.11	764.8	43	6.1	83	WNW	1.2	0.5			0			0	0			Clear	
Jamestown, Sitka, Alaska *	30.11	764.8	34	1.1	62	NE			1		0			0	0			Clear	
Kearsarge, Warrington, Florida	29.98	761.5	55	12.8	?	NE			1		0					Sm'h		Clear	
Lackawanna, Callao, Peru †	30.07	763.8	71	21.7	95	S			1		8		S	0	0			Fair	
Marion, Sandy P't, Terra del Fuego	29.49	749.0	50	10.0	93	N			1		10		Calm	Light		Sm'h		Rainy	
Michigan, Erie, Pennsylvania	29.53	750.0	50	10.0		S	6	2.7			10							Cloudy	
Minnesota, New York, N. Y	30.08	764.0	48	8.9	100	SSE			1		10							Foggy	
Monocacy, Shanghai, China	30.39	771.9	35	1.7	70	N			2		0							Clear	
New Hampshire, Port Royal, S. C	29.94	760.5	58	14.4	94	SW	4	1.8			10		Calm	0.34	8.6			Foggy	
Nipsic, Barcelona, Spain	29.97	761.2	59	15.0	65	SW			1		2					Sm'h		D. clouds	
Onward, Callao, Peru †	29.91	759.7	69	20.6	90	Calm			0		10					Long	W	Cloudy	
Palos, Shanghai, China	30.49	774.4	34	1.1	71	N			2		0							Clear	
Passaic, Washington, D. C	29.97	761.2	52	11.1	93	SE			1		10		Calm					Cloudy	
Pensacola, N. 7° 57′, W. 83° 14′	29.90	759.4	80	26.7	82	SSE			1-2		5			0	0	Sm'h		Cloudy	
Portsmouth, Washington, D. C	29.89	759.2	51	10.6	100	SE			2		10							Rain & fog	
Powhatan, New York, N. Y	30.08	764 0	44	6.7	100	Calm			0		10							Hazy	
Quinnebaug, Villafranca, France	29.72	754.9	56	13.3	69	SE			2		8		Calm			Long	SW	Fair	
Richmond, Hong-Kong, China	30.13	765.3	66	18.9	94	NW			1		0			0	0			Clear	
Saratoga, Baltimore, Md	29.93	760.2	45	7.2	100	SSE			2		10		SSE	Heavy				Raining	
Shenandoah, Montevideo, Uruguay *	30.12	765.0	76	24.4	64	E			3		0					Sm'h		Clear	
St. Louis, League Island, Pa	30.09	764.3	44	6.7	100	SE	6	2.7			10			0.15	3.8			Rain & fog	
Swatara, Nagasaki, Japan †	30.03	762.7	47	8.3	70	N			1		0					Sm'h		Blue sky	
Tennessee, N. 26° 04′, W. 86° 46′	29.97	761.2	73	22.8	90	ENE	15	6.7			0			0	0	Mod.	SE	Clear	
Ticonderoga, N. Yard, Mare Id., Cal.	30.09	764.3	47	8.3	100	W			1		0			0	0			Clear	
Trenton, Villafranca, France *	29.70	754.4	61	15.1	55	SE			0-1		5			0	0	Sm'h		Fair	
Vandalia, La Brea Point, Venezuela	29.99	761.7	76	24.4	100	NNW			5		8		NNW					Fair	
Wabash, Boston, Massachusetts	30.20	767.1	40	4.4	100						10		Calm	0	0			Misty	
Wachusetts, Panama, Panama *	29.56	750.8	75	23.9	90	NW			2		2		N			Sm'h		Fair	
Wyoming, Villafranca, France	29.72	754.9	58	14.4	88	SE			1		8		ENE			Sm'h	S	Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	Upper. From.	Lower. From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡ S. 6° 45′, W. 18° 00′	29.95	760.7	83.1	28.4	76	E			4		2								
S. S. Bateshire																		Blue sky	Capt. C. J Russell.
Barque Belleisle, N. 18° 10′, W. 41° 15′	29.95	760.7	77.5	25.3	86	SSE			6		10							Overcast	Capt. John Arbuckle
British Merchant. ‡																			Capt. A. J. Brown.
Chin Yang, ‡ N. 12° 14, W. 45° 16′	29.94	760.5	81.7	27.6	74	SSW			2		6							D. clouds	Capt. E. J. Molony.
S. S. Cipero.																			Capt. H. Youlden.
City of Agra, ‡ S. 22° 24′, W. 29° 35′	30.05	763.3	85.0	30.0	80	E			2		2							Blue sky	Capt W. N. Lailey.
Barque Commewyne, ‡ N. 30° 14′, W. 54° 20′	29.64	752.8	67	19.4	89	NNE			6		7							Showery	Capt. T. Young.
Barque Coppename																			Capt. W. Scott.
Denbigshire																			Capt. A. Buchan.
Barque Dochra, ‡ S. 13° 17′, W. 9° 09′	29.87	758.7	79	26.1	70	ESE			5		10							Raining	Capt. H. Y. Murdock.
Ship Ellen Stuart, N. 7° 28′, E. 90° 25′	29.90	759.4	79.5	26.4	82	E			3		3							D. clouds	Capt. H. Spalding.
Barque Elissa																			Capt. J. E. C. Patterson.
S. S. Ethiopia, ‡ N. 46° 37′, W. 47° 21′	29.80	756.9	42	5.6	91	SW			6		10					3	SSE; ENE	Overcast	Capt. A. Watson.
S. S. Fleurs Castle																			Capt. A. Campbell.
Barque Gem.																			Capt J. Kidder.
S. S. Gordon Castle																			Capt. H. Park.
Barque Harvest Home																			Capt. W. Waring.
Barquentine Hope ‡																			Capt. H. H. Williams.
Ship Iron Cross																			Capt. Jas. Campbell.
S. S. Kangaroo																			Capt. W. Randall.
Kryolith																			Capt. A. Kellett.
S. S. Lamperts																			Capt. Alex. Wilson.
Laomene																			Capt. G. H. Jones.
Ship Lochee ‡																			Capt. W. P. Hughes.
S. S. Lusitania																			Capt. J. Raeburn, R.N.R.
Majestic																			Capt. C. A. F. Powell.
Barque Markland, ‡ N. 17° 34′, W. 51° 29′	29.88	758.9	75.4	24.1	80	WSW			5		3					5	NNW	D. clouds	Capt. W. Ellery.
Barque Merlola, N. 37° 06′, W. 7° 16′	30.22	767.6	57.5	14.2	88	NNE			4		1							Blue sky	Capt. H. W. Dyke.
Nairnshire																			Capt. E. W. Turner.
S. S. Nizam																			Capt. W. Niven.
Queen of Cambria																			Capt. G. W. Brady.
S. S. Richmond																			Capt. M. Parry.
Barque Shun Lee, ‡ N. 3° 25′, W. 23° 45′	29.90	759.4	83.7	28.7	88	Calm			0		2					Sm'h		D. clouds	Capt. W. H. Stuart.
S. S. Seine																			Capt. John M. Gray.
S. S. Strathleven ‡																			Capt. H. Manning.
Sch'r. Traveller																			Capt. C. W. Pearson.
S. S. Wyberton, N. 31° 40′, E. 31° 49′	29.76	755.9	63.5	17.5	70	SW			6		10							Overcast	Capt. A. Simpson.
S. S. Yorkshire, N. 36° 30′, W. 1° 20′	30.17	766.3	63	17.2	78	SW			2		0					2	W	Blue sky	Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			
S. S. Nova Scotian																			Capt. F. Archer.
CUNARD LINE. *Ch. G. Francklyn.*																			Capt. Wm. Richardson.
S. S. Algeria																			
S. S. Bothnia																			Capt. W. Watson.
S. S. Scythia																			
WHITE STAR LINE. *Ismay, Imrie & Co.*																			Capt. W. H. P. Hains.
S. S. Adriatic																			
S. S. Baltic																			Capt. J. W. Jennings.
S. S. Britanic, N. 45° 34′, W. 39° 43′ †	30.50	775.7	45	7.2		Calm			0		2		E			Long	NE	D. clouds	Capt. H. Parsell.
S. S. Celtic, N. 51° 18′, W. 12° 08′ †	29.10	739.1	46	7.8		W			8		2		W	4h'rs	he'vy	H'vy	W	Fair	Capt. H. Perry.
S. S. Germanic, N. 43° 02′, W. 51° 40′ †	30.33	770.4	40	4.4		N			1		0			0	0	Sm'h		Clear	Capt. Benj. Gleadell.
S. S. Republic, N. 50° 49′, W. 15° 38 ′ *†	29.40	745.7	58	14.4	64	WNW			8		5		WNW	4 hours		H'vy	WNW	Fair	Capt. Ch. W. Kennedy.
																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			
S. S. Köln, N. 49° 39′, W 17° 35′ ‡	29.54	750.3	45.5	7.5		W			6–9		10		W*	Heavy Rain	squalls & h'il	Very h'vy	W	C oudy	Capt. H. Baur.
S. S. Leipzig, N. 49° 13′, W. 19° 53′	29.78	755.4	47.5	8.6	77	NW			7–8		10		NW	0	0	H'vy	NW	Fair	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand.

UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England. .*†	28.70	729.0	42	5.6	91	W			4		8		W					Fair	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 47° 46′, W. 43° 18′.....†	30.19	766.8	37	2.8	90	NW			4		8		N	0	0	R'gh	NW	Cloudy..	Capt. R. W. Sargent.
S. S. Ohio, ‡ Delaware River, Del...*†	30.02	762.5	45	7.2	92	SE			2		10		SE	Light				Foggy	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, † Philadelphia, Pa.....	29.99	761.7	38	3.3	90	SE			1		10		E	1.	25.4			Overcast	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 23° 46′, W. 111° 07′....†	29.96	761.0	64	17.8	78	NNW			4		8		NNW	0	0	Mod.	WNW	Cloudy	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ Yokohama, Japan.....†	29.63	752.6	54	12.2	74	SW			3		2		NW	0	0	Sm'h		Clear	Capt. H. Davison.
S. S. Gaelic, N. 34° 53′, E. 140° 09′..*†	30.18	766.6	55	12.8	97	WSW			7		2		WSW			Mod.	WSW	Clear	Capt. W. H. Kidley.
S. S. Oceanic, N. 35° 48′, W. 130° 20′...†	30.37	771.4	54	12.2	87	WNW			3		2		WNW	0	0	Mod.	WNW	Clear.	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles
S. S. Oregon																			Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon. San Pedro, Cal.....†	29.98	761.5	52	11.1	66	NW			3		0					Mod.	W	Clear	Capt. J. N. Ingalls.
S. S. Idaho, Port Townsend, Wash. T.†.	29.98	761.5	40	4.4	100	E			2		10							Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba..																			
S. S. Senator, San Francisco, Cal.....			46	7.8	92	NW			1		0							Clear	Thos. Wallace.
S. S. State of California, Portland, Oregon.....†	30.11	764.8	39	3.9	82	E			2		10			0	0			Cloudy	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal..... †	30.08	764.0	46	7.8	62	W			2		2		NW					Clear	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 0° 53′, W. 165° 42′.....	29.85	758.2	80	26.7	91	N			1		10					Sm'h		Hazy	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.....†	29.73	755.1	76	24.4	82	E			2		0			0	0			Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Panama, Panama.....†	30.05	763.3	74	23.3	90	NW			1		5		S	0	0	Sm'll	E	Clear	Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China.....†	30.09	764.3	66	18.9	54	NE			2		0			0	0	Sm'h		Clear	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ Mazatlan, Mexico.....†	29.93	760.2	65	18.3	89	ENE			3		2		Calm	0	0	Mod.	SW	Clear.	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada, N. 22° 50′, W. 106° 20′.....†	29.88	758.9	68	20.0	84	N			2		0			0	0	Light	WNW	Hazy	
S. S. Zealandia, S. 34° 23′, E. 170° 20′.....	30.21	767.3	70	21.1	85	ENE			4		5		NE			Sm'h	SE	Fine	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgeland, ‡ N. 49° 40′, W. 9° 36′.. ...†	29.31	744.5	53	11.7	80	WNW			10		5		W			Very H'vy	WNW	Hazy	Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland, ‡ Antwerp, Belgium.....	29.01	736.8	50	10.0		SW			6		10		WSW	0.3	8.			Rainy	Capt. W. Geo. Randle.
S. S. Vaderland.....‡.																			Capt. J. C. Jamison.
MISCELLANEOUS. Sch'r Abby K. Bentley, Jacksonville, Florida...†	29.94	760.5	65	18.3		SSE			2		10			0	0			Threatening	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va	30.00	762.0	51	10.6	100	SSE	13	5.8			10n			0.17	4.3			Threatening	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, N. 17° 08′, W. 56° 54′.....†	29.84	757.9	76	24.4		NW			5		2		WNW	Squalls		Long	NW	Clear.	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 36° 34′, W. 2° 00′.....†*	30.24	768.1	63	17.2		SW			2		Fog		SW			Sm'h		Foggy	Capt B. F. Woodbury.
Brigantine George, ‡ N. 24° 35′, W. 71° 20′.....†	30.31	769.9	75	23.9		NE			7		8		NE	0	0	Long h'vy	NE	Clearing	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va†	30.09	764.3	56	13.3	94	SSE	3	1.3			10n			0.05	1.3			Raining	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 32° 25′, W. 20° 20′.....†	30.32	770.1	63	17.2	100	ENE			5		8		E	0	0	Mod.	NW	Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 11, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.13	765.4	65.5	18.6	70	NE			4		1			0	0	Very fair	Dr. Ollive.
Nemours			30.07	763.7	69.1	20.6	83	SW			5		0			0	0	Clear.	Raynard.
Algiers			29.99	761.8	65.8	18.8	47	W			6		5			0	0	Cloudy	Nicolas.
La Calle			29.93	760.3	64.0	17.8	74	NW			5		4			0	0	Cloudy	Fonfréde.
Tunis			29.89	759.1															Jacques.
Sfax			30.01	762.2															Gau.
Saida			30.11	764.9	67.6	19.8	20	WNW			4		5			0	0	Cloudy	Dumas.
Tebessa			30.06	763.6	69.1	20.6	11	W			3		6			0	0	Cloudy	Watrin.
Geriville																			Lonchamp.
Laghouat			30.12	765.1	72.7	22.6	30	WSW			3		4			0	0	Cloudy	Herbin.
Biskra			30.09	764.2															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.74	755.4	29.83	757.7	60.8	16.0	80	SSE	4	1.8			3			0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.70	754.4	77	25.0		S			3		4k			0.02	0.5	Hazy	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	28.69	728.8	29.24	742.8	41.0	5.0	90	Calm			0		10			0.701	17.8	Rain & snow	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.43	722.0	29.19	741.4	42.8	6.0	76	WSW	9.4	4.2			10			0.217	5.5		Dr. Wiersbicki.
Eperies	28.41	721.7	29.31	744.4	34.2	1.2	93	S			1		0			0.147	3.72		Julius Mikolik.
Gratz‡	28.06	712.8	29.34	745.1	36.1	2.3	93	S			2		10			0	0		Andreas Rospini.
Hermannstadt	27.85	707.3	29.26	743.3	42.6	5.9	71	SE			3		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	27.93	709.5	29.28	743.7	40.1	4.5	74	SW			1		10			0.031	0.8		The Staff.
Lemberg	28.25	717.6	29.24	742.8	39.0	3.9	82	SW			2		10			0	0		Dr. T. Stanecki.
Pola	29.13	739.8	29.24	742.6	48.0	8.9	91	W			2		10			0.063	1.6		I. R. HydrographicOffice
Szathmar	28.89	733.9	29.34	745.2	39.9	4.4	93	SE			3		10			0	0		Beicht Peter, S. J.
Szegedin	29.06	738.2	29.35	745.5	34.5	1.4	93	S			1		10			0	0		Karl Stancel.
Trieste	29.16	740.7	29.26	743.3	47.7	8.7	91	WSW			1		10			0.346	8.8	Rain & fog	P. Busin.
Vienna	28.58	726.0	29.30	744.2	42.8	6.0	62	W			3		10			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	28.87	733.3	29.07	738.4	41.5	5.3	88	WSW			2		10		W	0.091	2.3	Light rain	Royal Observatory.
Furnes	29.08	738.5	29.10	739.1	39.0	3.9	88	NNE			4		10			0.059	1.5	Snow & sleet	M. E. de Cae.
Maeseyck	28.94	735.0	29.06	738.2	42.3	5.7	90	W			2		10			0.098	2.5	Raining	M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 13, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.45	748.0	29.55	750.6	32.6	0.3	94	N	18	8.0	.....	.....	7	.....	.....	0.070	1.78	Snowing	W. Boswell.
Armagh, Observatory	29.51	749.5	29.74	755.4	39.0	3.9	55	NNW	13	5.8	.....	.....	2	.....	.....	.....	.....	D. clouds	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.54	750.3	36	2.2	63	NW	24	10.7	.....	.....	8	.....	.....	.....	.....	Overcast	John Hartnup.
Bolton, Sharples	28.97	735.8	29.50	749.3	34.7	1.5	72	NE	27	12.1	.....	.....	0	.....	.....	.....	.....	Squally	Thomas Mackereth.
Bradford, Yorkshire	29.07	738.4	29.47	748.5	34.6	1.4	82	NW	.....	.....	2	.....	10	.....	.....	0.03	0.8	Snowing	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.89	759.2	29.92	760.0	80	26.7	62	.....	.....	.....	2	.....	3	.....	.....	.....	.....	D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington	.....	.....	29.32	744.7	36.0	2.2	80	N	.....	.....	6.0	.....	8	.....	.....	.....	.....	D. clouds	John McLaren.
Chatham, School M. E.	29.16	740.7	29.29	744.0	35.2	1.8	82	N	.....	.....	3	.....	9	.....	.....	.....	.....	Gloomy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.36	745.7	29.59	751.6	41.8	5.4	66	NNW	.....	.....	6	.....	9	.....	.....	.....	.....	Squally	The Staff.
Fort Napier, Natal	27.48	698.0	29.68	753.9	84.2	29.0	79	NE	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.62	752.3	29.86	758.4	86	30.0	88	NE	.....	.....	1	.....	5	.....	.....	.....	.....	D. clouds	C. E. Keane.
Galway, Queen's College	.....	.....	29.82	757.4	.....	.....	.....	N	.....	.....	1	.....	5	.....	.....	.....	.....	D. clouds	J. O'Donaghadue.
Gibraltar, Mediterranean	30.08	764.0	30.13	765.3	62.6	17.0	95	NW	.....	.....	2	.....	2	.....	.....	.....	.....	Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.43	747.5	29.64	752.8	36.5	2.5	68	WNW	.....	.....	4	.....	.....	.....	.....	.....	.....	Blue sky	D. G. MacLean.
Greenwich, Royal Obs'y	29.13	739.9	29.30	744.2	35.2	1.8	80	NNE	.....	.....	5	.....	10	.....	.....	.....	.....	Overcast	The Staff.
Guernsey	29.15	740.4	29.37	746.0	45	7.2	80	NW	.....	.....	6	.....	10	.....	.....	.....	.....	Squally	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.30	744.2	29.34	745.2	36.4	2.4	68	N	25	11.2	.....	.....	10	.....	.....	.....	.....	Gloomy	The Met'g'l Office.
Leicester, Museum	28.97	735.8	29.23	742.4	43.2	6.2	94	NE	.....	.....	4	.....	5	.....	.....	.....	.....	D. clouds	J. E. Carryer.
Malta, Mediterranean	29.63	752.6	29.71	754.6	64	17.8	73	NW	.....	.....	2	.....	6	.....	.....	.....	.....	D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	.....	.....	30.05	763.3	72.0	22.2	76	E	.....	.....	1	.....	4	.....	.....	.....	.....	D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.95	735.3	29.48	748.8	34.7	1.5	72	NNE	.....	.....	4	.....	9	.....	.....	.....	.....	D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	29.21	741.9	29.47	748.5	35.0	1.7	81	NW	.....	.....	4	.....	10	.....	.....	.....	.....	Squally	The Staff.
Plymouth	29.43	747.5	29.50	749.3	39.0	3.9	86	WNW	.....	.....	6	.....	8	.....	.....	.....	.....	D. clouds	John Merrifield.
Sandwick Manse, Orkneys	.....	.....	29.65	753.1	33.0	0.6	100	N	25	11.2	.....	.....	6	.....	.....	.....	.....	Snowing	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.53	750.0	29.60	751.8	52.0	11.1	79	SE	.....	.....	1	.....	2	.....	.....	.....	.....	D. clouds	Serg't W. H. Lyne.
Sheffield	29.21	741.9	29.50	749.3	35.3	1.8	75	NE	.....	.....	2	.....	9	.....	.....	0	0	Overcast	W. F. Cooper.
Silloth Rectory	29.62	752.3	29.65	753.1	38.9	3.8	75	N	.....	.....	5	.....	0	.....	.....	0	0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.54	750.3	33.9	1.1	90	N	14	6.3	.....	.....	7	.....	.....	.....	.....	D. clouds	Rev. S. J. Perry.
Strathfield Turgiss	29.18	741.1	29.40	746.7	36.2	2.3	73	NE	.....	.....	3	.....	9	.....	.....	.....	.....	Squally	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	29.68	753.9	29.74	755.4	50	10.0	79	NW	.....	.....	8	.....	8	.....	.....	.....	.....	Gloomy	W. Newcombe.
Valencia, Observatory	29.86	758.4	29.89	759.2	43.8	6.6	61	N	21	9.4	.....	.....	6	.....	.....	.....	.....	D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.73	755.1	29.77	756.1	39	3.9	98	SW	5	2.2	.....	.....	Fog	.....	.....	0.235	5.97	Light rain	H. J. Cundall, C. E.
Chatham, N. B.*	29.79	756.7	29.86	758.4	33	0.6	97	NE	11	4.9	.....	.....	10n	.....	NE	0.28	7.1	Light rain	G. A. Blair.
Chicontime, Quebec	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Rev. V. A. Huart.
Cornwall, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James Smith, M. A.
Dalhousie, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. A. Johnson.
Father Point, Quebec*	29.83	757.7	29.85	758.2	26	— 3.3	88	NE	50	22.4	.....	.....	10n	.....	.....	0.29	7.4	Threatening	J. McWilliams.
Fort Garry, Manitoba*	29.52	749.8	30.45	773.4	0	—17.8	100	N	8	3.6	.....	5k	5n	N	.....	0.191	4.84	Cloudy	James Stewart.
Fredericton, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. Harrison.
Granton, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James Grant.
Halifax, N. S.*	29.74	755.4	29.87	758.7	42	5.6	98	SW	16	7.2	.....	.....	10n	.....	.....	0.295	7.50	Light rain	A. Allison.
Hamilton, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. Dickson, B. A.
Kingston, Ontario*	29.68	753.9	30.03	762.7	34	1.1	84	SW	11	4.9	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. H. Rigby.
Montreal, Quebec*	29.75	755.6	29.96	761.0	35	1.7	90	SW	13	5.8	.....	.....	10s	.....	.....	0.11	2.8	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. R. Nason.
Norwood, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.31	744.5	30.04	763.0	26	— 3.3	88	W	22	9.8	.....	2k	2ks	W	W	0.05	1.3	Fair	Rev. R. Moseley.
Peterboro, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. F. Jeffers, M. A.
Port Dover, Ontario	29.39	746.5	30.11	764.8	33	0.6	89	SW	7	3.1	.....	.....	10n	.....	.....	0.01	0.3	Cloudy	H. Morgan.
Port Stanley, Ontario	29.45	748.0	30.12	765.0	33	0.6	80	W	10	4.5	.....	.....	10n	.....	W	Inap.	Inap.	Cloudy	M. Payne.
Quebec, Quebec*	29.56	750.8	29.89	759.2	34	1.1	100	W	.....	.....	1	.....	10n	.....	W	0.83	21.1	Light rain	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.45	748.0	29.92	760.0	33	0.6	92	SW	7	3.1	.....	.....	10s	.....	SW	0.11	2.8	Cloudy	K. Stewart.
Saugeen, Ontario*	29.31	744.5	30.06	763.5	30	— 1.1	96	W	19	8.5	.....	.....	10ks	.....	.....	0.02	0.5	Cloudy	W. H. McIntyre.
St. Andrews	29.77	756.1	29.82	757.4	38	3.3	95	Calm	0	0	.....	.....	Fog	.....	.....	0.09	2.3	Dense fog	
St. John's, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Murdock, C. E.
Stratford, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. J. Macgregor, M. A.
Sydney, C. B*	29.79	756.7	29.83	757.7	39	3.9	98	W	12	5.4	.....	.....	10n	.....	.....	0.07	1.8	Light rain	T. C. Hill, C. E.
Toronto, Ontario*	29.71	754.6	30.11	764.8	35	1.7	85	SW	9	4.0	.....	.....	10ks	.....	SW	0	0	Cloudy	Magnetic Observatory.
Windsor, N. S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Woodstock, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. Wolverton.
Yarmouth, N. S.*	29.85	758.2	29.91	759.7	37	2.8	99	SW	2	0.9	.....	Fog	Fog	.....	.....	0.14	3.6	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.71	754.6	29.97	761.2	40	4.4	91	SW	1	0.4	.....	.....	10	.....	.....	0.07	1.8	Cloudy	John Delany.
St. Pierre, N. F.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	N. F. Land, Comd't
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape St. Francis Lt. House	29.63	752.6	.....	.....	70.2	21.2	96	SW	13.6	6.1	.....	.....	7ks;d	.....	.....	.....	.....	Cloudy	John Duthie.
Cape Town, C. G. H. Obs'y	29.78	756.4	29.82	757.4	67.6	19.8	78	NNW	6.0	2.7	.....	10	10n	.....	.....	0.03	0.8	Raining	The Staff, for D. Gill.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.44	773.2	30.47	773.9	32.2	0.1	73	NE	2.5	1.1	.....	7ck	.....	W	.....	0	0	Very cloudy	M. Marc Dechevrens, S J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.15	664.2	29.87	758.7	59.4	15.2	89	NE			1		0			0	0	Clear.	Federico Maison.

DANISH SERIES.

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

Copenhagen	28.91	734.4	28.96	735.6	21.9	— 5.6	80	N	13	6			10						Oversergent Fischer.
Faröe	29.15	740.3	29.17	740.8	19.2	— 7.1	84	N			6		5						Overloerer Lauridsen.
Godthaab, Greenland	29.37	745.9	29.41	747.0	9.0	—12.8	88	NNE			4		9						S. Kleinschmidt.
Stykkisholm, Iceland	29.59	751.5	29.63	752.6	9.0	—12.8	100	NE			4		8						A. O. Thorlacius.
Thorshavn	29.79	756.7	29.83	757.6	33.4	0.8	61	NE	11	5			5						Overloerer Bergh.
Vestervig	29.09	738.9	29.19	741.3	20.1	— 6.6		NNE			4		9					Snowing	Loearer Oesterboi.

FRENCH SERIES.

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

Agen, Normal School	29.10	739.1	29.75	755.7	48.6	9.2	61	NW			4	ck	2n	E	NE	0	0		M. Labroue, Director.
Alençon	28.73	729.7	29.28	743.7	41.4	5.2	94	S			3		5n		E	0.205	5.2	Raining	M. Nicot, Director.
Arras, Engineer School	28.82	731.9	29.07	738.4	40.1	4.5	92	NW	6.9	3.1			10					Raining	M. Klein, Commandant.
Avignon, Normal School	29.53	750.0	29.61	752.0	51.8	11	54	SW			1		5		WNW	0	0	Cloudy	M. Giraud, Director.
Bar-sur-Seine	28.69	728.8	29.25	742.9	44.1	6.7	79	SW			2		10		W	0.295	7.5	Covered	M. Saillard, Director.
Beauvais, Normal School	28.84	732.5	29.10	739.2	43.0	6.1	86	WNW			2		10		W	0.335	8.50	Covered	M. Frère Eugene Marie.
Besançon, Normal School	28.50	723.8	29.40	746.8	42.1	5.6	85	SW			4		n		SW	0.87	22.		M. Gobin, Director.
Bordeaux, Observatory	29.42	747.3	29.68	753.9	50.7	10.4	63	WNW			4		10		WNW	0.209	5.3	Covered	M. Rayet, Director.
Bourges, Normal School	28.78?	730.9?	28.15?	714.9?	46.4	8	86	WSW			6		kn		WSW	0.24	6.		M. Postel, Director.
Brest, Naval Observatory	29.43	747.4	29.67	753.6	46.0	7.8	64	NW			4		6		NW	0.108	2.75		M. de Rermaree, Dir.
Caen, Normal School	29.08	738.7	29.16	740.7	45.7	7.6	100	NW			3		10			0.55	14.	Covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	28.85	732.8	29.16	740.6	46.2	7.9	83	SW			3		8	W	W	0.244	6.2	Very cloudy	M. Jadot, Director.
Charleville, Normal School	28.59	726.3	29.12	739.7	39.9	4.4	77	SW			1		10		NE	1.34	34.0	Covered	M. Grimard.
Clermont-Ferrand Obs'y	28.09	713.4	29.46	748.3	38.8	3.8	92	WSW			8		10			0.346	8.8	Raining	M. Alluard, Director.
Cluny, Normal School	28.60	726.5	29.40	746.7	47.3	8.5	70	SW			4		2		SW	0.28	7.		M. de Villemontée, Dir.
Commercy, Normal School	28.32	719.4	29.19	741.3	39.7	4.3	97	SW			8		10n		SW	0.799	20.3	Raining	Dr. Coulet, Director.
Gap, Normal School	27.01	686.0	29.59	751.5	36.3	2.4	75	S			2		5		SE	0	0	½ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.50	724.0	29.65	753.0	48.9	9.4	48	W			3		5		W	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	28.78	730.9	29.55	750.6	42.1	5.6	70	SSE			1		10kn			0.287	7.30	Raining	M. Ablard, Director.
Guéret, Normal School	27.87	708.0	29.45	748.0	42.4	5.8	60	SW			4		10		NE	0.83	21.	Raining	M. Rivoir, Director.
Lamballe, Normal School	29.03	737.3	29.30	744.3	42.1	5.6	92	W			6		10		W	0.16	4.	Raining	M. Ollitrault, Director.
Lescar, Normal School	29.30	744.3	29.98	761.6	47.5	8.6	78				6		8		SW	0.16	4.	Very cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.48	748.7	29.58	751.3	46.4	8.0	86	NW			5		5	W	NW	0.39	10.0	½ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.41	721.7	29.44	747.8	43.9	6.6	67	WSW			2		8n	W	NW	0.055	1.4	Very cloudy	M. André, Director.
Mans, Normal School	29.01	736.8	29.28	743.8	45.9	7.7	73	W			6		8		W	0.12	3.	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.40	746.7	29.67	753.6	51.8	11.0	61	NW			3		5		NW	0.045	1.15		M. Stephan, Director.
Montlouis l'instituteur	24.51	622.5	29.74	755.5	36.5	2.5	50	W	15.0	6.7			8		E	0.150	3.8		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.53	750.0	29.64	752.8	54.7	12.6	55	NW			6		2		NW	0	0	Slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	28.42	721.8	29.19	741.3	41.4	5.2	81	SSW			3		10n		SW	0.098	2.5	Light rain	M. Hasse.
Nantes, Observatory	29.35	745.4	29.51	749.5	50.4	10.2	86	WSW			4		6kn		SW	0.28	7.		M. Larocque, Director.
Nice	29.44	747.8	29.48	748.7	59.7	15.4	29	NW			6		5	W	NW	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.63	752.5	29.73	755.2	55.2	12.9	41	NW	33.5	15.0			2	NW	NW	0.031	0.8		Dr. Fines.
Pic-du-Midi, Plantade	22.20	563.8			35.6	2.0							10		SW	0.579	14.7	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.50	724.0	29.56	750.9	51.8	11	80	N			1		1n	N	N	0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	24 45	621.1			27.1	—2.7	98	W			8		10			0.677	17.2	Snow & fog.	M. Alluard, Director.
Rochefort, Naval Obs'y	29.60	751.8	29.63	752.6	51.3	10.7	72	W			4		5		W	0.08	2.	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.38	746.3	29.60	751.8	46.4	8	72	SW			1		0			0.08	2.	Clear	M. Moullot, Director.
Rodez, Normal School	27.48	698.0	29.67	753.6	37.0	2.8	83	W			4		10	W	W	0.374	9.5	Snowing	M. Richard, Director.
Rouen, Normal School	28.95	736.2	29.03	737.3	42.4	5.8	91	SW			1		10		WSW	0.24	6.	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.09	738.8	29.24	742.8	43.0	6.1	90	NNW			3		10		NNW	0.657	16.7	Raining	M. Delaplanche, Dir.
Saint Maur, Observatory	28.98	736.0	29.14	740.2	44.6	7.0	78	SW			3		10		W	0.098	2.5	Snowing	M. Renou, Director.
Toulouse, Observatory	29.07	738.3	29.79	756.6	47.3	8.5	81	W			4		10			0.71	18.0	Covered	M. Baillaud, Director.
Tours	29.17	740.8	29.36	745.8	49.6	9.8	64	WNW			6		5		WNW	0.244	6.2	½ covered	M. de Tastes.
Versailles, Observatory	28.64	727.4	29.13	739.9	43.5	6.4	85	W			8					0.053	1.35		Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

GERMAN SERIES.

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

Bamberg	28.30	718.9	29.14	740.2	41.9	5.5	70	WSW			4		8n	W		0.197	5.0	Raining	Prof. Dr. Hoh.
Berlin	28.85	732.9	29.03	737.3	36.3	2.4	79	NW			4		10			0.339	8.6		Prof. Dr. Arndt.
Breslau	28.60	726.5	29.12	739.6	43.7	6.5	63	SW			2		9			0.255	6.48		Royal University Obs'y.
Carlsruhe	28.74	730.1	29.16	740.7	43.7	6.5	72	SW			4		10	SW		0.787	20.0	Raining	Albert Senz.
Cassel	28.43	722.0	29.02	737.0	39.2	4.0	90	S			2		10			0.567	14.40		Dr. H. Möhl.
Frankfort on the Main	28.91	734.4	29.28	743.7	41.9	5.5	79	SW			3		10			0.520	13.2		Physical Society.
Friedrichshafen	27.90	708.6	29.33	745.0	42.4	5.8	64	SW			7		10	WSW		0.051	1.3		Chief Telegrapher Wilhelm.
Hamburg	29.02	737.2	29.10	739.0	24.4	—4.2	66	NW			5		9			0.539	13.7		Dr. R. Kleeman.
Kiel	29.05	737.8	29.06	738.2	23.5	—4.7	84	NW			2		10			0.375	9.52	Snowing	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	28.64	727.5	29.06	738.2	40.6	4.8	84	SW			4		9	W		0.146	3.7	Raining	Prof. Dr. Bruhns.
Magdeburg	28.82	731.9	29.04	737.7	35.1	1.7	94	WNW			2		10ks	NW		0.413	10.5	Light rain	Dr. Assmann.
Memel	28.77	730.7	28.81	731.8	35.2	1.8	88	S			3		10n						Reinbrecht & Issermann.
Munich	27.45	697.2	29.26	743.3	40.8	4.9	51	W			7		3	W		0.150	3.8		Central Station.
Neufahrwasser	28.85	732.8	28.87	733.2	33.1	0.6	92	WSW			6		8			0.094	2.4		A Lothes.
Neustadt, Palatinate	28.57	725.7	29.08	738.6	44.6	7.0	71	SW			5		7			0.532	13.5		Dickmether.
Stuttgart	28.26	717.9	29.15	740.5	43.3	6.3	66	W			8		9	W		0.244	6.2		Prof. Dr. Schoder.
Thorn	28.78	731.1	28.97	735.7	38.1	3.4	70	SW			5		10			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	27.73	704.3	29.21	741.8	40.3	4.6	72	W			6		10	W		0.094	2.4		Prof. Kemlein.
Wustrow	29.01	736.8	29.03	737.4	24.3	—4.3	89	NW			5		10s			0	0		Profs. Brandes & Reimer.

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

GREEK SERIES.

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

Athens	29.28	743.8	29.68	753.8	56.7	13.7	.....	SW	.....	.....	2.0	.....	0	.....	.....	.....	.....	Clear.	Schmidt & Wourlisch.

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	29.88	759.0	29.93	760.3	75.2	24.0	72	SW	17.0	7.6	.....	.....	0	.....	.....	0	0	Blue sky.	
Deesa	29.42	747.2	29.90	759.3	81.4	27.4	8	WSW	6.9	3.1	.....	.....	9	S	.....	0	0	D. clouds.	
Bombay	29.87	758.8	29.91	759.8	81.5	27.5	46	NW	18.0	8.0	.....	.....	0	.....	.....	0	0	Blue sky.	
Poona, Yarrowda	28.01	711.3	29.84	757.8	85.7	29.8	12	WNW	15.0	6.7	.....	.....	0	.....	.....	0	0	Blue sky.	
Belgaum	27.34	694.4	29.86	758.4	79.6	26.4	28	SW	5.0	2.2	.....	.....	0	.....	.....	0	0	Blue sky.	
Lahore	29.22	742.0	29.98	761.5	68.7	20.4	47	Calm	3.1	1.4	.....	.....	8	.....	.....	0	0	D. clouds.	
Roorkee	29.06	738.1	29.98	761.6	68.2	20.1	51	Calm	2.2	1.0	.....	.....	7	.....	.....	0.01	0.3	.....	
Agra	29.39	746.5	29.97	761.2	74.3	23.5	40	E	5.8	2.6	.....	.....	6	.....	E	0	0	.....	
Nagpur	28.83	732.4	29.87	758.7	83.7	28.7	45	Calm	3.8	1.7	.....	.....	8	W	.....	0	0	D. clouds.	
Jubbulpore	28.50	724.0	29.89	758.9	76.8	24.9	28	W	4.2	1.9	.....	.....	4	.....	.....	0	0	D. clouds.	
Lucknow	29.54	750.3	29.92	760.0	74.2	23.4	50	ENE	5.6	2.5	.....	.....	0	.....	.....	0.01	0.3	Blue sky.	
Allahabad	29.59	751.6	29.91	759.7	72.8	22.7	56	Calm	3.9	1.7	.....	.....	7	.....	.....	0.01	0.3	D. clouds.	
Patna	29.25	758.2	30.04	762.9	73.8	23.2	55	E	0.6	0.3	.....	.....	4	NE	NE	0.02	0.5	D. clouds.	
Hazaribagh	27.87	707.8	29.91	759.6	71.0	21.7	38	SE	6.9	3.1	.....	.....	9	.....	W	0	0	.....	
Cuttack	29.85	758.2	29.93	760.3	79.0	26.1	48	Calm	0.1	0.04	.....	.....	0	.....	.....	0	0	Blue sky.	
Calcutta, Alipore	29.91	759.6	29.93	760.2	74.6	23.7	48	SW	1.0	0.4	.....	.....	0	.....	.....	0	0	Blue sky.	
Goalpara	29.53	750.0	29.94	760.6	66.5	19.2	66	W	2.9	1.3	.....	.....	10	.....	W	0.02	0.5	Gloomy.	
Chittagong	29.86	758.5	29.95	760.8	72.0	22.2	81	W	2.3	1.0	.....	.....	0	.....	.....	0	0	Blue sky.	
Sibsagar	29.61	752.1	29.96	760.9	67.0	19.4	76	NE	2.3	1.0	.....	.....	0	.....	.....	0	0	Blue sky.	

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	28.84	732.6	29.26	743.3	43.5	6.4	73	Calm	0	0	.....	.....	10	.....	.....	0.213	5.4	.....	Prof. Giovanni Clodig
Milan	28.80	731.4	29.33	745.0	45.9	7.7	71	WSW	9.4	4.2	.....	.....	4	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.15	740.5	29.27	743.4	46.6	8.1	72	WNW	13.0	5.8	.....	.....	9	SW	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.43	722.2	29.37	745.9	44.4	6.9	57	E	1.8	0.8	.....	.....	1	.....	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.17	740.8	29.36	745.8	55.4	13.0	41	N	2.5	1.1	.....	.....	2	N	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	27.47	697.8	29.45	748.1	44.6	7.0	47	W	.....	.....	6	.....	0	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.27	743.5	29.32	744.8	47.8	8.8	78	NW	19.2	8.6	.....	.....	10	W	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.06	738.2	29.32	744.8	52.7	11.5	64	WSW	.....	.....	6	.....	10	WSW	.....	0.051	1.3	.....	Cav. F. Meucci.
Leghorn	29.25	743.0	29.34	745.2	59.2	15.1	59	WSW	19.2	8.6	.....	.....	5	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.29	744.0	29.47	748.5	54.1	12.3	89	WSW	11.2	5.0	.....	.....	10	.....	.....	0.016	0.4	.....	Prof. P. S. Ferrari.
Lecce	29.28	743.8	29.54	750.3	56.3	13.5	71	ESE	9.4	4.2	.....	.....	8	.....	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	28.73	729.8	29.65	753.0	51.1	10.6	72	NW	0.5	0.2	.....	.....	10	WNW	.....	0.102	2.6	.....	Prof. D. Conti.
Cagliari	29.43	747.4	29.62	752.4	58.6	14.8	63	NW	.....	.....	6	.....	8	NNW	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.40	746.7	29.65	753.1	62.6	17.0	58	SW	23.7	10.6	.....	.....	8	.....	.....	0	0	.....	Prof. G. Ciaccíatore.
Syracuse	29.69	754.2	29.74	755.3	61.2	16.2	64	SW	8.1	3.6	.....	.....	4	WSW	.....	0	0	.....	Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.07	738.4	29.59	751.5	56.1	13.4	80	SSW	17.4	7.8	.....	.....	8	.....	.....	0.035	0.9	.....	Prof. F. Brioschi
Stelvio	21.84	554.7	.....	.....	17.4	— 8.1	82	NE	.....	.....	4	.....	10n	.....	.....	0.079	2.0	Covered	P. F. Denza.
Valdobbia	21.84	554.7	.....	.....	19.8	— 6.8	92	E	.....	.....	6	.....	10	.....	SW	0.591	15.0	Covered	

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	30.24	768.1	30.25	768.3	30.5	— 0.8	86	N	0.6	0.3	.....	.....	rock	.....	N	0	0	Overcast	K. Sasaki.
Kioto	29.95	760.7	30.14	765.5	27.3	— 2.6	87	.....	.....	.....	.....	ck	ck;cs	NW	NW	0.006	0.15	Fair	.....
Nagasaki, I. M. Obs'y	30.07	763.8	30.29	769.3	29.2	— 1.6	93	NE	4.2	1.9	.....	8ck	0	.....	.....	0	0	Cloudy	S. Takehayashi.
Tokei Obs'y, Yeddo	29.86	758.4	29.94	760.5	29.4	— 1.4	70	NW	8.2	3.7	.....	0	0	.....	.....	0	0	Clear	The Staff.
Wakayama	30.10	764.5	30.16	766.0	32.3	0.2	72	NNE	1.9	0.8	.....	ck	9ks	.....	NW	0.002	0.05	Cloudy	S. Iwahashi.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.59	751.6	29.78	756.3	79.4	26.3	78	SSW	12.0	5.4	.....	0	8	.....	SW	0	0	Cloudy	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Leon	24.40	619.8	30.26	768.5	46.0	7.8	78	N	.....	.....	1	0	0	.....	.....	0	0	Fair	Prof. M. Leal.
Mazatlan	29.74	755.3	30.00	762.0	62.3	16.8	92	N	1.6	0.8	.....	0	0	.....	.....	0	0	Light fog	F. Quijano, C. E.
Mexico, Central Obs'y	23.02	584.3	30.12	765.0	38.8	3.8	54	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	The Staff.
Pabellon, Aguascalientes	23.85	605.8	29.99	761.7	41.5	5.3	47	Calm	.....	.....	.....	0	0	.....	.....	0	0	Fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.29	591.6	30.34	770.5	34.2	1.2	40	N	1.8	0.8	.....	0	0	.....	.....	0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.17	613.8	30.14	765.6	45.9	7.7	67	WSW	0.9	0.4	.....	.....	10	.....	SW	0	0	Covered	G. Barroeta, M. D.
Tlacotalpam	29.70	754.4	29.71	754.7	70.5	21.4	76	SE	10.9	4.9	.....	0	0	.....	.....	0	0	Clear	Prof. M. Cházaro.
Zacatecas	22.44	570.0	30.20	767.2	39.0	3.9	57	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	J. A. Bonilla, M. E.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	29.13	740.0	29.13	740.0	37.2	2.9	.....	NNE	.....	.....	5	.....	.....	.....	.....	0.276	7.0	.....	
Groningen	29.11	739.3	29.16	740.7	29.7	— 1.3	.....	N	.....	.....	4	.....	.....	.....	.....	0.039	1.0	.....	
Helder	29.17	740.9	29.17	740.9	31.3	— 0.4	.....	NNE	.....	.....	5	.....	.....	.....	.....	0.157	4.0	.....	
Hellevoetsluis	29.11	739.4	29.11	739.4	34.2	1.2	93	NE	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Utrecht	29.10	739.0	29.14	740.2	32.4	0.2	92	NNE	.....	.....	8	.....	8	.....	.....	0.091	2.3	Very cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.25	742.9	29.31	744.5	29.5	— 1.4	57	Calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Christiania	29.10	739.1	29.25	743.0	22.5	— 5.3	59	NNE	20	9	.....	.....	10	.....	.....	0.008	0.2	.....	
Gjæsvær	29.43	747.5	29.45	748.1	19.8	— 6.8	.....	WNW	.....	.....	4	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.56	750.9	29.61	752.1	16.5	— 8.6	63	N	.....	.....	6	.....	5	.....	.....	0	0	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.98	761.6	30.14	765.6	55.4	13.0	90	W	9.8	4.4	.....	.....	3	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.18	741.1	30.20	767.0	53.6	12.0	49	WNW	8.7	3.9	.....	.....	4	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.17	766.3	30.26	768.6	65.5	18.6	57	SE	5.6	2.5	.....	.....	2	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.93	760.3	30.30	769.6	55.0	12.8	57	NNE	17.4	7.8	.....	.....	6	.....	.....	0.008	0.2	.....	The Staff.
Ponta Delgada, Azores	30.25	758.5	30.33	770.3	60.8	16.0	69	SSW	6.9	3.1	.....	.....	3	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.28	743.7	30.48	774.1	6.1	—14.4	70	E	9	4	.....	.....	0	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.40	746.7	29.42	747.3	19.8	— 6.8	92	SE	4	2	.....	.....	10	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	29.76	756.0	29.68	753.9	34.3	1.3	83	Calm	0	0	.....	.....	10s	.....	.....	.....	.....	.....	Capt. Wisganow.
Barnaul	29.99	761.7	30.61	777.4	— 8.5	—22.5	71	NE	2	1	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	28.72	729.5	28.97	735.7	34.3	1.3	98	SE	9	4	.....	.....	10n	.....	.....	.....	.....	Light snow.	Observatory.
Ekaterinburg	29.22	742.3	30.28	769.1	10.0	—12.2	59	SE	4	2	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.68	753.9	29.97	761.3	16.7	— 8.5	62	SSE	7	3	.....	.....	5cs	.....	.....	.....	.....	.....	Observatory.
Kertch	29.54	750.3	29.56	750.8	46.4	8.0	86	Calm	0	0	.....	.....	1	.....	.....	.....	.....	.....	Lagorio.
Kieff	28.71	729.2	29.36	745.8	32 4	0.2	96	SSE	13	6	.....	.....	10ks;n	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.37	745.9	29.58	751.3	33.6	0.9	80	SSE	9	4	.....	.....	10	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	28.99	736.3	29.56	750.9	20.5	— 6.4	71	SSE	10.1	4.5	.....	.....	7ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.77	705.3	30.50	774.6	—11.4	—24.1	67	Calm	0	0	.....	.....	10	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	29.50	749.2	29.57	751.0	32.2	0.1	92	S	9	4	.....	.....	10n	.....	.....	.....	.....	Foggy	1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.76	755.8	29.84	758.0	—14.8	—26.0	52	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Lieut. Iwanow.
Nukuss	29.66	753.3	29.89	759.2	57.6	14.2	43	SW	2.2	1.0	.....	.....	0	.....	.....	.....	.....	.....	Dr. Dobrochotow.
Pekin, China	30.19	766.8	30.33	770.4	27.9	— 2.3	21	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.14	740.1	29.15	740.5	34.0	1.1	89	ESE	13	6	.....	.....	9k;n	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.37	720.6	29.97	761.2	45.5	7.5	53	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.30	718.7	29.68	753.9	61.7	16.5	49	Calm	0	0	.....	6ck	.....	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	28.65	727.7	29.07	738.4	41.2	5.1	69	SW	22	10	.....	ck	10ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	28.62	726.9	29.04	737.6	36.9	2.7	94	SSW	11	5	.....	.....	10	.....	.....	.....	.....	Heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.49	774.5	30.84	783.3	—25.9	—32.7	63	NW	4	2	.....	.....	0	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.62	752.3	36.3	2.4	68	N	.....	.....	2	.....	6k	.....	.....	0.42	10.7	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.78	756.4	39	3.9	91	NE	.....	.....	4	5	5	E	.....	0	0	D. clouds	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.42	747.2	.....	.....	.....	E	.....	.....	7	.....	10	.....	.....	Blank	.....	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.65	753.0	29.75	755.7	58.6	14.8	34	W	11.4	5.1	.....	.....	0	.....	.....	0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.98	761.6	30.04	763.1	49.8	9.9	73	NW	7.2	3.2	.....	.....	10	.....	.....	0.142	3.6	Rainy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.05	687.1	.....	.....	43.2	6.2	56	W	6.0	2.7	.....	0	3	.....	.....	0	0	Light clouds	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.77	705.4	30.12	765.0	48.4	9.1	50	NW	30.6	13.7	.....	0	4	.....	.....	0	0	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.81	757.2	29.96	761.0	64.6	18.1	47	NW	5.4	2.4	.....	5	4	SE	.....	0	0	Almost cov'd	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.28	743.7	30.19	766.9	49.6	9.8	60	NW	10.5	4.7	.....	.....	6	.....	.....	0.177	4.5	Cloudy	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.93	760.2	29.99	761.8	66.4	19.1	90	SE	1.8	0.8	.....	0	0	.....	.....	0.008	0.2	Clear	Benito Vines, S. J.
Manilla, Phillippine Islands	29.95	760.6	30.00	761.9	80.6	27.0	68	SE	2.9	1.3	.....	9ck	.....	E	.....	0	0	Very cloudy	Federico Faura, S. J
San Fernando, Naval Obs'y	30.13	765.2	30.23	767.7	57.0	13.9	82	WNW	12.2	5.3	.....	2	8	E	NW	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.89	759.3	29.98	761.6	72.3	22.4	94	NE	16.0	7.14	.....	1k	6km	NE	NE	0.030	0.75	Raining	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.98	761.4	30.12	765.1	72.3	22.4	79	NNW	5.4	2.4	.....	.....	9km	.....	NW	Inap.	Inap.	Cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.51	749.6	29.55	750.6	—12.6	—24.8	100	N	.....	.....	2	.....	0	.....	.....	0	0	.....	
Umea	29.44	747.8	29.49	749.1	1.0	—17.2	89	NE	.....	.....	4	.....	6	.....	.....	0	0	.....	
Hernosand	29.38	746.3	29.43	747.6	8.1	—13.3	72	NE	.....	.....	2	.....	10	.....	.....	0.118	3.0	.....	
Stockholm	28.76	730.4	28.93	734.9	12.2	—11.0	86	N	.....	.....	8	.....	10	.....	.....	0.059	1.5	Snowing	
Wisby	28.59	726.3	28.65	727.8	34.9	1.6	96	E	.....	.....	2	.....	10	.....	.....	0.283	7.2	.....	
Sub-Series.																			
Upsala	28.94	735.0	29.02	737.2	8.4	—13.1	94	N	27.3	12.2	.....	.....	10	.....	.....	0.097	2.47	Snowing	Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.03	712.0	29.50	749.4	38.7	3.7	83	SSW	.....	.....	7	.....	10	.....	.....	0.154	3.9	Covered	The Observatory.
Zurich	27.70	703.6	29.38	746.3	41.4	5.2	70	W	.....	.....	6	.....	10	.....	.....	0.224	5.7	Raining	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —14.5 mm.; Ther. +0°.3 cent.; Hum. +11 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.65	753.0	48.6	9.2	81	SE	4	2.0	.....	.....	7	.....	SW	0	0	.....	The Observatory.
Valona	.....	.....	29.56	750.8	58.6	14.8	.....	SW	.....	.....	2	.....	5	.....	.....	0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.60	751.8	53.4	11.9	91	SW	.....	.....	2	.....	10n	.....	SW	0.77	19.6	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.03	762.7	30.11	764.8	37	2.8	81	Calm	0	0	.....	.....	10ks;fg	.....	Calm	0.23	5.8	Cloudy.	
Alpena, Michigan	29.40	746.7	30.09	764.3	20	— 6.7	85	W	5	2.2	.....	0	0	.....	.....	0.15	3.8	Clear.	
Atlanta, Georgia	28.77	730.7	29.90	759.4	53	11.7	73	E	19	8.5	.....	2k	8s	S	S	0	0	Cloudy	
Atlantic City, New Jersey	30.16	766.1	30.17	766.3	34	1.1	90	W	2	0.9	.....	0	5s;fg	.....	W;C	0.22	5.6	Fair.	
Atton Id., Alaska‡	29.79	756.7	.....	.....	33	0.6	65	S	11	4.9	.....	.....	10s	.....	SE	0.07	1.8	Cloudy	
Augusta, Georgia	29.89	759.2	30.10	764.5	46	7.8	92	Calm	0	0	.....	5c;k	Fog	SW	Calm	0	0	Fair	
Baltimore, Maryland	30.13	765.3	30.18	766.6	36	2.2	90	S	1	0.4	.....	.....	Fog	.....	Calm	0.19	4.8	Dense fog.	
Barnegat, New Jersey	30.12	765.0	30.14	765.5	31	— 0.6	89	SW	4	1.8	.....	0	Fog	.....	Calm	0.24	6.1	Clear.	
Benton, Montana	27.52	699.0	.....	.....	7	—13.9	100	Calm	0	0	.....	.....	10n	.....	Calm	0.09	2.3	Light snow.	
Bismarck, Dakota	28.44	722.4	30.29	769.4	— 8	—22.2	100	NW	9	4.0	.....	0	0	.....	.....	0.02	0.5	Clear.	
Boise City, Idaho	27.32	693.9	30.28	769.1	32	0.0	79	NW	4	1.8	.....	.....	10s	.....	NW	0	0	Cloudy	
Boston, Massachusetts	29.86	758.4	30.02	762.5	41	5.0	82	SW	10	4.5	.....	0	Fog	.....	Calm	0.21	5.3	Clear.	
Brackettville, Texas	28.95	735.3	30.06	763.5	32	0.0	59	N	20	8.9	.....	.....	10s	.....	N	0	0	Cloudy	
Brownsville, Texas	29.90	759.4	29.95	760.7	56	13.3	94	N	18	8.0	.....	8cs	0	Calm	.....	0	0	Fair.	
Buffalo, New York	29.38	746.2	30.10	764.5	34	1.1	79	SW	14	6.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
Burlington, Vermont	29.70	754.4	30.00	762.0	42	5.6	66	NW	4	1.8	.....	2ck	8s	NW	W	0.23	5.8	Cloudy	
Cairo, Illinois	29.39	746.5	29.78	756.4	42	5.6	91	NE	10	4.5	.....	.....	10s	.....	S	0.30	7.6	Cloudy	
Campo, California	27.55	699.8	30.12	765.0	24	— 4.4	87	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Camp Thomas, Arizona	27.34	694.4	.....	.....	21	— 6.1	71	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear.	
Cape Henry, Virginia	30.11	764.8	30.13	765.3	38	3.3	91	NW	7	3.1	.....	0	0	.....	.....	0.32	8.1	Clear.	
Cape May, New Jersey	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Castroville, Texas	29.28	743.7	30.02	762.5	34	1.1	70	NW	2	0.9	.....	.....	10s	.....	NW	0	0	Cloudy	
Cedar Keys, Florida	29.98	761.5	30.00	762.0	64	17.8	89	E	15	6.7	.....	0	8s	.....	E	0	0	Fair.	
Champaign, Illinois	29.15	740.4	29.98	761.5	30	— 1.1	78	NE	16	7.2	.....	.....	10n	.....	NE	0.14	3.6	Light rain	
Charleston, S. Carolina	30.03	762.7	30.09	764.3	52	11.1	86	S	1	0.4	.....	0	0	.....	.....	0	0	Clear.	
Charlotte, N. Carolina	29.22	742.2	30.05	763.3	47	8.3	85	E	3	1.3	.....	0	Fog	.....	Calm	0	0	Clear.	
Chattanooga, Tennessee	29.14	740.1	29.94	760.5	50	10.0	72	W	10	4.5	.....	8ck	2ks	SW	SW	0	0	Cloudy.	
Cheyenne, Wyoming	24.00	609.6	29.94	760.5	— 4	—20.0	65	NW	8	3.6	.....	0	0	.....	.....	Inap.	Inap.	Clear.	
Chicago, Illinois	29.34	745.2	30.06	763.5	32	0.0	79	NE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Chincoteague, Virginia	30.15	765.8	30.17	766.3	34	1.1	100	E	8	3.6	.....	.....	Fog	.....	Calm	0.39	9.9	Dense fog.	
Cincinnati, Ohio	29.41	747.0	30.08	764.0	39	3.9	82	NE	2	0.9	.....	.....	10n	.....	Calm	0.01	0.3	Light rain.	
Cleveland, Ohio	29.37	746.0	30.13	765.3	32	0.0	89	N	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Coleman City, Texas	28.27	718.0	30.06	763.5	23	— 5.0	73	NW	20	8.9	.....	0	0	.....	.....	0.20	5.1	Clear	
Columbus, Ohio	29.23	742.4	30.10	764.5	36	2.2	80	E	6	2.7	.....	0	8s	.....	Calm	0	0	Fair.	
Concho, Texas	28.18	715.8	29.99	761.7	22	— 5.6	86	NW	14	6.3	.....	0.	0	.....	.....	0 21	5.3	Clear	
Corsicana, Texas	29.56	750.8	30.05	763.3	32	0.0	100	NW	12	5.4	.....	.....	10s	.....	Calm	0.34	8.6	Cloudy	
Davenport, Iowa	29.34	745.2	30.00	762.0	26	— 3.3	75	NE	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Dayton, Washington T'y	28.44	722.4	30.21	767.3	25	— 3.9	100	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Deadwood, Dakota	25.42	645.7	.....	.....	4	—15.6	74	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Decatur, Texas	28.73	729.7	29.96	761.0	26	— 3.3	88	NW	18	8.0	.....	.....	10s	.....	Calm	0.29	7.4	Cloudy	
Delaware Breakwater, Del.	30.14	765.5	30.16	766.1	31	— 0.6	100	NE	2	0.9	.....	.....	Fog	.....	Calm	0.21	5.3	Dense fog.	
Denison, Texas	29.10	739.1	29.94	760.5	27	— 2.8	88	NW	16	7.2	.....	.....	10s	.....	Calm	0.36	9.1	Cloudy	
Denver, Colorado	24.82	630.4	30.04	763.0	— 3	—19.4	66	S	2	0.9	.....	0	0	.....	.....	0.04	1.0	Clear.	
Des Moines, Iowa	29.15	740.4	30.08	764.0	21	— 6.1	86	NE	8	3.6	.....	0	8s	.....	Calm	0	0	Fair	
Detroit, Michigan	29.38	746.2	30.10	764.5	37	2.8	90	NW	3	1.3	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Dodge City, Kansas	27.41	696.2	29.89	759.2	19	— 7.2	80	N	34	15.2	.....	.....	10n	.....	Calm	0.07	1.8	Light snow.	
Dubuque, Iowa	29.32	744.7	30.06	763.5	26	— 3.3	75	SW	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Duluth, Minnesota	29.48	748.8	30.22	767.6	14	—10.0	82	NE	2	0.9	.....	0	2s	.....	NE	0.11	2.8	Clear.	
Eagle Pass, Texas	29.38	746.2	30.15	765.8	36	2.2	71	N	22	9.8	.....	0	0	.....	.....	0	0	Clear	
Eagle Rock, Idaho	25.30	642.6	29.95	760.7	2	—16.7	72	Calm	0	0	.....	8cs	0	NW	.....	0	0	Fair.	
Eastport, Maine	29.76	755.9	29.83	757.7	39	3.9	100	SW	1	0.4	.....	.....	Fog	.....	Calm	0.05	1.3	Dense fog.	
Edinburg, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
El Paso, Texas	26.29	667.8	.....	.....	20	— 6.7	70	N	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Erie, Pennsylvania	29.38	746.2	30.12	765.0	35	1.7	80	W	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
Escanaba, Michigan	29.45	748.0	30.16	766.1	12	—11.1	80	W	5	2.2	.....	2c	2s	Calm	Calm	0.29	7.4	Fair	
Florence, Arizona	28.68	728.5	30.28	769.1	25	— 3.9	50	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Apache, New Mexico	25.03	635.8	30.48	774.2	9	—12.8	57	NE	4	1.8	.....	0	0	.....	.....	0.01	0.3	Clear.	
Fort Assinniboine, Montana	27.48	698.0	.....	.....	4	—15.6	100	NE	4	1.8	.....	.....	10n	.....	NE	0.16	4.1	Light snow.	
Fort Bennett, Dakota	28.68	728.5	.....	.....	0	—17.8	70	NW	20	8.9	.....	0	0	.....	.....	0	0	Clear	
Fort Buford, Dakota	28.32	719.3	30.45	773.4	— 9	—22.8	56	NW	8	3.6	.....	0	0	.....	.....	0.13	3.3	Clear.	
Fort Custer, Montana	27.08	687.8	.....	.....	5	—15.0	75	Calm	0	0	.....	.....	10s	.....	W	0.07	1.8	Cloudy	
Fort Davis, Texas	25.19	639.8	30.15	765.8	15	— 9.4	82	N	2	0.9	.....	0	0	.....	.....	0.13	3.3	Clear	
Fort Elliott, Texas	27.22	691.4	29.70	754.4	9	—12.8	36	NE	28	12.5	.....	0	0	.....	.....	0.10	2.5	Clear	
Fort Gibson, Indian T'y	29.22	742.2	29.77	756.1	30	— 1.1	89	N	20	8.9	.....	.....	10s	.....	Calm	0.50	12.7	Cloudy	
Fort Grant, Arizona	25.17	639.3	29.97	761.2	26	— 3.3	75	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Griffin, Texas	28.71	729.2	30.07	763.8	22	— 5.6	58	NW	23	10.3	.....	0	0	.....	.....	0.03	0.8	Clear.	
Fort Keogh, Montana	27.80	706.1	.....	.....	— 6	—21.1	61	Calm	0	[illegible]	.....	2cs	0	Calm	.....	0.03	0.8	Fair	
Fort McKavett, Texas	27.78	705.6	29.84	757.9	22	— 5.6	72	NW	18	8.0	.....	0	0	.....	.....	0.02	0.5	Clear.	
Fort Macon, North Carolina	30.10	764.5	30.11	764.8	47	8.3	92	NW	4	1.8	.....	0	Fog	.....	Calm	0.98	24.9	Clear.	
Fort St. Michaels	30.75	781.0	30.79	782.1	7	—13.9	100	NE	5	2.2	.....	0	0	.....	.....	.....	.....	.....	
Fort Missoula, Montana	26.81	681.0	.....	.....	12	—11.1	100	NW	4	1.8	.....	8k	0	Calm	.....	0	0	Cloudy	
Fort Shaw, Montana	26.64	676.6	.....	.....	6	—14.4	76	W	5	2.2	.....	10cs	0	Calm	.....	0.02	0.5	Cloudy	
Fort Sill, Indian Territory	28.73	729.7	29.91	759.7	21	— 6.1	86	NW	16	7.2	.....	.....	10s	.....	Calm	0.21	5.3	Cloudy	
Fort Stevenson, Dakota	28.42	721.9	.....	.....	2	—16.7	85	NW	4	1.8	.....	0	0	.....	.....	0.02	0.5	Clear	
Fort Verde, Arizona	.....	.....	.....	.....	20	— 6.7	70	N	.....	.....	2	0	0	.....	.....	0	0	Clear	
Fredericksburg, Texas	28.22	716.9	29.86	758.4	30	— 1.1	89	N	10	4.5	.....	0	4s	.....	Calm	0.23	5.8	Fair.	
Galveston, Texas	29.89	759.2	29.94	760.5	49	9.4	85	N	24	10.7	.....	.....	10s	.....	N	0.21	5.3	Cloudy	
Grand Haven, Michigan	29.41	747.0	30.08	764.0	34	1.1	79	SW	1	0.4	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Hatteras, North Carolina	30.09	764.3	30.12	765.0	42	5.6	100	NE	2	0.9	.....	.....	Fog	.....	Calm	0.62	15.7	Dense fog.	
Helena, Montana	26.01	660.6	.....	.....	2	—16.7	100	S	2	0.9	.....	0	0	.....	.....	0.01	0.3	Clear	
Henrietta, Texas	28.99	736.3	29.98	761.5	24	— 4.4	87	NW	28	12.5	.....	.....	10s	.....	Calm	0.12	3.0	Cloudy	
Indianapolis, Indiana	29.22	742.2	30.03	762.7	34	1.1	79	NE	5	2.2	.....	.....	10s	.....	NE	0	0	Cloudy	
Indianola, Texas	29.96	761.0	29.99	761.7	48	8.9	85	N	38	17.0	.....	.....	10s	.....	Calm	0.08	2.0	Cloudy.	
Jacksboro, Texas	28.81	731.8	30.01	762.2	25	— 3.9	87	NW	22	9.8	.....	.....	10s	.....	N	0.11	2.8	Cloudy	
Jacksonville, Florida	29.98	761.5	30.03	762.7	58	14.4	88	E	5	2.2	.....	0	0	.....	.....	0	0	Clear.	
Keokuk, Iowa	29.29	744.0	29.97	761.2	26	— 3.3	88	NE	9	4.0	.....	.....	10n	.....	Calm	Inap.	Inap.	Light snow.	
Key West, Florida	29.99	761.7	30.02	762.5	74	23.3	76	SE	12	5.4	.....	5k	0	SE	.....	0	0	Fair	
Kittyhawk, North Carolina	30.12	765.0	30.15	765.8	40	4.4	91	SE	2	0.9	.....	.....	Fog	.....	Calm	0.63	16.0	Dense fog.	
Knoxville, Tennessee	28.95	735.3	29.97	761.2	45	7.2	84	E	4	1.8	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
La Crosse, Wisconsin	29.27	743.4	30.04	763.0	29	— 1.7	78	NW	1	0.4	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
La Mesilla, New Mexico	26.14	663.9	30.29	769.4	18	— 7.8	81	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Laredo, Texas	29.66	753.4	30.01	762.2	44	6.7	68	N	16	7.2	.....	.....	10s	.....	N	0	0	Cloudy	
Leavenworth, Kansas	29.03	737.3	29.93	760.2	19	— 7.2	85	N	16	7.2	.....	.....	10s	.....	Calm	0.09	2.3	Cloudy	
Lewiston, Idaho	29.44	747.8	30.13	765.3	29	— 1.7	67	E	6	2.7	.....	0	0	.....	.....	0.02	0.5	Clear.	
Little Rock, Arkansas	29.38	746.2	29.70	754.4	47	8.3	92	NW	6	2.7	.....	.....	10s	.....	Calm	1.08	27.4	Cloudy	
Los Angeles, California	29.78	756.4	30.16	766.1	42	5.6	66	NW	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Louisville, Kentucky	29.38	746.2	29.95	760.7	38	3.3	91	N	10	4.5	.....	.....	10s	.....	S	0.10	2.5	Cloudy	
Lynchburg, Virginia	29.41	747.0	30.11	764.8	37	2.8	81	Calm	0	0	.....	0	Fog	.....	Calm	0	0	Clear.	
Madison, Wisconsin	29.00	736.6	30.03	762.7	29	— 1.7	89	SW	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Marquette, Michigan	29.35	745.5	30.12	765.0	12	—11.1	80	NW	8	3.6	.....	.....	10s	.....	Calm	0.86	21.8	Cloudy	
Mason, Texas	28.44	722.4	30.32	770.1	25	— 3.9	75	NW	22	9.8	.....	0	2s	.....	NW	0.38	9.7	Fair.	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0–10	Clouds. Amount and kind. Up'er 0–10	Lo'er 0–10	Direction, Upper.	Lower.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
United States Series—Continued.																			
Memphis, Tennessee	29.34	745.2	29.67	753.6	51	10.6	100	Calm	0	0			1on		Calm	68	17.3	Light rain	
Milwaukee, Wisconsin	29.31	744.5	30.07	763.8	31	— 0.6	89	SW	1	0.4			1os		Calm	0	0	Cloudy	
Mobile, Alabama	29.67	753.6	29.74	755.4	62	16.7	94	S	20	8.9			1oks		SW	0.01	0.3	Threatening	
Montgomery, Alabama	29.67	753.6	29.90	759.4	53	11.7	96	NW	18	8.0			1on		NW	0.36	9.1	Heavy rain	
Moorhead, Minnesota	29.14	740.1	30.19	766.8	13	—10.6	81	NE	8	3.6		0	6s		N	0.07	1.8	Fair	
Morgantown, W. Virginia	29.09	738.9	30.13	765.3	32	0.0	89	Calm	0	0			Fog		Calm	0.10	2.5	Dense fog	
Mt. Washington, N. H.	23.54	597.9	29.90	759.4	23	— 5.0	100	W	52	23.2			10n;fg		C;W	2.20	55.9	Sleeting	
Nashville, Tennessee	29.32	744.7	29.85	758.2	50	10.0	86	SE	7	3.1			1on		SW	0.06	1.5	Light rain	
New Haven, Connecticut	29.97	761.2	30.09	764.3	32	0.0	79	Calm	0	0			Fog		Calm	0.42	10.7	Dense fog	
New London, Connecticut	30.04	763.0	30.09	764.3	32	0.0	100	Calm	0	0			Fog		Calm	0.48	12.2	Dense fog	
New Orleans, Louisiana	29.66	753.4	29.72	754.9	67	19.4	95	S	18	8.0			1on		Calm	0.13	3.3	Light rain	
Newport, Rhode Island	30.00	762.0	30.06	763.5	34	1.1	100	Calm	0	0			Fog			0.39	9.9	Dense fog	
New River, N. Carolina					51	10.6	100	Calm	0	0			Fog		Calm			Dense fog	
New Shoreham, Rhode I'd	30.06	763.5	30.10	764.5	37	2.8	90	Calm	0	0		0	Fog		Calm	0.20	5.1	Clear	
New York, New York	29.94	760.5	30.13	765.3	34	1.1	100	SW	4	1.8		0	Fog		Calm	0.32	8.1	Clear	
Norfolk, Virginia	30.09	764.3	30.15	765.8	44	6.7	92	N	4	1.8			Fog		Calm	0.09	2.3	Dense fog	
North Platte, Nebraska	27.23	691.6	30.07	763.8	7	—13.9	77	N	16	7.2		0	Haze		Calm	0	0	Clear	
Olympia, Washington T'y	30.02	762.5	30.06	763.5	36.0	2.2	100	E	1	0.4			10s		Calm	0	0	Cloudy	
Omaha, Nebraska	28.94	735.1	30.15	765.8	8	—13.3	100	N	12	5.4			1on		Calm	0.03	0.8	Light snow	
Oswego, New York	29.77	756.1	30.11	764.8	38	3.3	72	W	10	4.5			10s		W	0.16	4.1	Cloudy	
Pensacola, Florida	29.80	756.9	29.83	757.7	66	18.9	95	SE	16	7.2		3k	7s	SW	SW	0	0	Cloudy	
Philadelphia, Pa	30.11	764.8	30.17	766.3	33	0.6	100	W	4	1.8			Fog		Calm	0.32	8.1	Dense fog	
Phœnix, Arizona	29.09	738.9	31.03	788.1	30	— 1.1	57	SW	2	0.9		0	0			0	0	Clear	
Pike's Peak, Colorado	17.25	438.1	29.46	748.3	—16	—26.7	39	NE	14	6.3		0	5s		Calm	0	0	Fair	
Pilot Point, Texas	29.12	739.6	30.01	762.2	27	— 2.8	100	N	16	7.2			10s		Calm	0.59	15.0	Cloudy	
Pioche, Nevada	24.02	610.1	29.79	756.7	16	— 8.9	57	SW	3	1.3		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.30	744.2	30.14	765.5	36	2.2	80	NE	1	0.4			Fog		Calm	0	0	Dense fog	
Port Huron, Michigan	29.41	747.0	30.10	764.5	32	0.0	79	SW	9	4.0			10s		Calm	0.06	1.5	Cloudy	
Portland, Maine	29.89	759.2	29.94	760.5	40	4.4	91	W	1	0.4			Fog			0.10	2.5	Dense fog	
Portland, Oregon	30.03	762.7	30.11	764.8	35	1.7	90	E	6	2.7			1on		Calm	0.31	7.9	Light snow	
Portsmouth, N. Carolina					43	6.1	100	SE	2	0.9			Fog		SE	1.09	27.7	Dense fog	
Prescott, Arizona	24.78	629.4	30.14	765.5	14	—10.0	46	Calm	0	0		0	0			0	0	Clear	
Punta Rassa, Florida	29.98	761.5	30.00	762.0	66	18.9	89	E	8	3.6		0	1s		Calm	0	0	Clear	
Red Bluff, California	29.86	758.4	30.23	767.8	39.0	3.9	82	NW	1	0.4			10s		Calm	0	0	Cloudy	
Rio Grande City, Texas	29.83	757.7	30.05	763.3	57	13.9	47	N	12	5.4			10s		Calm	0	0	Cloudy	
Rochester, New York	29.47	748.5	30.11	764.8	36	2.2	80	W	15	6.7			10s		W	0	0	Cloudy	
Roseburg, Oregon	29.56	750.8	30.14	765.5	40	4.4	86	NW	4	1.8			1on		Calm	Inap	Inap.	Light rain	
Sacramento, California	30.16	766.1	30.24	768.1	42	5.6	91	SE	8	3.6		2c	0	Calm		0	0	Clear	
St. Louis, Missouri	29.26	743.2	29.84	757.9	33	0.6	89	NE	10	4.5			1on		Calm	0.25	6.3	Light snow	
St. Paul, Minnesota	29.18	741.2	30.04	763.0	28	— 2.2	88	N	7	3.1			10s		N	0	0	Cloudy	
Salt Lake City, Utah	25.72	653.3	30.05	763.3	22	— 5.6	45	Calm	0	0			10s		Calm	0.07	1.8	Cloudy	
San Antonio, Texas	29.38	746.2	30.12	765.0	36	2.2	61	NW	15	6.7			10s		NW	0.08	2.0	Threatening	
San Diego, California	30.13	765.3	30.21	767.3	41	5.0	82	E	5	2.2		0	0			6	0	Clear	
Sandusky, Ohio	29.41	747.0	30.10	764.5	37	2.8	71	NW	5	2.2			10s		Calm	0	0	Cloudy	
Sandy Hook, New Jersey	30.08	764.0	30.12	765.0	30	— 1.1	78	W	3	1.3		0	Haze		Calm	0.26	6.6	Clear	
San Francisco, California	30.18	766.6	30.25	768.3	48	8.9	78	SE	1	0.4			8s		Calm	0	0	Cloudy	
Santa Fé, New Mexico	23.10	586.7	29.64	752.8	10	—12.2	79	Calm	0	0			1on		Calm	Inap.	Inap.	Light snow	
Savannah, Georgia	29.98	761.5	30.07	763.8	52	11.1	86	SE	7	3.1		0	Fog		Calm	0	0	Clear	
Shreveport, Louisiana	29.58	751.3	29.83	757.7	44	6.7	100	NW	9	4.0			1on		Calm	1.87	47.5	Light rain	
Silver City, New Mexico	24.21	614.9	30.82	782.8	14	—10.0	46	Calm	0	0		0	0			0	0	Clear	
Smithville, North Carolina	30.11	764.8	30.15	765.8	51	10.6	93	NE	6	2.7		0	1ks		Calm	0.04	1.0	Clear	
Socorro, New Mexico	25.37	644.4	29.44	747.8	30	— 1.1	78	NW	6	2.7		0	0			0	0	Clear	
Springfield, Illinois	29.25	742.9	29.94	760.5	30.5	— 0.8	84	NE	12	5.4			10n		Calm	0.01	0.3	Heavy sleet	
Springfield, Massachusetts	29.93	760.2	30.06	763.5	35	1.7	100	Calm	0	0			Fog		Calm	0.38	9.7	Dense fog	
Stockton, Texas	27.08	687.8	30.08	764.0	20	— 6.7	85	NW	12	5.4		0	0			0	0	Clear	
St. Vincent, Minnesota	29.42	747.3	30.31	769.9	5	—15.0	100	N	12	5.4			10s		Calm	0.01	0.3	Cloudy	
Thatcher's Island, Mass.	29.97	761.2	30.02	762.5	37	2.8	90	SW	8	3.6		0	Fog		Calm	0.19	4.8	Clear	
Toledo, Ohio	29.38	746.2	30.08	764.0	30	2.2	90	S	2	0.9			10s		Calm	0	0	Cloudy	
Tucson, Arizona	27.93	701.8	30.18	766.6	28	— 2.2	66	SE	2	0.9		0	0			0	0	Clear	
Umatilla, Oregon	29.92	760.0	30.44	773.2	30	— 1.1	89	NE	16	7.2			10s		Calm	0	0	Cloudy	
Uvalde, Texas	29.12	739.6	29.99	761.7	34	1.1	61	N	17	7.6			10s		N	0	0	Cloudy	
Vicksburg, Mississippi	29.52	749.8	29.78	756.4	53	11.7	93	W	7	3.1			10n		Calm	1.59	40.4	Heavy rain	
Visalia, California	29.86	758.4	30.25	768.3	36	2.2	90	SE	3	1.3		2c	0	Calm		0	0	Clear	
Washington, D. C.	30.05	763.3	30.17	766.3	34	1.1	90	Calm	0	0			Fog		Calm	0.03	0.8	Dense fog	
Wickenburg, Arizona					20	— 6.7	70	NW			1	0	0			0	0	Clear	
Wilmington, N. Carolina	30.07	763.8	30.13	765.3	49	9.4	85	Calm	0	0		0	Fog		Calm	0.01	0.3	Clear	
Winnemucca, Nevada	25.67	652.0	30.03	762.7	28	— 2.2	77	SW	6	2.7			10ks		SW	0.02	0.5	Cloudy	
Wood's Holl, Mass.	30.01	762.2	30.05	763.3	33	0.6	100	SW	8	3.6			Fog		SW	0.22	5.6	Dense fog	
Yankton, Dakota	28.90	734.0	30.34	770.6	6	—14.4	76	NW	16	7.2			10s		Calm	0	0	Cloudy	
Yuma, Arizona	30.04	763.0	30.20	767.1	39	3.9	55	NE	1	0.4		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.06	560.3			53.0	11.7	79	Calm	0	0		0	5s			0	0	Fair	Thomas Herran.
Buff Bay Town, Jam ica. ‡	29.79	756.7	30.11	764.8	66	18.9	78	SE				0	1c						
Havana, Cuba, W. I.	29.96	761.0	30.01	762.2	69	20.6	84	Calm	0	0		0	0			0	0	Clear	Charles Hasselbrink.
Jakobshavn, Greenland	29.28	743.8	29.34	745.3	— 5.4	—20.8		S			2		7			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.98	761.5	29.99	761.7	69.9	21.1	73	Calm	0	0		0	0			0	0	Fine	Robert Johnstone.
Navassa, W. I.	29.88	758.9	29.96	761.0	75.5	24.2	68	NE	11	4.9			1o		NE	0	0	Cloudy	F. M. Everett.
Paramaribo, S. A.	29.94	760.5	29.94	760.5	77	25.0	82	NE			2	3c	5k	E		0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.42	747.3	29.98	761.5	80	26.7	85	Calm			0	0	5s		Calm	0	0	Hazy	Francesco J. Cisneros.
Rivas, Nicaragua								SE			1	0	5ks		SE	0	0		Earl Flint.
Santiago de Cuba, W. I.	29.97	761.2	30.00	762.0	75.2	24.		N	3.6	1.6		4cs	0	NE		0	0	Fair	Robert Mason.
St. Thomas, W. I.					71	21.7	75												G. O. Gellich.
Upernavik, Greenland	29.53	750.0	29.59	751.6	—20.9	—29.4		NW			2		0			0	0		K. Elberg.
York Factory, B. A.	30.20	767.1	30.25	768.3	—25.0	—31.7		SW	16	7.2			1on		SW	0.05	1.3	Snowing	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.77	756.1	63	17.2	82	W			4–5		3							D. clouds	Capt. Lord Walter Kerr
H. M. S. Antelope, Basika Bay, Turkey	29.62	752.3	54	12.2		NW			1		1					Sm'h		Blue sky	Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 23′, E. 55° 23′	29.86	758.4	75	23.9	64	WNW			1		1	WNW						Misty	Comm. G. Hand.
H. M. S. Bittern, Constantinople, Turkey			57	13.9		NE			1		2	NE						D. clouds	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.75	755.6	78.5	25.8	82	ENE			5		0					4	ENE	Blue sky	Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer, N. 37° 01′ E. 15° 19′	29.68	753.9	59	15.0		WSW			6		7	WSW				4	SW	Squally	Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 29° 59′, E. 122° 04′	30.37	771.4	42	5.6	74	Calm			0		7	W						D. clouds	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.16	766.1	63	17.2	72	NE			1–2		7	NE						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, Singapore, Malay Peninsula	29.86	758.4	80	26.7		NNE			3		8	SE				2	E	D. clouds	Capt. W. H. Maxwell.
H. M. S. Emerald																			Comm. C. Johnstone.
H. M. S. Encounter, Shangbai, China	30.44	773.2	34	1.1	79	NE			1		0							Blue sky	Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.82	757.4	81	27.2	60	NW			2–3		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 8° 10′ W. 79° 45′	29.92	760.0	81	27.2	70	NNE			4		3					1–2	N	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.68	753.9				SW			6									Squally	Capt. L. F. Jones.
H. M. S. Griffin, N. 20° 18′, W. 61° 46′	29.98	761.5	71.5	21.9	95	NNE			3		5	NE				4	NNE	Squally	
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris, N. 36° 23′, E. 21° 47′	29.70	754.4	62	16.7	94	NW			2–3		1					1	W	Blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 149° 57′	30.16	766.1	63	17.2	89	E			1		8	E						D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Africa	29.84	757.9	83	28.3	87				1		3							D. clouds	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 29° 53′, E. 121° 34′	30.45	773.4	39.5	4.2	64	N			1		10							Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 37° 22′, E. 44° 45′	29.93	760.2	61	16.1	77	W			6–7		7	W				6	W	Misty	Capt. J. F. G. Grant.
H. M. S. Minotaur, Vigo, Spain	30.22	767.6	54.5	12.5	74	NNW			5		5	N						D. clouds	Capt. H. Rawson.
H. M. S. Modeste, N. 5° 24′, E. 100° 20′	29.88	758.9	79	26.1	?	N			2		2							D. clouds	Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Trinidad, W. I.	29.90	759.4	74	23.3	90	SE			1		2	E						D. clouds,	Capt. E. Drummond.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, S. 6° 59′, W. 13° 39′	29.91	759.7	79	26.1	91	SSE			2		0					2	SSE	D. clouds	Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.86	758.4	84	28.9	91	Calm			0		5							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	30.27	768.8	58	14.4	64	NNE			2		6	NNE						D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.54	750.3	77	25.0	86	SE			1–2	2ck						2	SE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	29.98	761.5	68.5	20.3	90	NNW			1		10					1	W	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos, N. 8° 10′, W. 58° 31′	30.07	763.8	79	26.1	78	NE			1		4					5	N	D. clouds	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, N. 36° 50′, E. 10° 22′	29.76	755.9	65	18.3	84	WNW			3–4										Capt. P. H. Colomb.
H. M. S. Triumph, S. 24° 00′, W. 73° 30′	30.03	762.7	69	20.6	70	SSE			1		10	S				3	S	D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 32° 20′, E. 28° 40′	29.68	753.9	62	16.7		NW			3–4		8					1	WNW	Showery	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I	30.00	762.0	71	21.7		N			1		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, Palestine	29.64	752.8	69.5	20.8	66	SSE			5–6		9	SE						Thund'r st'm	Capt. F. Negham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Bulama, Senegambia	29.95	760.8	86.0	30.0	78	ESE			2		3							D' clouds	S. C. da Silva Costa, Comd't.
Sado. St. Paul de Loando, Africa	29.87	758.8	83.5	28.6	79	W			3		7		W			2	W	Overcast	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Mahmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡																			Com. Th. Ulner.

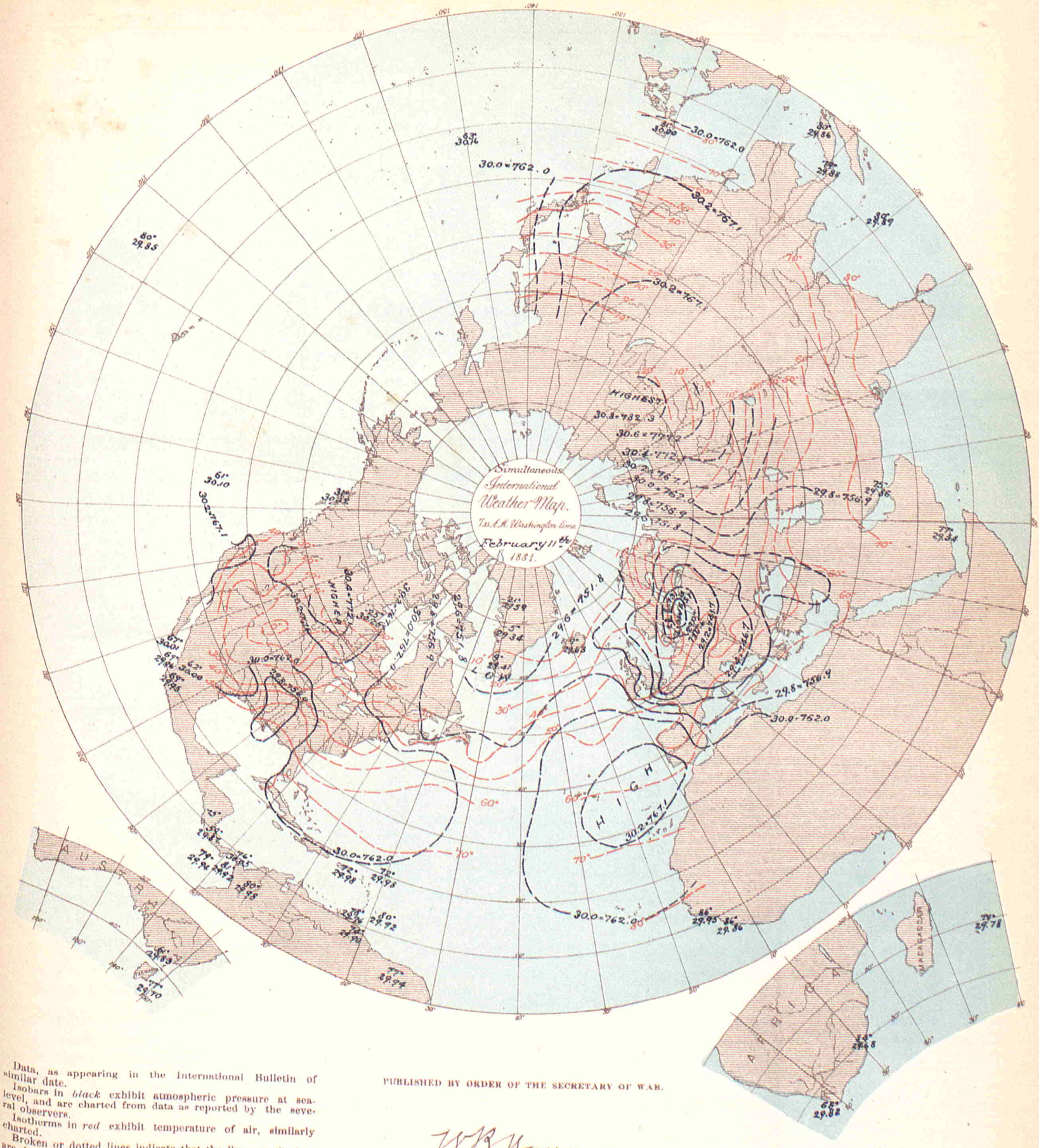
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.08	764.0	53	11.7	54	SW	10	4.5			5		SW	0	0			Fair	
N. Yard, Portsmouth, N. H.	29.95	760.7	37	2.8	90	W	4	1.8			0?			0.2	5.			Raining?	
Naval Hospital, Yokohama, Japan	29.70	754.4	32.5	0.3	36	N			5		0			0	0			Clear	
Adams, S. 0° 13′, W. 81° 01′	29.98	761.5	77	25.0	86	E			3		10		NW			Sm'h	NW	Cloudy	
Alaska, N. Yard, Mare I'd, Cal.	30.19	766 8	47	8.3	77	W			3		8		W	0	0			Cloudy	
Alert, Hong-Kong, China *.	30.05	763.3	64	17.8	78	E			3		10		E	0	0	Sm'h		Hazy	
Alliance, New Orleans, La	29.71	754.6	67	19.4	100	SE			2		10			Light		Sm'h		Foggy	
Ashuelot, Tientsin, China	30.36	771.1	25	— 3.9	100	SE			1		0							Clear	
Colorado, New York, N. Y	30.17	766.3	34	1.1	100	W	2	0.9			0			0.20	5.1			Clear	
Constitution, N. Yard, League I'd., Pa			32	0.0	100	Calm	0	0			10							Foggy	
Franklin, Norfolk, Va	30.06	763.5	44	6.7	84	NE	2	0.9			10			0.13	3.3			Foggy	
Galena, Naples, Italy	29.52	749.8	61	16.1	71	WSW			4		8		SW			Sm'h		Cloudy	
Independence, N. Yard, Mare I'd, Cal.	30.22	767.6	50	10.0	93	W	6.0	2.7			10		W	0	0			Overcast	
Jamestown, Sitka, Alaska *	30.12	765.0	31	— 0.6		ESE			1		10			0	0	Sm'h		Cloudy	
Kearsarge, Warrington, Florida	29.76	755.9	65	18.3	84	SE			4		5		SW			Sm'h		Fair	
Lackawanna, Callao, Peru †.	30.09	764.3	70	21.1	90	NE			1-2		10		NE	0	0			Cloudy	
Marion, Sandy P't, Terra del Fuego	29.80	756.9	54	12.2	77	NW			2		5		WNW	Heavy		Sm'h		Fair	
Michigan, Erie, Pennsylvania	30.07	763.8	34	1.1		W	2	0.9			10		W					Cloudy	
Minnesota, New York, N. Y			38	3.3	90	W			1		0							Hazy	
Monocacy, Shanghai, China	30.48	774.2	35	1.7	80	ENE			1		2							Clear	
New Hampshire, Port Royal, S. C	29.97	761.2	52	11.1	93	E	4	1.8			2		Calm	0	0			Foggy	
Nipsic, Barcelona, Spain	29.78	756.4	62	16.7	41	WNW			3		2					Sm'h		D. clouds	
Onward, Callao, Peru †.	29.93	760.2	69	20.6	90	Calm			0		10					Long	W	Cloudy	
Palos, Shanghai, China	30.50	774.7	36	2.2	71	ENE			1		2							Fair	
Passaic, Washington, D. C	30.19	766.8	34	1.1	89	SW			1		8		Calm					Cloudy	
Pensacola, N. 7° 06′, W. 80° 47′	29.94	760.5	79	26.1	82	ENE			3		2			0	0	Sm'h		Fair	
Portsmouth, Washington, D. C	30.15	765.8	32	0.0	100	Calm			0		2							Misty	
Powhatan, New York, N. Y	30.11	764.8	35	1.7	100	SSW			1		0							Foggy	
Quinnebaug, Villafranca, France	29.44	747.8	59	15.0	88	WNW			5		2		Calm			Long	W	Clear	
Richmond, Hong-Kong, China	30.20	767.1	63	17.2	89	E			2		10		E	0	0			Hazy	
Saratoga, Baltimore, Md	30.13	765.3	34	1.1	100	Calm			0		10		Calm	0	0			Cloudy	
Shenandoah, Montevideo, Uruguay *	30.22	767.6	73	22.8	67	NE			2		0					Sm'h		Clear	
St. Louis, League Island, Pa	30.16	766.1	29	— 1.7	100	Calm	0	0			10			0.45	11.4			Foggy	
Swatara, Nagasaki, Japan †	30.14	765.5	35	1.7	70	N			1		5		NW			Sm'h		D. clouds	
Tennessee, N. 28° 35′, W. 89° 07′	29.78	756.4	74	23.3	100	S	30	13.4			10		SSE	0.02	0.5	Mod.	SE	Rainy	
Ticonderoga, N. Yard, Mare Id., Cal.	30.23	767.8	47	8.3	100	WNW			1		0?			0	0			Overcast	
Trenton, Villafranca, France *	29.40	746.7	66	18.9	23	NW			3-5		0			0	0	Sm'h		Squally	
Vandalia, N. 12° 02′, W. 61° 48′	29.96	761.0	78	25.6	86	NNE			1		2		NE					Fair	
Wabash, Boston, Massachusetts	30.06	763.5	38	3.3	90	WSW	6	2.7						0.17	4.3			Hazy	
Wachusetts, Panama, Panama *.	29.57	751.1	76	24.4	86	NW			1		2		N					Fair	
Wyoming, Villafranca, France	29.43	747.5	58	14.4	48	WNW			4		2					Mod.	SSE	Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
S. 5° 45′, W. 19° 25′	29.97	761.2	82.5	28.1	75	E			4		2							Blue sky	Capt. C. J. Russell.
S. S. Bateshire,																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 18° 07′, W. 43° 18′	29.95	760.7	73.5	23.1	86	ESE			4		5							Thunder-storm	Capt. A. J. Brown.
British Merchant, ‡																			Capt. E. J. Molony.
Chin Yang, ‡																			
N. 11° 45′, W. 45° 37′	29.93	760.2	78.5	25.8	82	ENE			1		10							Drizzling	Capt. N. Youlden.
S. S. Cipero,																			Capt. W. N. Lailey.
City of Agra, ‡																			
S. 19° 44′, W. 29° 52′	30.05	763.3	81.7	27.6	83	ENE			1		8							D. clouds	Capt. T. Young.
Barque Commewyne, ‡																			
N. 31° 24′, W. 55° 32′	30.03	762.7	68.1	20.1	79	NE			6		8							Showery	Capt. W. Scott.
Barque Coppename,																			Capt. Jas. Buchan.
Denbighshire,																			Capt. H. Y. Murdoch.
Barque Dochra, ‡																			
S. 12° 09′, W. 10° 17′	29.96	761.0	81	27.2	72	SE			2		8							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart,																			
N. 5° 53′, E. 90° 06′	29.89	759.2	79.5	26.4	87	E			3		9							Overcast	Capt. J. E. C. Patterson.
Barque Elissa,																			Capt. A. Watson.
S. S. Ethiopia, ‡																			
N. 49° 06′, W. 40° 50′	29.79	756.7	42	5.6	91	SW			6		10					5	WbW	Overcast	Capt. A. Campbell.
S. S. Fleurs Castle,																			Capt. J. Kidder.
Barque Gem,																			Capt. H. Park.
S. S. Gordon Castle,																			Capt. W. Waring.
Barque Harvest Home,																			Capt. H. H. Williams
Barquentine Hope, ‡																			
S. 3° 55′, W. 34° 23′	29.92	760.0	80.0	26.7	93	SE			4		6							D. clouds	Capt. Jas. Campbell.
Ship Iron Cross,																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith,																			Capt. Alex. Wilson.
S. S. Lamperts,																			Capt. G. H. Jones.
Laomene,																			Capt. W. P. Hughes.
Ship Lochee, ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania,																			Capt. C. A. F. Powell.
Majastic,																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 19° 28′, W. 51° 58′	29.82	757.4	74.3	23.5	87	WNW			6		3					4	NNW	D. clouds	Capt. H. W. Dyke.
Barque Mertola,																			
N. 37° 06′, W. 7° 16′	30.25	768.3	57.5	14.2	82	NNW			5		2							Blue sky	Capt E. W. Turner.
Nairnshire,																			Capt. W. Niven.
S. S. Nizam,																			Capt. J. W. Brady.
Queen of Cambria,																			Capt. M. Parry.
S. S. Richmond,																			Capt. W. H. Stuart
Barque Shun Lee, ‡																			Capt. John M. Gray.
S. S. Seino,																			Capt. H. Manning.
S. S. Strathleven, ‡																			Capt. C. W. Pearson.
Schr. Traveller,																			Capt. A. Simpson.
S. S. Wyberton, ‡																			
Suez Canal	29.79	756.7	58	14.4	70	SW			5		9							Showery	Capt. R. J. Blacklin.
S. S. Yorkshire,																			
N. 36° 15′, W. 4° 55′	30.10	764.5	61	16.1	77	W			5		2					4	WSW	Blue sky	
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian,																			Capt. F. Archer.
S. S. Nova Scotian,																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia,																			
S. S. Scythia,																			
WHITE STAR LINE. *Ismay, Imrie & Co.*																			Capt. W. H. P. Hains.
S. S. Adriatic,																			
S. S. Britanic,																			Capt. J. W. Jennings.
N. 48° 14′, W. 31° 56′ †	30.08	764.0	53	11.7		SE			3		10		E			Long	NE	Raining	Capt. H. Parsell.
S. S. Celtic,																			
N. 51° 04′, W. 16° 33′ †	30.05	763.3	48	8.9		WNW			4		5		W	o	o	Mod.	W	Fair	Capt. H. Perry.
S. S. Germanic,																			
N. 41° 47′, W. 59° 31′ †	30.20	767.1	58	14.4		SW			3		8?		W	o	o	Sm'h		Clear?	Capt. Benj. Glendell.
S. S. Republic,																			
Off Mine Head, England †*	29.76	755.9	50	10.0	72	N			6		2		N	Hea show	vy ers	Sm'h		Fair	Capt. Ch. W. Kennedy.
																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Köln,																			
N. 49° 39′, W. 20° 34′	30.06	763.5	45.5	7.5		SW			5		10		SW	12h'rs	hail	H'vy	WNW	Cloudy	
S. S. Leipzig,																			
N. 49° 10′, W. 13° 00′	30.07	763.8	50.0	10.0	61	NNW			6		5		NNW	o	o	Cross	NNW	Fair	Capt. F. Pfeiffer.
S. S. Ohio,																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, †																			Capt. Albert Fredholm
Ship Peru, ‡																			Capt. O. F. Skötdebran.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. ‡ Liverpool, England....*†	29.50	749.3	38	3.3	90	N	.....	.....	6	.....	2	.....	N	.....	.....	.....	.....	Clear.....	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 45° 53′, W. 49° 54′.....†	29.88	758.9	33	0.6	89	NW	.....	.....	4	.....	8	.....	N	Li	ght	R'gh	WNW	Cloudy.....	Capt. R. W. Sargent.
S. S. Ohio, Delaware River.....†*	30.20	767.1	35	1.7	90	S	.....	.....	1	.....	2	.....	S	0	0	.....	.....	Misty.....	Wm. Shakford, 1st Off'
S. S. Pennsylvania, Philadelphia, Pa.....†	30.03	762.7	33	0.6	80	Calm	.....	.....	0	.....	10	.....	NE	0	0′	.....	.....	Foggy.....	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 23° 05′, W. 107° 25′.....†	29.96	761.0	69	20.6	65	N	.....	.....	4	.....	0	.....	.....	0	0	Mod.	NNW	Clear.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 35° 04′, E. 141° 26′ .....†	29.76	755.9	47	8.3	72	NNW	.....	.....	6	.....	10	.....	.....	0	0	High	NNW	Overcast.....	Capt. H. Davison.
S. S. Gaelic, Yokohama, Japan .....†*	30.03	762.7	33	0.6	61	WSW	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	Capt. W. H. Kidley.
S. S. Oceanic, N. 34° 31′, W. 135° 28′.....	30.10	764.5	61	16.1	100	SSE	.....	.....	5	.....	5?	.....	SW	0	0	Mod.	NW	Clear?.....	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Fred. Bolles.
S. S. Oregon, N. 40° 10′, W. 124° 25′....†	30.20	767.1	50.0	10.0	75	Var.	.....	.....	3	.....	10	.....	W	.....	.....	Mod.	WSW	Rainy...	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Diego, Cal.....†	30.11	764.8	44	6.7	84	NE	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	Capt. J. N. Ingalls.
S. S. Idaho, ‡ Esquimalt, Vancouver Isl'd†	30.02	762.5	38	3.3	100	SE	.....	.....	3	.....	8	.....	.....	.....	.....	.....	.....	Cloudy.....	C. E. Lyons, 1st Officer.
S. S. Orizaba.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Senator, San Francisco, Cal.....†	.....	.....	48	8.9	85	W	.....	.....	1	.....	10	.....	W	.....	.....	.....	.....	Cloudy	Thos. Wallace.
S. S. State of California, Portland, Oregon.....†	30.05	763.3	34	1.1	79	NE	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	Snowing.....	Capt. G. Debney.
S. S. Victoria, N. 38° 50′, W. 123° 46′....†	30.12	765.0	49	9.4	71	NNE	.....	.....	3	.....	8	.....	NW	.....	.....	Long	NW	Fair	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 5° 35′, W. 164° 36′....†	29.85	758.2	80	26.7	100	NNE	.....	.....	2	.....	8	.....	NE	.....	.....	Mod.	NE	Cloudy	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.....†	30.33	770.4	70	21.1	100	ESE	.....	.....	4	.....	10	.....	SE	0	0	.....	.....	Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Panama, Panama .....†	30.05	763.3	78	25.6	82	ENE	.....	.....	1	.....	2	.....	SE	.....	.....	Sm'll	SW	Clear.....	Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China.....†	30.15	765.8	60	15.6	55	NE	.....	.....	5	.....	8	.....	.....	0	0	Sm'h	.....	Cloudy.....	Capt. G. G. Berry.
S. S. City of Sidney.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. H. C. Dearborn.
S. S. City of Tokio.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 20° 01′, W. 105° 32′....†	29.95	760.7	69	20.6	80	ENE	.....	.....	7	.....	2	.....	Calm	0	0	Mod.	WSW	Misty.....	Capt. R. R. Searle.
S. S. Dakota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. D. E. Griffiths.
S. S. Granada, N. 23° 06′, W. 108° 44′....†	30.01	762.2	67	19.4	74	NW	.....	.....	5	.....	0	.....	.....	0	0	R'gh	NW	Hazy.....	.....
S. S. Zealandia, S. 34° 13′, E. 164° 23′.....	30.06	763.5	74	23.3	81	NNE	.....	.....	6	.....	8	.....	N	.....	.....	Sm'h	N	Cloudy.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland, ‡ N. 49° 21′, W. 12° 05′.....†	29.88	758.9	50	10.0	86	NNW	.....	.....	9	.....	5	.....	WSW	.....	.....	Very h'vy	NW	Fair.....	Capt. Sam'l Jackson.
S. S. Nederland..... ‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. S. Stokes.
S. S. Rhynland, ‡ Antwerp, Belgium.....	29.07	738.4	45	7.2	.....	NNW	.....	.....	5	.....	10	.....	N	0.3	8.	.....	.....	Rainy...	Capt. W. Geo. Randle.
S. S. Vaderland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, ‡ Jacksonville, Florida...†	29.99	761.7	65	18.3	.....	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	Fine.....	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va.....	30.10	764.5	45	7.2	84	Calm	0	0	.....	.....	Fog	.....	.....	0.05	1.3	.....	.....	Foggy	Capt J. Jorgensen.
Sch'r Annie R. Lewis, N. 16° 02′, W. 58° 20′.....†	29.87	758.7	76	24.4	.....	WNW	.....	.....	1	.....	10	.....	W	Squ	alls	Very h'vy	NNW	Raining.....	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 36° 14′, W. 2° 30′.....†*	30.14	765.5	62	16.7	.....	WSW	.....	.....	6	.....	0	.....	.....	.....	.....	R'gh	WSW	Hazy.....	Capt. B. F. Woodbury.
Brigantine George, ‡ N. 25° 34′, W. 71° 40′.....†	30.33	770.4	70	21.1	.....	E	.....	.....	5	.....	8	.....	E	0	0	Long h'vy	ENE	Clearing.....	Capt. W H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va.†	30.16	766.1	44	6.7	92	NNE	1	0.4	.....	5ks	5ks	.....	.....	0.03	0.8	.....	.....	Foggy	.....
Ship Jumna.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 30° 42′, W. 22° 50′.. ..†	30.22	767.6	66	18.9	?	ENE	.....	.....	6	.....	8	.....	E	0	0	Mod.	E	Fair.....	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 12, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.06	763.4	64.0	17.8	74	NE			4		1			0	0	Very fair	Dr. Ollive.
Nemours			30.04	763.0	66.0	18.9	79	W			3		0			0	0	Clear.	Raynard.
Algiers			29.95	760.7	58.6	14.8	54	NW			3		4			0	0	Cloudy	Nicolas.
La Calle			29.84	757.9	57.2	14.0	78	NNW			5		9			0.551	14.0	Covered.	Fonfrède.
Tunis			29.80	757.0															Jacques.
Sfax			29.95	760.6															Gau.
Saida			30.05	763.3	54.0	12.2	67	W			1		7			0	0	Very clear	Dumas.
Tebessa			29.98	761.5	48.9	9.4	37	WNW			5		6			0	0	Cloudy	Watrin.
Geriville																			Lonchamp.
Laghouat			30.04	763.0	60.1	15.6	55	WSW			3		4			0	0	Cloudy	Herbin.
Biskra			30.00	762.1															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.43	747.5	29.52	749.8	61.9	16.6	86	S	13	5.8			5			0.08	2.0	Rainy	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.50	749.3	73	22.8		SE			3		5n			0.17	4.3		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	28.88	733.6	29.44	747.8	38.1	3.4	88	SE			2		10			0.008	0.2		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.70	729.0	29.50	749.2	28.8	— 1.8	100	WNW	11.2	5.0			10			0.055	1.4		Dr. Wiersbicki.
Eperies	28.38	720.8	29.26	743.2	39.4	4.1	80	NW			2		8			0	0		Julius Mikolik.
Gratz‡	28.28	718.4	29.56	750.9	34.9	1.6	43	NW			6		2			0.248	6.3		Andreas Rospini.
Hermannstadt	27.71	703.7	29.14	740.1	34.9	1.6	91	NW			3		10			0.156	3.95	Snowing	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.33	719.6	29.74	755.4	26.2	— 3.2	94	W			3		6			0.244	6.2		The Staff.
Lemberg	28.24	717.2	29.24	742.6	34.2	1.2	94	NE			1		10			0.327	8.3		Dr. T. Stanecki.
Pola	29.28	743.8	29.40	746.7	41.5	5.3	86	ENE			3		10			0.157	4.0	Sleeting	I. R. HydrographicOffice
Szathmar	28.68	728.4	29.12	739.6	34.2	1.2	96	N			2		10			0.689	17.5	Foggy	Beicht Peter, S. J.
Szegedin	29.05	737.9	29.34	745.2	34.3	1.3	87	NW			4		8			0	0		Karl Stancel.
Trieste	29.33	744.9	29.43	747.5	47.1	8.4	37	NNE			2		10			0	0	Cloudy	P. Busin.
Vienna	28.89	733.7	29.63	752.7	27.9	— 2.3	79	W			5		10			0.339	8.6		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.70	754.3	29.91	759.6	36.1	2.3	65	NW			2		9		NW	0	0		Royal Observatory.
Furnes	29.87	758.6	29.89	759.2	37.9	3.3	69	N			6		5			0.102	2.6		M. E. de Cae.
Maeseyck	29.76	755.9	29.89	759.1	34.5	1.4	76	NNW			2		9			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 14, 1882.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.91	759.7	30.01	762.2	32.2	0.1	69	SW	7	3.1			0			0.050	1.27	Blue sky	W. Boswell.
Armagh, Observatory	29.74	755.4	29.98	761.5	38.3	3.5	70	SSE	17	7.6			10					Overcast	S. Call.
Bidston, Liverpool Obs'y			30.09	764.3	36.9	2.7	62	NW	4	1.8			3					Blue sky	John Hartnup.
Bolton, Sharples	29.5c	749.3	30.05	763.3	39.6	4.2	76	N					0					Blue sky	Thomas Mackereth.
Bradford, Yorkshire	29.53	750.0	29.92	760.0	33.1	0.6	70	NW			2		7			0	0	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.89	759.2	29.92	760.0	78	25.6	70				2		8					Overcast	Pvt. J. Surgenor, A. H. C.
Cardington			30.01	762.2	37.6	3.1	66	N			1.0		1					Blue sky	John McLaren.
Chatham, School M. E.	29.90	759.4	30.04	763.0	38.1	3.4	46	NW			1		1					D. clouds	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.90	759.4	30.14	765.5	43.7	6.5	58	NNW			1		2					D. clouds	The Staff.
Fort Napier, Natal	27.65	702.3	29.87	758.7	69.1	20.6	74	SE			2		7					Overcast	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	88	31.1	84	E			2		3					D. clouds	C. E. Keane.
Galway, Queen's College			29.81	757.2				S			4		10					Overcast	J. O'Donaghadue.
Gibraltar, Mediterranean	30.03	762.7	30.08	764.0	64.5	18.1	92	NW			3		4					Blue sky	2nd Opl. O. Baldwin.
Glasgow, Observatory	29.81	757.2	30.02	762.5	35.4	1.9	67	S			3							Blue sky	D. G. MacLean.
Greenwich, Royal Obs'y	29.87	758.7	30.05	763.3	39.1	3.9	68	N			1		2			Blank		Blue sky	The Staff.
Guernsey	29.88	758.9	30.10	764.5	42	5.6	58	NW			2		3					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.02	737.1	29.06	738.1	39.7	4.3	55	NNW	13	5.8			3					Blue sky	The Met'g'l Office.
Leicester, Museum	29.86	758.4	30.12	765.0	40.3	4.6	84	NE			2		9					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.60	751.8	29.68	753.9	56.8	13.8	83	NW			3		8					Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas			30.08	764.0	72.0	22.2	85	SE			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.54	750.3	30.08	764.0	38.2	3.4	62	NW			3					Blank		Blue sky	Robert Pate.
Oxford, Radcliffe Obs'y	29.84	757.9	30.10	764.5	38.8	3.8	69	NW			3		0					Blue sky	The Staff.
Plymouth	30.05	763.3	30.12	765.0	40.1	4.5	73	NW			1		0					Foggy	John Merrifield.
Sandwick Manse, Orkneys			29.88	758.9	33.5	0.8	91	S	33	14.8			0					Blue sky	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.24	742.7	29.31	744.5	44.2	6.8	97	SW			3		10					Raining	Serg't W. H. Lyne.
Sheffield	29.80	756.9	30.08	764.0	38.6	3.7	62	NE			1		1			0	0	Blue sky	W. F. Cooper.
Silloth Rectory	29.93	760.2	29.96	761.0	39.6	4.2	70	Calm			0		0			0	0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.08	764.0	36.1	2.3	59	SSW	1	0.4			0					Blue sky	Rev. S. J. Perry.
Strathfield Turgiss	29.85	758.2	30.07	763.8	40.5	4.7	64	NW			1		0					Blue sky	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	30.06	763.5	30.13	765.3	50	10.0	79	SE			4		5					D. clouds	W. Newcombe.
Valencia, Observatory	29.81	757.2	29.84	757.9	46.6	8.1	80	SE	40	17.9			10					Gloomy	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.14	765.5	30.18	766.6	22	— 5.6	86	N	4	1.8			8s			0.115	2.92	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.12	765.0	30.19	766.8	23	— 5.0	93	Calm	0	0			10s		Calm	0.03	0.8	Cloudy	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.18	766.6	30.20	767.1	22	— 5.6	79	NE	2	0.9			10n		Calm	0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.63	752.6	30.56	776.2	4	—15.6	100	NE	14	6.3			10n			0.100	2.54	Cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.06	763.5	30.20	767.1	28	— 2.2	92	NE	4	1.8		0	8ks			0	0	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.39	746.5	29.73	755.1	35	1.7	93	E	16	7.2			10n		E	0.03	0.8	Heavy rain	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.78	756.4	29.98	761.5	33	0.6	82	E	11	4.9			10s			0	0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	28.84	732.5	29.55	750.6	32	0.9	95	E	16	7.2			10n		NE	0.05	1.3	Light rain	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	28.70	729.0	29.40	746.7	36	2.2	100	N	6	2.7			10n			0.42	10.7	Light rain	H. Morgan.
Port Stanley, Ontario	28.71	729.2	29.37	746.0	37	2.8	92	E	14	6.3			10n		SW	0.66	16.8	Light rain	M. Payne.
Quebec, Quebec*	29.78	756.4	30.13	765.3	26	— 3.3	100	NE			5		10n		NE	0.02	0.5	Hailing	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.37	746.0	29.84	757.9	30	— 1.1	79	E	10	4.5			10s		SE	0	0	Threatening	K. Stewart.
Saugeen, Ontario*	28.67	728.2	29.40	746.7	32	0.0	99	NE	35	15.6			10ks		E	0.05	1.3	Light snow	W. H. McIntyre.
St. Andrews	30.09	764.3	30.14	765.5	34	1.1	89	SE	4	1.8			10n			0	0	Cloudy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.09	764.3	30.14	765.5	20	— 6.7	98	Calm	0	0			0			0.13	3.3	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.10	739.1	29.49	749.0	36	2.2	97	NE	30	13.4			10n		E	0.45	11.4	Light rain	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.09	764.3	30.16	766.1	31	— 0.6	85	E	7	3.1		5ck	0	W		0	0	Fair	Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. John's, Newfoundland	29.77	756.1	30.03	762.7	25	— 3.9	100	NE	1	0.4			10			0.40	10.2	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape St. Francis Lt. House	30.11	764.8			68.0	20.0	88	W	32.7	14.6			3s			0.010	0.25	Fine	John Duthie.
Cape Town, C. G. H. Obs'y	30.20	767.1	30.24	768.1	83.5	28.6	36	S	19.4	8.7		2	4k			0	0		The Staff, for D. Gill.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	30.22	767.5	30.24	768.1	41.0	5.0	80	ENE	5.4	2.4			10			0	0	Covered	M. Marc Dechevrens, S J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.24	666.5	29.96	761.0	62.6	17.0	90	NE			1	1c	2d			0	0	Fair	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.58	751.3	29.63	752.5	19.8	— 6.8	89	N	20	9			10					Snowing	Oversergent Fischer.
Fanöe	29.82	757.4	29.84	757.9	28.6	— 1.9	90	N			6		8						Overloerer Lauridsen.
Godthaab, Greenland	29.43	747.5	29.47	748.6	3.6	—15.8	81	NNE			2		5						S. Kleinschmidt.
Stykkisholm, Iceland	28.41	721.6	28.45	722.7	12.2	—11.0	93	E			8		10					Snowing	A. O. Thorlacius.
Thorshavn	29.56	750.7	29.59	751.6	41.5	5.3	78	S	29	13			10					Raining	Overloerer Bergh.
Vestervig	29.77	756.1	29.86	758.5	22.1	— 5.5		NNE			4		0						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.49	749.1	30.17	766.2	41.4	5.2	51	N			2	ck	2n		SE	0	0		M. Labroue, Director.
Alençon	29.58	751.4	30.13	765.4	37.4	3	89	N			3		5kn		N	0.16	4.	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.70	754.3	29.97	761.1	31.3	—0.4		N	5.8	2.6			10					Snowing	M. Klein, Commandant.
Avignon, Normal School	29.80	757.6	29.88	759.0	43.7	6.5	37	N			6		2		NNW	0	0	Slightly cl'dy	M. Giraud, Director.
Bar-sur-Seine	29.39	746.6	29.97	761.3	36.0	2.2	84	NW			2		8n		N	0.264	6.7	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.73	755.1	30.00	762.0	37.9	3.3	63	NNW			2		8		NNW	0.148	3.75	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.07	738.3	30.00	762.0	33.1	0.6	79	S			1		n		S	0.335	8.5		M. Gobin, Director.
Bordeaux, Observatory	29.89	759.3	30.17	766.2	43.7	6.5	40	N			1		2		NW	0.130	3.3	Slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.40	746.7	29.92	760.0	41.0	5	69	NW			6		kn		NW	0.04	1.		M. Postel, Director.
Brest, Naval Observatory	29.95	760.6	30.19	766.8	51.1	10.6	68	WNW			1		1		WNW	0.010	0.25		M. de Rermaree, Dir.
Caen, Normal School	29.93	760.1	30.00	762.1	43.0	6.1	97	NNW			1		0			0	0	Clear	M. Bietrix, Director.
Châlons-sur-Marne, N.Sch'l	29.62	752.3	29.95	760.7	35.6	2.0	82	W			1		10			0.169	4.3	Covered	M. Jadot, Director.
Charleville, Normal School	29.17	741.0	29.73	755.1	35.2	1.8	70	N			1		8			0.177	4.5	¼ covered	M. Grimard.
Clermont-Ferrand Obs'y	28.61	726.8	30.03	762.8	33.1	0.6	80	NW			2		8		N	0.528	13.4	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.10	739.2	29.96	761.0	32.0	0	100	N			3		8	N	N	0.177	4.5		M. de Villemontée, Dir.
Commercy, Normal School	29.10	739.0	29.99	761.7	31.3	—0.4	92	W			4		10n		W	0.256	6.5	Snowing	Dr. Coulet, Director.
Gap, Normal School	27.17	690.0	29.77	756.2	33.8	1	89	N			2		5		NE	0	0	½ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.65	727.8	29.80	756.8	38.1	3.4	44	NW			8		5		NW	0.008	0.2	Stormy	M. Kina, Director.
Grenoble, Normal School	29.14	740.2	29.95	760.7	31.1	—0.5		NW			3		10n			0.469	11.90	Snowing	M. Ablard, Director.
Guéret, Normal School	28.41	721.6	30.03	762.7	33.8	1	81	W			4		n		E	0	0		M. Rivoir, Director.
Lamballe, Normal School	29.89	759.1	30.17	766.3	44.6	7	66	N			1		10		N	0.173	4.4	Raining	M. Ollitrault, Director.
Lescar, Normal School	29.59	751.5	30.28	769.1	42.1	5.6	70	WNW			4		5		SE	0.559	14.2	Cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	30.05	763.2	30.15	765.8	50.0	10.0	84	WNW			2		2		NW	0.079	2.0	¼ covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.89	733.8	29.95	760.6	34.3	1.3	85	NW			3		10n		NW	0.039	1.0	Snow-flakes	M. André, Director.
Mans, Normal School	29.78	756.5	30.10	764.5	39.0	3.9	53	N			3		2		NW	0.028	0.7	Slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.51	749.5	29.78	756.4	41.4	5.2	50	NNW			7		2		NW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.63	625.5	29.86	758.5	29.3	—1.5	31	W	9.4	4.2			0			0.244	6.2		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.84	757.9	29.95	760.7	44.6	7	53	NNW			3		5		NNW	0.142	3.6	Raining	M. Galzin, Director.
Nancy, Normal School	29.11	739 3	29.90	759.5	33.4	0.8	82	W			2		10n		NW	0.004	0.1	Snowing	M. Hasse.
Nantes, Observatory	30.01	762.2	30.17	766.3	45.0	7.2	66	WNW			2	c	4k		WNW	0	0		M. Larocque, Director.
Nice	29.46	748.3	29.50	749.2	51.8	11.0	28	NNW			4		5	NW	NNW	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.88	758.9	29.98	761.6	44.2	6.8	43	NW	28.0	12.5			2	NW	NW	0.134	3.4		Dr. Fines.
Pic-du-Midi, Plantade	22.34	567.5			14.7	—9.6							10		NNW	0.661	16.8	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.85	732.9	29.97	761.3	32.9	0.5		NW			4		10k	NW	NW	0	0	Covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.91	632.6			18.7	—7.4	97	NW			6		10			1.488	37.8	Snow and fog	M. Alluard, Director.
Rochefort, Naval Obs'y	30.15	765.8	30.18	766.6	47.5	8.6	72	NW			1		2		NW	0	0	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.93	760.3	30.15	765.9	45.3	7.4	51	NW			2		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.82	706.6	30.03	762.7	33.1	0.6	84	NW			2		7kn	NW	NW	0.272	6.9		M. Richard, Director.
Rouen, Normal School	29.94	760.4	30.02	762.6	38.5	3.6	60	N			4		5		NW	0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.96	761.0	30.12	765.0	41.9	5.5	64	NW			1		2		NW	0.035	0.9	Slightly cl'dy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.83	757.7	30.00	761.9	37.2	2.9	64	NNW			2		10		NNW	0.043	1.1		M. Renou, Director.
Toulouse, Observatory	29.43	747.5	30.16	766.0	39.7	4.3	46	NW			6		8	W		0.024	0.6	Very cloudy	M. Baillaud, Director.
Tours	29.87	758.8	30.07	763.8	41.0	5.0	51	N			2		8		N	0.016	0.4	¾ covered	M. de Tastes.
Versailles, Observatory	29.50	749.4	30.00	761.9	46.0	7.8	70	N			2					0.004	0.09		Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.94	735.0	29.80	756.8	28.0	—2.2	68	N			5		4k	NW		0.157	4.0		Prof. Dr. Hoh.
Berlin	29.49	749.0	29.67	753.6	25.2	—3.8	69	NW			6		1c			0.012	0.3		Prof. Dr. Arndt.
Breslau	29.04	737.7	29.57	751.0	25.5	—3.6	69	WNW			4		10			0.012	0.30	Snowing	Royal University Obs'y.
Carlsruhe	29.41	747.0	29.85	758.2	32.4	0.2	79	NW			1		5	NW		0.039	1.0	Snowy	Albert Senz.
Cassel	29.17	741.0	29.77	756.2	25.9	—3.4	90	N			6		10	N		0.025	0.63	Snowing	Dr. H. Möhl.
Frankfort on the Main	29.19	741.4	29.57	751.0	32.9	0.5	60	N			2		8			0.020	0.5		Physical Society.
Friedrichshafen	28.36	720.4	29.85	758.3	33.1	0.6	77	W			5		10	W		0.047	1.2		Chief Telegrapher Wilhelm.
Hamburg	29.69	754.0	29.76	755.8	23.4	—4.8	61	NNW			3		9			0	0		Dr. R. Kleeman.
Kiel	29.71	754.7	29.73	755.1	22.8	—5.1	82	NNW			3		6			0.015	0.37	Snowing	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.29	743.9	29.73	755.1	24.4	—4.2	81	WNW			3		10			0.322	8.2	Snowing	Prof. Dr. Bruhns.
Magdeburg	29.48	748.7	29.71	754.7	24.8	—4.0	82	WNW			6		10ks	NW		0.016	0.4	Snowing	Dr. Assmann.
Memel	29.35	745.6	29.40	746.7	35.2	1.8	94	WSW			4		10n						Reinbrecht & Issermann.
Munich	27.90	708.6	29.74	755.4	28.2	—2.1	74	W			1		7n			0.157	4.0	Light snow	Central Station.
Neufahrwasser	29.47	748.5	29.48	748.9	25.9	—3.4	70	WNW			2		9			0.016	0.4	Snowing	A Lothes.
Neustadt, Palatinate	29.30	744.1	29.82	757.4	33.1	0.6	94	NW			3		10			0	0		Dicknether.
Stuttgart	28.85	732.9	29.79	756.6	30.2	—1.0	74	NW			1		5	W		0.028	0.7		Prof. Dr. Schoder.
Thorn	29.29	744.0	29.48	748.7	24.8	—4.0	71	NW			4		10			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	28.22	716.9	29.72	754.9	30.4	—0.9	79	W			6		8	N		0.106	2.7		Prof. Kemlein.
Wustrow	29.67	753.5	29.69	754.2	20.8	—6.2	98	NNW			5		10			0.039	1.9	Snowing	Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.06	738.0	29.45	748.0	60.6	15.9	.....	NW	.....	.....	3.0	.....	5	.....	.....	.....	.....	½ clear	Schmidt & Wourlisch.
INDIAN SERIES.																			
Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.95	760.7	30.00	762.0	74.9	23.8	77	SW	17.0	7.6	.....	.....	5	W	.....	0	0	D. clouds	
Deesa	29.45	748.0	29.92	759.9	87.3	30.7	8	W	6.5	2.9	.....	.....	4	NW	.....	0	0	D. clouds	
Bombay	29.90	759.5	29.94	760.5	80.2	26.8	50	NW	19.0	8.5	.....	.....	0	.....	.....	0	0	Blue sky	
Poona, Yarrowda	28.04	712.2	29.87	758.7	85.5	29.7	14	W	15.0	6.7	.....	.....	0	.....	.....	0	0	Blue sky	
Belgaum	27.36	695.0	29.88	759.0	79.9	26.6	23	WSW	5.0	2.2	.....	.....	0	.....	.....	0	0	Blue sky	
Lahore	29.18	741.1	29.94	760.3	72.8	22.7	24	W	1.9	0.8	.....	.....	0	.....	.....	0	0	Blue sky	
Roorkee	29.62	737.1	29.94	760.5	70.8	21.6	37	Calm	1.3	0.6	.....	.....	0	.....	.....	0	0	.....	
Agra	29.40	747.3	29.97	761.2	78.3	25.7	30	W	0.8	0.4	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28.86	733.1	29.90	759.5	84.7	29.3	41	Calm	2.6	1.2	.....	.....	6	.....	SW	0	0	.....	
Jubbulpore	28.56	725.4	29.94	760.4	80.3	26.8	19	N	1.0	0.4	.....	.....	0	.....	.....	0	0	Blue sky	
Lucknow	29.60	751.7	29.98	761.4	73.2	22.9	41	N	1.0	0.4	.....	.....	0	.....	.....	0	0	Blue sky	
Allahabad	29.66	753.2	29.98	761.4	69.0	20.6	56	Calm	1.5	0.7	.....	.....	0	.....	.....	0	0	Blue sky	
Patna	29.83	757.7	30.02	762.4	71.0	21.7	60	W	0.7	0.3	.....	.....	6	W	W	0	0	D.clouds	
Hazaribagh	27.91	708.9	29.96	761.0	69.0	20.6	39	NNW	8.9	4.0	.....	.....	7	.....	W	0	0	D. clouds	
Cuttack	29.83	757.8	29.92	759.8	81.5	27.5	41	SSW	1.0	0.4	.....	.....	0	.....	.....	0	0	Blue sky	
Calcutta, Alipore	29.90	759.4	29.92	759.9	74.8	23.8	44	SSW	4.0	1.8	.....	.....	8	SW	.....	0	0	D. clouds	
Goalpara	29.56	750.7	29.97	761.3	65.1	18.4	69	ENE	3.0	1.3	.....	.....	5	.....	W	0	0	D. clouds	
Chittagong	29.86	758.5	29.95	760.8	73.0	22.8	65	W	2.6	1.2	.....	.....	0	.....	.....	0	0	Blue sky	
Sibsagar	29.64	752.8	29.99	761.8	65.1	18.4	78	NE	4.2	1.9	.....	.....	8	SW	SW	0.40	10.2	D. clouds	
ITALIAN SERIES.																			
By authority of the Minister of Agriculture, Industry and Commerce.																			
Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.05	737.8	29.47	748.5	46.4	8.0	28	E	1.3	0.6	.....	.....	10	.....	.....	0	0	.....	Prof. Giovanni Clodig
Milan	29.00	736.7	29.54	750.3	44.4	6.9	67	NNW	19.2	8.6	.....	.....	3	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.34	745.2	29.45	748.1	45.7	7.6	75	NNW	6.9	3.1	.....	.....	10	NW	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.67	728.3	29.61	752.0	45.7	7.6	13	NNW	12.5	5.6	.....	.....	0	.....	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.32	744.6	29.51	749.6	46.9	8.3	14	N	13.7	6.1	.....	.....	2	SW	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	27.65	702.4	29.63	752.7	38.5	3.6	34	W	.....	.....	6	.....	0	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.36	745.7	29.41	747.0	44.6	7.0	77	NW	17.4	7.8	.....	.....	10	.....	.....	0.071	1.8	.....	Prof. Luigi Guidi.
Florence	29.11	739.5	29.37	746.1	50.2	10.1	28	N	.....	.....	6	.....	0	.....	.....	0	0	.....	Cav. F. Meucci.
Leghorn	29.29	744.0	29.37	746.1	51.1	10.6	36	NW	14.8	6.6	.....	.....	2	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.17	741.0	29.35	745.5	52.7	11.5	54	W	1.3	0.6	.....	.....	9	.....	.....	0.520	13.2	.....	Prof. P. S. Ferrari.
Lecce	29.13	739.8	29.38	746.3	51.4	10.8	63	W	9.4	4.2	.....	.....	4	W	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	28.59	726.2	29.50	749.4	44.6	7.0	74	SE	0.7	0.3	.....	.....	10	ESE	.....	1.748	44.4	.....	Prof. D. Conti.
Cagliari	29.46	748.2	29.65	753.2	50.4	10.2	41	NW	.....	.....	6	.....	8	NNW	.....	0.177	4.5	.....	Prof. A. Pacinotti.
Palermo	29.34	745.2	29.59	751.6	55.6	13.1	36	WNW	22.4	10.0	.....	.....	9	WNW	.....	0	0	.....	Prof. G. Ciaccialore.
Syracuse	29.50	749.4	29.55	750.5	58.3	14.6	48	W	11.2	5.0	.....	.....	6	W	.....	0	0	.....	Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	28.85	732.8	29.37	746.0	52.3	11.3	70	WSW	4.9	2.2	.....	.....	6	.....	.....	0.378	9.6	.....	Prof. F. Brioschi.
Stelvio	21.89	556.2	.....	.....	1.9	—16.7	66	N	.....	.....	6	.....	2cs	.....	N	0.079	2.0	Misty	P. F. Denza.
Valdobbia	21.57	547.9	.....	.....	8.2	—13.2	76	NE	.....	.....	6	.....	0	.....	.....	0	0	Misty	
JAPANESE SERIES.																			
Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.27	768.8	30.28	769.1	32.3	0.2	77	NNE	7.8	3.5	.....	.....	0	.....	.....	0	0	Clear	K. Sasaki.
Kioto	30.08	764.0	30.26	768.6	30.5	— 0.8	78	.....	.....	.....	.....	.....	10s;ck	.....	NW	0	0	Cloudy	
Nagasaki, I. M. Obs'y	30.07	763.8	30.29	769.3	33.9	1.1	77	Calm	0	0	.....	.....	0	.....	.....	0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	30.04	763.0	30.11	764.8	32.4	0.2	50	NNW	5.8	2.6	.....	0	0	.....	.....	0	0	Fair	The Staff.
Wakayama	30.20	767.1	30.26	768.6	34.3	1.3	72	NNW	1.2	0.5	.....	ck	9ks	.....	NNW	0	0	Cloudy	S. Iwahashi.
MAURITIUS SERIES.																			
Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.68	753.9	29.87	758.7	81.0	27.4	72	NNW	19.5	8.7	.....	0	6	.....	NW	0.23	5.8	Squally	A. N. Figon.
MEXICAN SERIES.																			
By authority of the Secretary of Public Works.																			
Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.47	621.5	30.33	770.4	46.5	8.1	79	SW	.....	.....	2	7c	0	.....	.....	0	0	Cloudy	Prof. M. Leal.
Mazatlan	29.76	756.0	30.03	762.7	62.5	16.9	69	N	0	0	.....	10s	0	.....	.....	0	0	Light haze	F. Quijano, C. E.
Mexico, Central Obs'y	23.12	587.2	30.30	769.5	44.4	6.9	59	Calm	0	0	.....	3cs	0	.....	.....	0	0	Foggy	The Staff.
Pabellon, Aguascalientes	23.94	608.2	30.11	764.7	42.3	5.7	76	NNW	.....	.....	1	6c	0	SW	.....	0	0	Cloudy	M. Y. de Leon, M. E.
Puebla, Catholic Institute	23.34	592.9	30.23	767.7	43.0	6.1	50	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.32	617.6	30.41	772.3	42.5	5.8	58	SE	0.9	0.4	.....	.....	10	.....	SW	0	0	Covered	G. Barroeta, M. D.
Tlacotalpam	30.25	768.3	30.25	768.6	63.0	17.2	88	N	15.5	6.9	.....	6	4	NE	N	0	0	Covered	Prof. M. Cházaro.
Zacatecas	22.58	573.5	30.39	771.8	40.8	4.9	68	Calm	0	0	.....	0	3ks	.....	.....	0	0	Clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES.																			
Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.93	760.2	29.93	760.2	37.4	3.0	.....	N	.....	.....	3	.....	.....	.....	.....	0.197	5.0	.....	
Groningen	29.83	757.6	29.88	759.0	30.0	— 1.1	.....	N	.....	.....	2	.....	.....	.....	.....	0.134	3.4	.....	
Helder	29.91	759.7	29.91	759.7	32.9	0.5	.....	N	.....	.....	4	.....	.....	.....	.....	0.012	0.3	.....	
Hellevoetsluis	29.91	759.7	29.91	759.7	34.7	1.5	85	NE	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Utrecht	29.87	758.7	29.92	759.9	33.6	0.9	8c	N	.....	.....	3	.....	5	.....	.....	0.008	0.2	Cloudy	H. van der Brink

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction, Upper.	CLOUDS. Direction, Lower.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.76	755.8	29.94	760.4	23.0	— 5.0	62	Calm	0	0			0			0	0		
Christiania	29.76	756.0	29.92	760.0	22.5	— 5.3	33	NNW	7	3			0			0	0		
Gjæsvær	29.83	757.7	29.85	758.3	20.7	— 6.3		WNW			6		6						
Lodingen	29.95	760.8	30.00	762.0	17.2	— 8.2	71	S			4		1			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.76	756.0	29.92	760.0	59.4	15.2	95	SW	3.1	1.4			5			0.276	7.0		Dr. J. A. Sampaio.
Campo Major	29.15	740.3	30.16	766.1	52.9	11.6	46	N	6.9	3.1			4			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.12	765.0	30.21	767.2	64.2	17.9	59	E	3.1	1.4			6			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.88	759.0	30.25	768 3	53.6	12.0	42	NNE	16.1	7.2			6	NW		0	0		The Staff.
Ponta Delgada, Azores	30.10	764.6	30.17	766.4	60.4	15.8	87	SW	10.5	4.7			10			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.13	739.9	30.31	769.8	11.5	—11.4	50	ESE	9	4			0						Capt. Lasarew.
Archangel	29.59	751.6	29.61	752.1	19.0	— 7.2	93	NE	4	2			10					Snowing	Capt. Sseliwerstow.
Astrakhan	29.80	756.9	29.72	754.8	33.8	1.0	92	Calm	0	0			10cp					Heavy cl'ds	Capt. Wisganow.
Barnaul	30.04	763.1	30.63	777.9	—11.2	—24.0	73	Calm	0	0			0						Meteorological Obs'y.
Dorpat	29.15	740.4	29.40	746.7	33.6	0.9	75	S	2	1			10n						Observatory.
Ekaterinburg	29.02	737.0	30.06	763.5	12.2	—11.0	52	SE	4	2		10c						Solar corona	Me teorological Obs'y.
Kasan	29.54	750.3	29.83	757.6	18.5	— 7.5	65	SE	4	2			10						Obs ervatory.
Kertch	29.42	747.2	29.44	747.7	43.5	6.4	94	S	4	2			10						Lagorio.
Kieff	28.59	726.2	29.24	742.6	32.7	0.4	100	ESE	7	3			10n						Cand. Fatjanow.
Lugan	29.29	743.9	29.49	749.1	37.4	3.0	83	ESE	18	8			9						Meteorological Obs'y.
Moscow	28.99	736.4	29.56	750.8	28.9	— 1.7	84	S	7.8	3.5			10s						Meteorological Obs'y.
Nertchinsk	27.82	706.6	30.40	772.2	— 5.3	—20.7	49	NW	4	2			2						Meteorological Obs'y.
Nikolaiev	29.21	742.0	29.28	743.8	39.7	4.3	100	SSE	22	10			10n					Raining	1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Nukuss	29.62	752.3	29.85	758.3	51.4	10.8	65	NE	5.6	2.5			0						Dr. Dobrochotow.
Pekin, China	30.08	763.9	30.22	767.5	30.7	— 0.7	44	Calm	0	0			3ks					Lunar corona	Physical Observatory.
St. Petersburg	29.37	745.9	29.38	746.3	35.6	2.0	91	SSW	4	2			10n						Central Physical Obs'y.
Tashkend, Laboratory	28.37	720.6	29.95	760.7	52.5	11.4	53						6						Teich, A. M.
Tiflis	28.23	717.1	29.66	753.3	46.2	7.9	93	ESE	9	4			10					Light rain	Physical Observatory.
Warsaw	28.99	736.3	29.43	747.4	27.9	— 2.3	89	NW	16	7			10n					Snowing	Astronomical Obs'y.
Wilna	28.95	735.2	29.37	746.1	35.4	1.9	90	SW	2	1			10					Heavy cl'ds	Berg, Assistant.
Yeniseisk	30.32	770.0	30.66	778.7	—21.8	—29.9	69	SE	7	3			10					Snowing	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.06	763.5	36.0	2.2	61	NW			1		0			0	0	Foggy	Andrew Gibb.
Monach Lt. House, Hebrides			29.75	755.6	42	5.6	91	S			8		10			0	0	Overcast	J. Youngclause.
North Unst, Shetland Isl'ds			29.80	756.9				S			4	5	5	SW		0	0		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.84	757.9	29.95	760.6	52.7	11.5	53	N	7.6	3.4			1			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.16	766.1	30.22	767.6	50.7	10.4	68	NE	5.6	2.5		2	3	N		0.559	14.2	Cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.17	690.0			40.6	4.8	71	NW	6.3	2.8		0	6			0	0	Cloudy	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.89	708.5	30.16	766.0	49.1	9.5	50	SE	2.7	1.2		0	1			0	0	Almost clear	The Staff.
Murcia, Met. Obs'y	29.89	759.2	30.04	763.1	57.9	14.4	44	NW	5.4	2.4		0	5			0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.24	742.8	30.16	766.0	50.5	10.3	78	SW	0	0			7			0.008	0.2	Cloudy	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.98	761.5	30.05	763.2	66.4	19.1	92	SSE	2.7	1.2		0	0			0	0	Clear	Benito Vines, S. J.
Manilla, Phillippine Islands	29.95	760.8	30.00	762.1	79.0	26.1	71	SE	4.4	2.0			2ck?		E	0	0	Very cloudy?	Federico Faura, S. J
San Fernando, Naval Obs'y	30.07	763.8	30.17	766.4	55.8	13.2	56	NW	4.5	2.0		4	0	N		0	0		Capt. C. Pajazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.90	759.4	29.99	761.7	69.8	21.0	91	SW	0	0		4k	5kn	SW	SW	0.079	2.00	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.97	761.1	30.11	764.8	70.9	21.6	86	NW	4.9	2.2			10ks		NW	0	0	Very cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.97	761.1	30.00	762.1	— 2.2	—19.0	100	N			4		0			0	0		
Umea	29.87	758.8	29.93	760.1	14.7	— 9.6	68	N			6		1			0	0		
Hernosand	29.88	758.9	29.93	760.2	14.9	— 9.5	65	NNE			6		2			0.008	0.2		
Stockholm	29.32	744.7	29.50	749.2	16.9	— 8.4	82	NNE			7		10			0.118	3.0	Snowing	
Wisby	29.28	743.6	29.34	745.1	21.9	— 5.6	96	NNE			7		10			0.260	6.6	Snowing	
SUB-SERIES.																			
Upsala	29.48	748.8	29.57	751.0	13.1	—10.5	97	N	23.5	10.5			10			0.128	3.25	Snowing	Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.46	722.8	29.95	760.8	32.0	0.0	85	NW			1		9			0.374	9.5	Covered	The Observatory.
Zurich	28.19	716.0	29.91	759.8	30.6	— 0.8	70	W			5		7			0.146	3.7	Snowing	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —3.6 mm.; Ther. —3°.5 cent.; Hum. +13 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.32	744.8	46.8	8.2	91	WSW	19	8.5			8		SW	0.559	14.2	Raining	The Observatory.
Valona			29.40	746.8	56.7	13.7		SW			2		5			0.39	10.	Cloudy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.82	757.4	66.0	18.9	66	W			1		6ks		W	0.626	15.9		Prof. C. V. A. van Dyck.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
UNITED STATES SERIES. By authority of the SECRETARY OF WAR. Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	29.88	758.9	29.96	761.0	38	3.3	81	N	5	2.2			10s		E	0.01	0.3	Cloudy	
Alpena, Michigan	28.78	731.0	29.43	747.5	25	— 3.9	87	NE	31	13.9			10n		Calm	0.10	2.5	Light snow.	
Atlanta, Georgia	28.72	729.5	29.89	759.2	37	2.8	71	SW	20	8.9			10s		SW	2.92	74.2	Cloudy	
Atlantic City, New Jersey	29.74	755.4	29.76	755.9	41	5.0	100	SE	20	8.9			Fog		Calm	0.12	3.0	Dense fog	
Attou Id., Alaska‡	30.32	770.1			35	1.7	80	S	18	8.0			10s		E	0	0	Cloudy	
Augusta, Georgia	29.72	754.9	29.92	760.0	50	10.0	65	NW	15	6.7		0	5s		SW	0.57	14.5	Fair	
Baltimore, Maryland	29.56	750.8	29.60	751.8	49	9.4	93	NE	4	1.8			Fog		Calm	0.85	21.6	Dense fog	
Barnegat, New Jersey	29.76	755.9	29.78	756.4	42	5.6	100	SE	26	11.6			10n;fg		C;SE	0.19	4.8	Light rain	
Benton, Montana	27.73	704.3			2	—16.7	72	W	8	3.6			10s		Calm	Inap.	Inap.	Cloudy	
Bismarck, Dakota	28.57	725.7	30.42	772.7	— 5	—20.6	100	NW	18	8.0			10s		Calm	0	0	Cloudy	
Boise City, Idaho	27.37	695.2	30.33	770.4	36	2.2	71	SE	4	1.8			10s		Calm	0	0	Cloudy	
Boston, Massachusetts	29.93	760.2	30.09	764.3	36	2.2	80	E	11	4.9			10s		SW	0	0	Cloudy	
Brackettville, Texas	29.28	743.7	30.42	772.7	27	— 2.8	76	Calm	0	0		0	0			0	0	Clear	
Brownsville, Texas	30.43	772.9	30.48	774.2	39	3.9	64	N	4	1.8		2c	0	Calm		0	0	Clear	
Buffalo, New York	28.68	728.5	29.36	745.7	46	7.8	77	E	18	8.0			10n		Calm	Inap.	Inap.	Light rain	
Burlington, Vermont	29.68	753.9	29.97	761.2	36	2.2	80	SE	3	1.3			10n		SE	0.02	0.5	Sleeting	
Cairo, Illinois	29.43	747.5	29.84	757.9	25	— 3.9	87	NW	30	13.4			10n		W	0.45	11.4	Light snow.	
Campo, California	27.63	701.8	30.20	767.1	29	— 1.7	89	SW	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.54	699.5			23	— 5.0	73	SE			1	0	0			0	0	Clear	
Cape Henry, Virginia	29.68	753.9	29.70	754.4	47	8.3	100	SE	19	8.5			10n;fg			0.04	1.0	Light rain	
Cape May, New Jersey																			
Castroville, Texas	29.65	753.1	30.42	772.7	30	— 1.1	78	NW	6	2.7		0	0			0	0	Clear	
Cedar Keys, Florida	30.01	762.2	30.04	763.0	57	13.9	75	NW	18	8.0		1cs	0	Calm		0.90	22.9	Clear	
Champaign, Illinois	28.53	724.6	29.34	745.2	22	— 5.6	86	SW	36	16.1			10n		SW	1.28	32.5	Light snow.	
Charleston, S. Carolina	29.81	757.2	29.86	758.4	59	15.0	88	S	12	5.4			10s		S	0.07	1.8	Threatening	
Charlotte, N. Carolina	28.89	733.8	29.70	754.4	47	8.3	55	SW	15	6.7		0	2s		SW	0.25	6.3	Fair	
Chattanooga, Tennessee	29.05	737.9	29.88	758.9	35	1.7	61	SW	18	8.0			10s		SW	0.92	23.4	Cloudy	
Cheyenne, Wyoming	24.12	612.6	30.06	763.5	7	—13.9	54	NW	8	3.6		0	0			0	0	Clear	
Chicago, Illinois	28.55	725.2	29.23	742.4	32	0.0	89	S	5	2.2			10s		Calm	1.09	27.7	Cloudy	
Chincoteague, Virginia	29.71	754.6	29.73	755.1	44	6.7	100	SE	29	13.0			10n		SE	0.02	0.5	Light rain	
Cincinnati, Ohio	28.89	733.8	29.54	750.3	36	2.2	71	S	14	6.3			10n		SW	0.46	11.7	Light snow.	
Cleveland, Ohio	28.68	728.5	29.39	746.5	41	5.0	65	SW	20	8.9		0	5ks		SW	0.22	5.6	Fair	
Coleman City, Texas	28.60	726.4	30.44	773.2	20	— 6.7	56	N	20	8.9		0	0			0	0	Clear	
Columbus, Ohio	28.60	726.4	29.43	747.5	38	3.3	72	SW	20	8.9			10ks		SW	0.47	11.9	Cloudy	
Concho, Texas	28.48	723.4	30.33	770.4	20	— 6.7	70	NW	2	0.9		0	0			0	0	Clear	
Corsicana, Texas	29.96	761.0	30.48	774.2	25	— 3.9	62	NW	8	3.6		0	0			0	0	Clear	
Davenport, Iowa	28.86	733.0	29.52	749.8	14	—10.0	91	N	19	8.5			10n		Calm	1.17	29.7	Light snow	
Dayton, Washington T'y	28.51	724.1	30.29	769.4	24	— 4.4	100	Calm	0	0			10s		Calm	0.03	0.8	Cloudy	
Deadwood, Dakota	25.58	649.7			2	—16.7	72	SW	6	2.7		2k	0	NW		0	0	Fair	
Decatur, Texas	29.18	741.1	30.47	773.9	21	— 6.1	86	NW	16	7.2		0	0			Inap.	Inap.	Clear	
Delaware Breakwater, Del.	29.69	754.1	29.71	754.6	47	8.3	100	S	28	12.5			Fog		S	0.04	1.0	Dense fog	
Denison, Texas	29.54	750.3	30.41	772.4	22	— 5.6	72	NW	16	7.2		0	0			Inap.	Inap.	Clear	
Denver, Colorado	24.95	633.7	30.17	766.3	— 7	—21.7	80	SE	2	0.9		0	0			0	0	Clear	
Des Moines, Iowa	28.95	735.3	29.90	759.4	13	—10.6	81	N	20	8.9			10s		N	0.62	15.7	Cloudy	
Detroit, Michigan	28.64	727.4	29.31	744.5	46	7.8	92	S	16	7.2			10s		Calm	1.28	32.5	Cloudy	
Dodge City, Kansas	27.64	702.0	30.18	766.6	8	—13.3	78	NW	28	12.5		0	0			0.01	0.3	Clear	
Dubuque, Iowa	28.87	733.3	29.60	751.8	13	—10.6	90	NW	12	5.4			10n		Calm	0.93	23.6	Light snow.	
Duluth, Minnesota	29.34	745.2	30.08	764.0	12	—11.1	80	N	10	4.5			10s		Calm	0.01	0.3	Cloudy	
Eagle Pass, Texas	29.71	754.6	30.51	774.9	28	— 2.2	77	N	2	0.9		0	0			0	0	Clear	
Eagle Rock, Idaho	25.40	645.2	30.05	763.3	8	—13.3	78	N	8	3.6			10s		SW	0	0	Cloudy	
Eastport, Maine	30.08	764.0	30.15	765.8	35	1.7	80	E	1	0.4			10s		Calm	0	0	Cloudy	
Edinburg, Texas																			
El Paso, Texas	26.49	672.8			23	— 5.0	60	Calm	0	0		0	0			0	0	Clear	
Erie, Pennsylvania	28.70	729.0	29.39	746.5	46	7.8	84	SW	12	5.4			10s		SW	0.05	1.3	Light rain	
Escanaba, Michigan	28.94	735.1	29.62	752.3	16	— 8.9	100	N	42	18.8			10n		Calm	0.03	0.8	Light snow.	
Florence, Arizona	28.76	730.5	30.36	771.1	35	1.7	70	NE	3	1.3		0	0			0	0	Clear	
Fort Apache, New Mexico	25.22	640.3	30.67	779.0	16	— 8.9	49	E	4	1.8		1c	0	Calm		0	0	Clear	
Fort Assinniboine, Montana	27.72	704.1			— 9	—22.8	56	SW	6	2.7		0	0			0.13	3.3	Clear	
Fort Bennett, Dakota	28.81	731.8			— 5	—20.6	63	NW	14	6.3		0	0			0	0	Clear	
Fort Buford, Dakota	28.51	724.1	30.70	779.8	—12	—24.4	75	Calm	0	0		0	0			0	0	Clear	
Fort Custer, Montana	27.31	693.7			—13	—25.0	100	Calm	0	0			10s		Calm	0	0	Cloudy	
Fort Davis, Texas	25.36	644.1	30.32	770.1	15	— 9.4	82	Calm	0	0		0	0			0	0	Clear	
Fort Elliott, Texas	27.50	698.5	30.02	762.5	5	—15.0	50	NW	12	5.4		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.70	754.4	30.29	769.4	17	— 8.3	83	NW	20	8.9		0	2s		N	0.05	1.3	Fair	
Fort Grant, Arizona	25.41	645.4	30.21	767.3	27	— 2.8	76	Calm	0	0		0	0			0	0	Clear	
Fort Griffin, Texas	29.09	738.9	30.49	774.4	20	— 6.7	56	W	12	5.4		0	0			0	0	Clear	
Fort Keogh, Montana	28.02	711.7			—10	—23.3		SW	1	0.4		0	0			0	0	Clear	
Fort McKavett, Texas	28.10	713.7	30.12	765.0	19	— 7.2	85	NW	3	1.3		0	0			0	0	Clear	
Fort Macon, North Carolina	29.79	756.7	29.80	756.9	55	12.8	100	S	25	11.2		2k	8ks	Calm	SW	0.05	1.3	Cloudy	
Fort St. Michaels	30.79	782.1	30.83	783.1	5	—15.0	100	NE	1	0.4		0	0						
Fort Missoula, Montana	27.08	687.8			4	—15.6	100	NW	7	3.1		1c	0	Calm		0	0	Clear	
Fort Shaw, Montana	26.80	680.7			1	—17.2	71	W	2	0.9		5cs	0	Calm		0	0	Fair	
Fort Sill, Indian Territory	29.10	739.1	30.32	770.1	15	— 7.2	69	NW	22	9.8		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.58	725.9			— 1	—18.3	84	N	16	7.2			10n		N	0.02	0.5	Light snow.	
Fort Verde, Arizona					20	— 6.7	56	W			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.64	727.4	30.35	770.9	26	— 3.3	88	N	6	2.7		0	0			0	0	Clear	
Galveston, Texas	30.35	770.9	30.40	772.1	34	1.1	70	NW	15	6.7		0	0			0.02	0.5	Clear	
Grand Haven, Michigan	28.64	727.4	29.29	744.0	29	— 1.7	100	NE	4	1.8			10n		Calm	0.41	10.4	Light snow.	
Hatteras, North Carolina	29.78	756.4	29.80	756.9	53	11.7	93	S	24	10.7		0	5s		SE	0	0	Fair	
Helena, Montana	26.16	664.4			— 2	—18.9	100	Calm	0	0		0	0			0	0	Clear	
Henrietta, Texas	29.40	746.7	30.44	773.2	19	— 7.2	69	NW	16	7.2		0	0			0	0	Clear	
Indianapolis, Indiana	28.64	727.4	29.42	747.3	31	— 0.6	79	SW	18	8.0			10n		SW	0.54	13.7	Light snow.	
Indianola, Texas	30.41	772.4	30.44	773.2	36	2.2	61	N	18	8.0		0	0			0	0	Clear	
Jacksboro, Texas	29.23	742.2	30.48	774.2	20	— 6.7	70	NW	17	7.6		0	0			0	0	Clear	
Jacksonville, Florida	29.93	760.2	29 98	761.5	62	16.7	72	SW	14	6.3		2cs	0	Calm		0.15	3.8	Clear	
Keokuk, Iowa	28.94	735.1	29.62	752.3	15	— 9.4	82	NW	21	9.4			10n		Calm	0.23	5.8	Light snow.	
Key West, Florida	30.03	762.7	30.06	763.5	73	22.8	85	SE	3	1.3		0	1s		Calm	0	0	Clear	
Kittyhawk, North Carolina	29.77	756.1	29.80	756.9	57	13.9	94	S	35	15.6			10n		SW	0.07	1.8	Light rain	
Knoxville, Tennessee	28.75	730.2	29.77	756.1	36	2.2	71	SW	20	8.9			10s		SW	0.73	18.5	Cloudy	
La Crosse, Wisconsin	28.92	734.6	29.71	754.6	9	—12.8	100	N	24	10.7			10n		Calm	0.12	3.0	Light snow.	
La Mesilla, New Mexico	26.35	669.3	30.50	774.7	23	— 5.0	60	NW	2	0.9		0	0			0	0	Clear	
Laredo, Texas	30.02	762.5	30.39	771.9	35	1.7	79	N	4	1.8		0	0			0	0	Clear	
Leavenworth, Kansas	29.13	739.9	30.06	763.5	9	—12.8	78	NW	28	12.5			10s			0.74	18.8	Cloudy	
Lewiston, Idaho	29.48	748.8	30.17	766.3	31	— 0.6	69	E	1	0.4		2k	0	Calm		0	0	Clear	
Little Rock, Arkansas	29.76	755.9	30.10	764.5	27	— 2.8	76	W	13	5.8			10ks		NW	0.28	7.1	Cloudy	
Los Angeles, California	29.89	759.2	30.26	768.6	46	7.8	69	NE	8	3.6		0	4s		Calm	0	0	Fair	
Louisville, Kentucky	29.02	737.1	29.59	751.6	34	1.1	79	SW	18	8.0			10n		SW	0.40	10.2	Light snow.	
Lynchburg, Virginia	28.85	732.8	29.49	749.0	59	15.0	70	S	16	7.2		0	0			0.50	12.7	Clear	
Madison, Wisconsin	28.44	722.4	29.46	748.3	14	—10.0	82	N	24	10.7			10n		Calm	0.83	21.1	Light snow.	
Marquette, Michigan	29.10	739.1	29.85	758.2	14	—10.0	82	N	18	8.0			10n		Calm	0.01	0.3	Light snow.	
Mason, Texas	28.75	730.2	30.69	779.5	22	— 5.6	72	NW	6	2.7		0	0			0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.63	752.6	29.99	761.7	31	— 0.6	79	W	9	4.0	.....	.....	10ks	.....	SW	0.50	12.7	Cloudy	
Milwaukee, Wisconsin	28.61	726.7	29.34	745.2	27	— 2.8	100	NE	37	16.5	.....	.....	10n	.....	Calm	0.55	14.0	Heavy snow	
Mobile, Alabama	30.09	764.3	30.17	766.3	34	1.1	61	N	11	4.9	.....	0	0	.....	.....	0	0	Clear	
Montgomery, Alabama	29.84	757.9	30.09	764.3	35	1.7	61	W	20	8.9	.....	5k	0	Calm	.....	1.53	38.9	Fair	
Moorhead, Minnesota	29.22	742.2	30.28	769.1	7	—13.9	88	N	20	8.9	.....	.....	10s	.....	N	0.07	1.8	Cloudy	
Morgantown, W. Virginia	28.54	724.9	29.50	749.3	46	7.8	77	S	4	1.8	.....	.....	10n	.....	SW	0.33	8.4	Light rain	
Mt. Washington, N. H.	23.70	602.0	30.06	763.5	28	— 2.2	94	SW	36	16.1	.....	.....	10n;fog	.....	C;SW	0.15	3.8	Light snow.	
Nashville, Tennessee	29.28	743.7	29.83	757.7	33	0.6	79	SW	10	4.5	.....	.....	10ks	.....	SW	0.30	7.6	Cloudy	
New Haven, Connecticut	29.84	757.9	29.96	761.0	40	4.4	73	NE	7	3.1	.....	10cs	0	S	.....	0	0	Cloudy	
New London, Connecticut	29.94	760.5	30.00	762.0	39	3.9	74	E	14	6.3	.....	.....	10s	.....	E	0	0	Cloudy	
New Orleans, Louisiana	30.17	766.3	30.23	767.8	39	3.9	55	NW	12	5.4	.....	0	0	.....	.....	0.03	0.8	Clear	
Newport, Rhode Island	30.00	762.0	30.05	763.3	38	3.3	81	E	7	3.1	.....	.....	10s	.....	SW	0	0	Cloudy	
New River, N. Carolina	.....	.....	.....	.....	58	14.4	94	SW	.....	.....	6	.....	10n	.....	SW	.....	.....	Light rain	
New Shoreham, Rhode I'd	29.96	761.0	29.99	761.7	39	3.9	82	SE	11	4.9	.....	.....	10s	.....	S	0	0	Cloudy	
New York, New York	29.67	753.6	29.85	758.2	37	2.8	90	NE	18	8.0	.....	.....	10s;fg	.....	SE;C	Inap.	Inap.	Light rain	
Norfolk, Virginia	29.61	752.1	29.67	753.6	64	17.8	89	S	27	12.1	.....	.....	10n	.....	S	0.02	0.5	Light rain	
North Platte, Nebraska	27.31	693.7	30.19	766.8	3	—16.1	60	N	32	14.3	.....	0	0	.....	.....	0	0	Clear	
Olympia, Washington T'y	30.02	762.5	30.06	763.5	37.0	2 8	81	N	2	0.9	.....	.....	10s	.....	Calm	0.14	3.6	Cloudy	
Omaha, Nebraska	28.87	733.3	30.08	764.0	5	—15.0	88	NW	38	17.0	.....	.....	10s	.....	Calm	0.07	1.8	Cloudy	
Oswego, New York	29.30	744.2	29.62	752.3	42	5.6	66	SE	19	8.5	.....	.....	10s	.....	S	0.18	4.6	Cloudy	
Pensacola, Florida	30.12	765.0	30.16	766.1	39	3.9	73	NW	7	3.1	.....	1k	Haze	W	Calm	0.10	2.5	Fair	
Philadelphia, Pa	29.66	753.4	29.72	754.9	44	6.7	100	E	13	5.8	.....	.....	10n	.....	Calm	0.16	4.1	Light rain	
Phœnix, Arizona	29.20	741.7	31.16	791.4	30	— 1.1	47	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.37	441.2	29.58	751.3	—18	—27.8	67	SW	48	21.5	.....	0	5s	.....	SW	0	0	Fair	
Pilot Point, Texas	29.58	751.3	30.50	774.7	22	— 5.6	86	NW	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Pioche, Nevada	24.16	613.6	29.93	760.2	23	— 5.0	53	S	1	0.4	.....	10c	0	Calm	.....	0	0	Cloudy	
Pittsburg, Pennsylvania	28.70	729.0	29.50	749.3	43	6.1	87	SE	10	4.5	.....	.....	10n	.....	SE	0.36	9.1	Light rain	
Port Huron, Michigan	28.62	726.9	29.27	743.4	40	4.4	82	S	18	8.0	.....	.....	10ks	.....	SW	0.62	15.7	Cloudy	
Portland, Maine	30.05	763.3	30.10	764.5	39	3.9	82	E	2	0.9	.....	.....	10s;fg	.....	Calm	0	0	Cloudy	
Portland, Oregon	30.01	762.2	30.08	764.0	34.5	1.4	85	E	5	2.2	.....	.....	10n	.....	Calm	0.22	5.6	Light snow.	
Portsmouth, N. Carolina	.....	.....	.....	.....	56	13.3	100	SW	28	12.5	.....	.....	10n	.....	SW	0.38	9.7	Light rain	
Prescott, Arizona	24.92	633.0	30.28	769.1	18	— 7.8	53	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	30.02	762.5	30.04	763.0	66	18.9	74	NW	24	10.7	.....	.....	10n	.....	SW	0.02	0.5	Light rain	
Red Bluff, California	29.88	758.9	30.24	768.1	45.5	7.5	84	SE	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Rio Grande City, Texas	30.29	769.4	30.53	775.4	38	3.3	63	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Rochester, New York	28.89	733.8	29.50	749.3	41	5.0	82	SE	16	7.2	.....	.....	10s	.....	SW	0.26	6.6	Threatening	
Roseburg, Oregon	29.38	746.2	29.96	761.0	41	5.0	91	SW	1	0.4	.....	.....	10ks	.....	SW	0.52	13.2	Threatening	
Sacramento, California	30.18	766.6	30.26	768.6	47	8.3	85	SE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
St. Louis, Missouri	29.03	737.3	29.63	752.6	22	— 5.6	100	W	24	10.7	.....	.....	10n	.....	Calm	0.50	12.7	Light snow.	
St. Paul, Minnesota	29.02	737.1	29.90	759.4	14	—10.0	82	N	18	8.0	.....	.....	10s	.....	N	0	0	Cloudy	
Salt Lake City, Utah	25.86	656.8	30.19	766.8	26	— 3.3	52	Calm	0	0	.....	7k	0	NW	.....	0	0	Fair	
San Antonio, Texas	29.77	756.1	30.53	775.4	32	0.0	69	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
San Diego, California	30.20	767.1	30.28	769.1	47	8.3	62	NE	7	3.1	.....	2c	0	Calm	.....	0	0	Clear	
Sandusky, Ohio	28.71	729.2	29.36	745.7	42	5.6	74	S	20	8.9	.....	.....	10s	.....	Calm	0.39	9.9	Cloudy	
Sandy Hook, New Jersey	29.81	757.2	29.85	758.2	37	2.8	100	NE	.....	.....	6	.....	10n	.....	Calm	0.28	7.1	Light rain	
San Francisco, California	30.19	766.8	30.25	768.3	49	9.4	78	SW	2	0.9	.....	50s	5s	W	W	0	0	Cloudy	
Santa Fé, New Mexico	23.35	593.1	29.89	759.2	13	—10.6	62	N	6	2.7	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Savannah, Georgia	29.84	757.9	29.93	760.2	60	15.6	60	N	14	6.3	.....	0	5ks	.....	W	0.18	4.6	Fair	
Shreveport, Louisiana	30.06	763.5	30.33	770.4	27	— 2.8	64	NW	13	5.8	.....	0	0	.....	.....	0.04	1.0	Clear	
Silver City, New Mexico	24.44	620.8	30.96	786.4	25	— 3.9	62	NW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Smithville, North Carolina	29.77	756 1	29.80	756.9	57	13.9	94	SW	26	11.6	.....	.....	10n	.....	Calm	0.55	14.0	Light rain	
Socorro, New Mexico	25.61	650.5	29.68	753.9	27	— 2.8	64	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	28.80	731.5	29.49	749.0	22	— 5.6	86	NW	18	8.0	.....	.....	10n	.....	.....	1.98	50.3	Light snow.	
Springfield, Massachusetts	29.90	759.4	30.03	762.7	38	3.3	72	NE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Stockton, Texas	27.31	693.7	30.31	769.9	17	— 8.3	67	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.51	749.5	30.40	772.1	9	—12.8	100	N	16	7.2	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Thatcher's Island, Mass	30.03	762.7	30.09	764.3	38	3.3	81	SE	13	5.8	.....	5cs	5s	SW	Calm	0	0	Cloudy	
Toledo, Ohio	28.66	728.0	29.33	745.0	39	3.9	82	W	18	8.0	.....	.....	10ks	.....	W	0.90	22.9	Threatening	
Tucson, Arizona	27.76	705.1	30.32	770.1	28	— 2.2	66	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.97	761.2	30.51	774.9	25	— 3.9	93	SE	4	1.8	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
Uvalde, Texas	29.48	748.8	30.37	771.4	31	— 0.6	58	E	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Vicksburg, Mississippi	29.94	760.5	30.21	767.3	31	— 0.6	69	W	21	9.4	.....	0	0	.....	.....	0.43	10.9	Clear	
Visalia, California	29.87	758.7	30.26	768.6	44	6.7	84	SE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Washington, D. C	29.39	746.5	29.51	749.3	57	13.9	94	S	12	5.4	.....	.....	10s	.....	S	0.59	15.0	Cloudy	
Wickenburg, Arizona	.....	.....	.....	.....	24	— 4.4	48	NW	.....	.....	1	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	29.70	754.4	29.75	755.6	63	17.2	94	SW	21	9.4	.....	.....	10s	.....	SW	0.33	8.4	Cloudy	
Winnemucca, Nevada	25.75	654.0	30.11	764.8	34	1.1	79	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Wood's Holl, Mass	30.04	763.0	30.08	764.0	37	2.8	81	SE	6	2.7	.....	.....	10s	.....	W	0	0	Cloudy	
Yankton, Dakota	28.93	734.8	30.40	772.1	0	—17.8	70	N	25	11.2	.....	.....	10n	.....	.....	0.07	1.8	Light snow.	
Yuma, Arizona	30.10	766.1	30.32	770.1	42	5.6	42	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogotá, U. S. Columbia	22.07	560.6	.....	.....	53.8	12.1	74	Calm	0	0	.....	10cs	0	.....	.....	0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jam ica.‡	29.85	758.2	30.17	766.3	66	18.9	90	E	.....	.....	.....	0	1k	.....	.....	.....	.....	.....	
Havana, Cuba, W. I	30.00	762.0	30.05	763.3	69	20.6	84	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	Charles Hasselbrink.
Jakobshavn, Greenland	29.47	748.4	29.52	749.9	—14.8	—25.	.....	W	.....	.....	2	.....	2	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I	30.02	762.5	30.03	762.7	69.5	20.8	77	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	Robert Johnstone.
Navassa, W. I	29.82	757.4	29.90	759.4	80	26.7	55	NE	9	4.0	.....	.....	10	.....	NE	Inap.	Inap.	Raining	F. M. Everett.
Paramaribo, S. A	29.94	760.5	29.94	760.5	77	25.0	88	E	.....	.....	1	5k	6ks	E	.....	0	0	½ Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.43	747.5	29.99	761.7	78	25.6	80	E	.....	.....	1	2ck	8s	NE	S	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	75.2	24	.....	SE	.....	.....	1	0	1ks	.....	SE	0	0	.....	Earl Flint.
Santiago de Cuba, W. I	30.01	762.2	30.04	763.0	73	22.8	76	NNE	2.4	1.1	.....	0	0	.....	.....	0	0	Clear	Robert Mason.
St. Thomas, W. I	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gollich.
Upernavik, Greenland	29.40	746.7	29.46	748.3	—11.2	—24	.....	W	.....	.....	4	.....	2	.....	.....	0	0	.....	K. Elberg.
York Factory, B. A	30.10	764.5	30.15	765.8	—34.0	—36.7	.....	S	15	6.7	.....	3k	0	SW	.....	0.03	0.8	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.71	754.6	58.2	14.6	70	NW			3-5		8	NW						Squally	Capt. Lord Walter Kerr.
H. M. S. Antelope, N. 40° 20', E. 26° 41'	29.32	744.7	53	11.7		WNW			3-4		8	WNW				1	NW	Blue sky	Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 41', E 52° 40'	29.85	758.2	75	23.9	81	SW			1		7	SW				1	WSW	Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			52	11.1		SW			2-3		10	SW				3	SW	Raining	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51', E. 31° 04'	29.99	761.7	76	24.4	66	SW			6		8	SW				4	SW	D. clouds	Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser, Syracuse, Sicily	29.58	751.3	57	13.9		NW			5		3	NW						Squally	Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 30° 35', E. 122° 21'	30.13	765.3	47	8.3	77	ESE			5-6		9	WNW						D. clouds	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.16	766.1	65	18.3	78	NE			0-1		2	N						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St. J. Garforin.
H. M. S. Egeria, Singapore, Malay Peninsula	29.89	759.2	80	26.7		NE			2		1	SE				2	E	Blue sky	Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter, Shanghai, China	30.24	768.1	41	5.0	82	SE			1		9	NW						Overcast	Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.87	758.7	79	26.1	62	NW			3-5		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 8° 55', W. 79° 30'	29.92	760.0	74	23.3	86	NW			2		1							Blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41', W. 57° 51'	29.66	753.4				NW			5									Squally	Capt. L. F. Jones.
H. M. S. Griffin, N. 22° 27', W. 62° 40'	29.93	760.2	74	23.3	90	ENE			4		4	ENE				4	NE	Squally	
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Tenedos, Turkey, Asia	29.32	744.7	61	16.1	88	W			5		2	W				2	W	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16', E. 149° 57'	30.13	765.3	63.5	17.5	78	ENE			1-2		8	E						D. clouds	Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Zanzibar, Africa	29.84	757.9	82	27.8	96	Calm			0		3	NE						D. clouds	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 36' E. 122° 02'	30.45	773.4	45.1	7.3	76	ESE			3		10					1	ESE	Overcast	Capt. R. H. Napier.
H. M. S. Malabar, N. 36° 56', E. 0° 00'	30.05	763.3	59	15.0	76	WNW			3		5	W				6-7	W	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minatour, Vigo, Spain	30.18	766.6	53.5	11.9	80	NW			1		3	NW						D. clouds	Capt. H. Rawson.
H. M. S. Modeste, N. 5° 24', E. 100° 20'	29.84	757.9	84	28.9	79	S			2		2							Misty	Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Trinidad. W. I.	29.92	760.0	79	26.1	74	N			1		1	NE						Blue sky	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, S. 5° 19′, W. 11° 53′	29.89	759.2	78	25.6	?	SE			3		2	SSE				3	SSE	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.86	758.4	82	27.8	96	ENE			1		5							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Spain	30.20	767.1	55	12.8	56	NE			1-2		6							D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.49	749 0	77	25.0	86	ESE			1	4ck						1	SE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	29.99	761.7	68	20.0	94	S			2		10					1	SW	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 6° 49′, W. 58° 11′	29.97	761.2	80	26.7	82	N			3		8					1	N	D. clouds	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, N. 37° 00′, E. 10° 43′	29.74	755.4	57	13.9	97	NW			6		7					5	NW	Showery	Capt. P. H. Colomb.
H. M. S. Triumph, S. 26° 00′, W. 72° 45′	29.97	761.2	66.5	19.2	71	S			2		9	S				2	S	D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.03	762.7	71	21.7		N			1-2		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, Palestine	29.91	759.7	67.5	19.7	51	N			1		1	W						Blue sky	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Bulama, Senegambia	29.89	759.3	83.3	28.5	77	ESE			1		0							Blue sky	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando, Africa	29.84	758.0	83.3	28.5	75	WSW			4		3		W			2	W	D. clouds	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

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

UNITED STATES NAVAL SERIES.

By authority of the Secretary of the Navy.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

N. Yard, Pensacola, Fla	30.24	768.1	42	5.6	42	NW	7	3.1			0			0.10	2.5			Clear	
N. Yard, Portsmouth, N. H	30.14	765.5	36	2.2	90	NE	5	2.2		10c		SE		0	0			Cloudy	
Naval Hospital, Yokohama, Japan	29.88	758.9	33	0.6	70	Calm			0		0			Sli	ght			Clear	
Adams, N. 2° 46′, W. 80° 30′	30.05	763.3	79	26.1	91	N			3		5		N			Sm'h	NW	Fair	
Alaska, N. Yard, Mare I'd, Cal	30.20	767.1	48	8.9	85	Calm			0		10		S	0	0			Cloudy	
Alert, Hong-Kong, China *.	30.03	762.7	65	18.3	63	E			3		5		E	0	0	Sm'h		Fair	
Alliance, New Orleans, La	30.17	766.3	39	3.9	64	NW			2		0			Li	ght	Sm'h		Clear	
Ashuelot, Tientsin, China	30.22	767.6	31	— 0.6	100	ENE			1		2		Calm					Fair	
Colorado, New York, N. Y	29.92	760.0	37	2.8	100	E	2	0.9			10							Rainy	
Constitution, N. Yard, League I'd., Pa			42	5.6	100	ENE	17	7.6			10							Raining	
Franklin, Norfolk, Va	29.65	753.1	62	16.7	81	SSE	27.6	12.3			10		SSW	0.06	1.5			Showery	
Galena, Naples, Italy	29.37	746.0	55	12.8	74	SW			1		5		NW			Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	30.23	767.8	46	7.8	92	Calm	0	0			10		Calm	0.05	1.3			Overcast	
Jamestown, Sitka, Alaska *	30.12	765.0	32	0.0		NE			2		10			0	0			Cloudy	
Kearsarge, Warrington, Florida	30.15	765.8	43	6.1	75	NW			3		0					Sm'h		Clear	
Lackawanna, Callao, Peru †.	30.07	763.8	69	20.6	95	SSE			1		5		SE	0	0			Fair	
Marion, Sandy P't, Terra del Fuego	29.57	751.1	55	12.8	87	NNW			2		10		Calm	3 h'r	s driz	Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	29.29	744.0	44	6.7		E	4	1.8			8		E					Raining	
Minnesota, New York, N. Y	29.86	758.4	40	4.4	82	ENE			1		10							Raining	
Monocacy, Shanghai, China	30.28	769.1	42	5.6	74	ESE			2		10							Overcast	
New Hampshire, Port Royal, S. C	29.85	758.2	58	14.4	58	WSW	18	8.0			8		Calm	0.01	0 3			Fair	
Nipsic, Barcelona, Spain	29.95	760.7	57	13.9	41	WNW			1		5					Sm'h		D. clouds	
Onward, Callao, Peru †.	29.93	760.2	67	19.4	89	SSE			2		10					Long	W	Cloudy	
Palos, Shanghai, China	30.28	769.1	42	5.6	74	ESE			1		10							Overcast	
Passaic, Washington, D. C	29.64	752.8	56	13.3	94	SE			4		10		SE					Raining	
Pensacola, N. 8° 22′, W. 79° 39′	29.97	761.2	78	25.6	78	N			3		0			0	0	Sm'h		Clear	
Portsmouth, Washington, D. C	29.49	749.0	58	14.4	94	SSE			6		1		SSE					Rainy	
Powhatan, New York, N. Y	29.91	759.7	39	3.9	91	NE			2		10		SE					Raining	
Quinnebaug, Villafranca, France	29.47	748.5	51	10.6	29	NW			2		10		NW			Sm'h		Cloudy	
Richmond, Hong-Kong, China	30.15	765.8	64	17.8	83	E			2		5		E	0	0			Fair	
Saratoga, Baltimore, Md	29.58	751.3	47	8.3	92	ESE			1		10		Calm	He	avy			Foggy	
Shenandoah, Montevideo, Uruguay *	30.15	765.8	69	20.6	75	N			3		0					Sm'h		Clear	
St. Louis, League Island, Pa	29.85	758.2	45	7.2	92	SE	16	7.2			10		SE	0.02	0.5			Raining	
Swatara, Nagasaki, Japan †	30.17	766.3	42	5.6	74	E			1		0					Sm'h		Hazy	
Tennessee, N. 29° 52′, W. 89° 52′	30.24	768.1	41	5.0	57	WNW	15	6.7			0			0	0			Clear	
Ticonderoga, N. Yard, Mare Id., Cal	30.26	768.6	51	10.6	93	E			1		10		SW	0	0			Cloudy	
Trenton, Villafranca, France *	29.43	747.5	53	11.7	29	N			1-2		10			0	0	Sm'h		Squally	
Vandalia, St. George, Granada, W. I.	29.96	761.0	77	25.0	77	N			1		5		Calm					Fair	
Wabash, Boston, Massachusetts	30.11	764.8	37	2.8	81	E	4	1.8			10		Calm	0	0			Cloudy	
Wachusetts, Panama, Panama *.	29.58	751.3	74	23.3	90	NW			2		2		S			Sm'h		Fair	
Wyoming, Villafranca, France	29.48	748.8	51	10.6	52	NW			3		0					Mod.	SSE	Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
N. 4° 45′, W. 20° 50′	29.89	759.2	85	29.4	72	E			3		9							Overcast	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 18° 25′, W. 43° 46′	29.94	760.5	79.5	26.4	78	SSW			4		3							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang, ‡																			
N. 11° 32′, W. 45° 55′	29.92	760.0	82.7	28.2	73	E			1		2							Blue sky	Capt. H. Youlden.
S. S. Cipero																			W. N. Lailey.
City of Agra, ‡																			
S. 18° 30′, W. 30° 00′	29.99	761.7	84.9	29.4	79	ENE			2		4							D. clouds	Capt. T. Young.
Barque Commewyne, ‡																			
N. 32° 40′, W. 56° 55′	30.20	767.1	64	17.8	68	NNE			4		8							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 11° 00′, W. 11° 29′	29.94	760.5	82	27.8	73	ESE			2		4							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart, ‡																			
N. 4° 43′, E. 90° 06′	29.92	760.0	80.5	26.9	85	ENE			2		5							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡																			
N. 51° 14′, W. 33° 42′	29.60	751.8	43	6.1	75	SW			5		9				5	WNW		Overcast	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope ‡																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 17° 11′, W. 52° 08′	29.90	759.4	76.9	24.9	88	WSW			4		2				4	NNW		Blue sky	Capt. H. W. Dyke.
Barque Mertola																			
N. 37° 06′, W. 7° 16′	30.14	765.5	58.5	14.7	73	NNW			3		2							Blue sky	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee, ‡																			
N. 2° 47′, W. 23° 48′	29.90	759.4	77.5	25.3	95	WSW			1		5							D. clouds	Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven																			Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡																			
Suez Canal	29.79	756.7	66	18.9	51	SW			2		4							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire,																			
N. 35° 15′, W. 7° 10′	30.16	766.1	59	15.0	71	W			1		4				3	WNW		D. clouds	
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian ‡																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			
WHITE STAR LINE. *Ismay, Imrie & Co.*																			Capt. W. H. P. Hains.
S. S. Adriatic ‡																			
S. S. Baltic, ‡																			Capt. J. W. Jennings.
N. 40° 48, W. 67° 15′	30.09	764.3	46	7.8	84	Var.			2-4		3		SE			Light	SE;S	D. clouds	Capt. H. Parsell.
S. S. Britannic,																			
N. 49° 48′, W. 23° 36′ †	29.86	758.4	55	12.8		NW			4		5		E			Sl't	N	Drizzling	Capt. H. Perry.
S. S. Celtic,																			
N. 50° 41′, W. 24° 15′ †	29.60	751.8	51	10.6		W			6		10		W	4h'rs	fine	Mod.	W	Overcast	Capt. Benj. Gleadell.
S. S. Germanic, ‡																			
N. 41° 01′ W. 67° 00′ †	30.19	766.8	40	4.4		S			1		5		W	o	o	Sm'h		Hazy	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT--MARINE SERIES.																			
NORTH GERMAN LLOYD--Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Undütsch.
S. S. Hermann																			Capt. H. Maur.
S. S. Köln,																			
N. 49° 39′, W. 20° 56′	29.64	752.8	53.6	12.0		W			4		9		W	Light	rain	R'gh	WNW	Cloudy	
S. S. Leipzig, ‡																			
N. 40°49′ W. 6° 38′	30.09	764.3	47.0	8.3	62	SSE			3		5		SSE	o	o	Sm'h	SSE	Fair	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT--MARINE SERIES.																			
Barque Adolph Fredholm ‡																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Sköterbrand

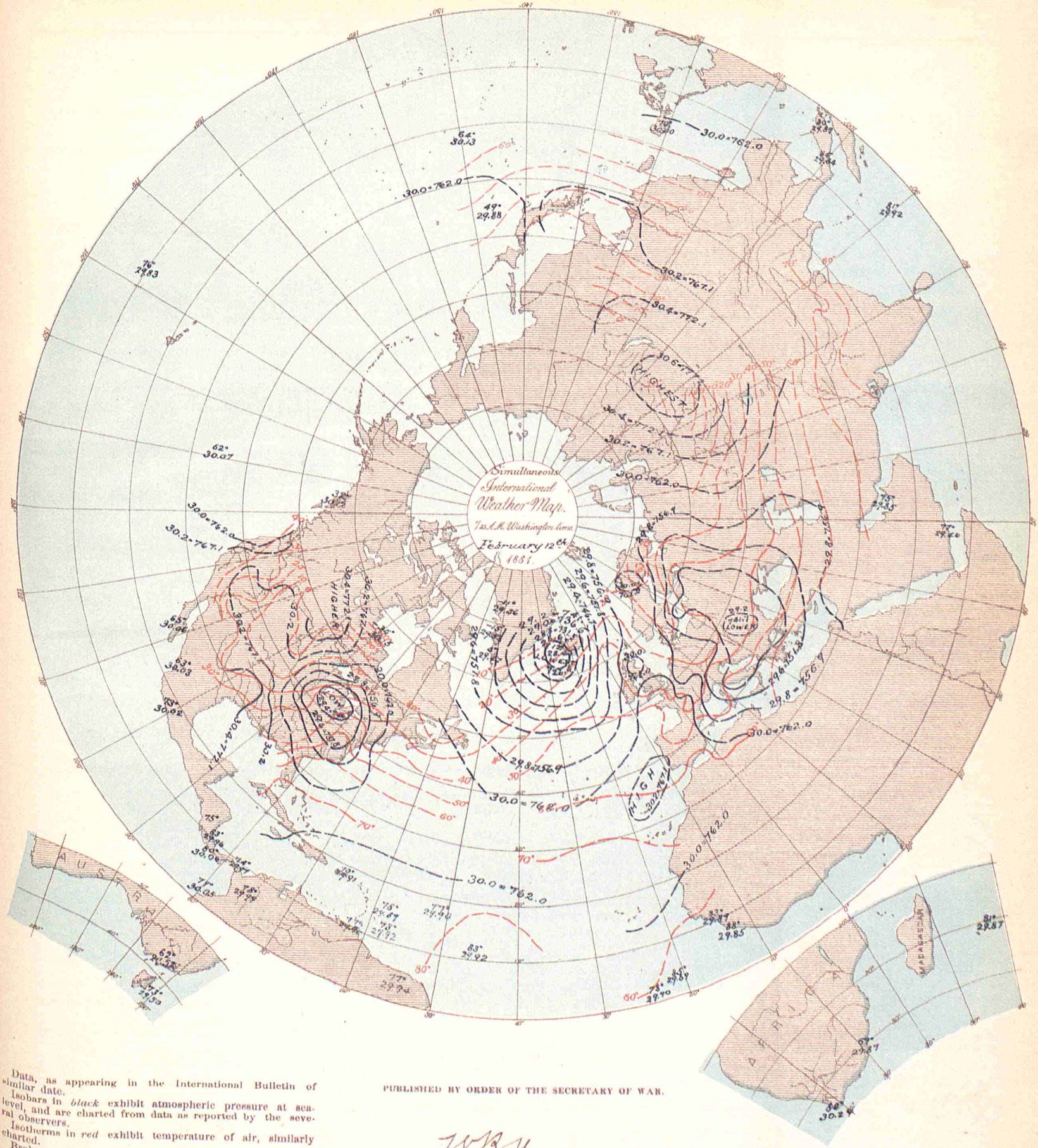
UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England. .*†	29.98	761.5	42	5.6	83	S			2		2		W					Clear.....	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 44° 18′, W. 56° 05′.....†	29.78	756.4	32	0.0	90	NW			5		8		NW	Light		R'gh	NW	Cloudy..	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 40° 18′, W. 70° 47′...*†	30.04	763.0	54	12.2	100	SE			3		10		SE	0	0	Sm'll	SE	Cloudy.....	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, Philadelphia, Pa.....†	29.65	753.1	45	7.2	?	E			2		10			1.	25.			Cloudy.....	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, Mazatlan, Mexico.....†	29.96	761.0	67	19.4	84	Calm			0		0			0	0	Sm'll	SSW	Clear.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 35° 45′, E. 147° 22′....†	29.88	758.9	49	9.4	64	NW			6		8		NW	0	0	High	NNW	Cloudy.....	Capt. H. Davison.
S. S. Gaelic, N. 34° 40′, E. 139° 20′..*†	30.10	764.5	43	6.1	83	N			3		0					Mod.	NNW	Clear.....	Capt. W. H. Kidley.
S. S. Oceanic, N. 33° 47′, W. 140° 35′.....	30.07	763.8	62	16.7	94	WSW			4		8		SW	0.03	0.8	Sl't	S	Cloudy.....	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia.....																			Capt. Fred. Bolles
S. S. Oregon, N. 44° 35′, W. 124° 10′....†	29.81	757.2	43.0	6.1	100	ESE			4		10		SE			Mod.	SE	Rainy.....	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Pedro, Cal.....†	30.19	766.8	47	8.3	85	N			3		0					Mod.		Clear.....	Capt. J. N. Ingalls.
S. S. Idaho, N. 48° 20′, W. 125° 50′....†	29.96	761.0	40	4.4	100	SE			3		10		SW			Mod.	SW	Raining.....	C. E. Lyons, 1st Officer.
S. S. Orizaba..																			
S. S. Senator, San Francisco, Cal.....†	30.28	769.1	49	9.4	85	S			1		10		S					Cloudy.....	Thos. Wallace.
S. S. State of California, Portland, Oregon.....†	30.03	762.7	35	1.7	90	NE			4		10							Snowing.....	Capt. G. Debney.
S. S. Victoria, N. 42° 38′, W. 125° 00′....†	29.76	755.9	51	10.6	86	SE			6		10		SE			Long	SE	Drizzling....	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 9° 38′, W. 162° 29′.....	29.83	757.7	76	24.4	?	NNE			3		8		NE			Mod.	NE	Cloudy.....	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.....†	30.32	770.1	70	21.1	95	SSE			4		10		SSE	0	0			Cloudy..... ..	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 8° 28′, W. 83° 05′.....†	30.06	763.5	80	26.7	82	NW			3		8		NE	0	0	Sm'll	E	Cloudy.....	Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China.....†	30.09	764.3	68	20.0	.....	NE			4		5		NE	0	0	Sm'h		Fair	Capt. G. G. Berry.
S. S. City of Sidney.....																			Capt. H. C. Dearborn.
S. S. City of Tokio.....																			A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 17° 33′, W. 102° 00′....†	30.02	762.5	73	22.8	76	ESE			2		2		ESE			Sm'h	W	Clear.	Capt. R. R. Searle.
S. S. Dakota.....																			Capt. D. E. Griffiths.
S. S. Granada, N. 25° 00′, W. 112° 35′.....†	30.06	763.5	65	18.3	68	NNE			6		0			0	0	Short R'gh	N	Clear.	.....
S. S. Zealandia, S. 34° 16′, E. 158° 08′.....	29.87	758.7	76	24.4	91	NW			5		8		N			Sm'h	NNW	Showery.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland, ‡ N. 49° 18′, W. 18° 21′...†	29.55	750.6	54	12.2	74	NW			8		5		W			Cross	NNW	Fair.....	Capt. Sam'l Jackson.
S. S. Nederland.....																			Capt. S. Stokes.
S. S. Rhynland, ‡ Lillo, Belgium	29.92	760.0	41	5.0	.....	N			3		5		NNW	0.1	3.			Fair.....	Capt. W. Geo. Randle.
S. S. Vaderland.....‡																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Jacksonville, Florida...†	29.92	760.0	60	15.6	.....	S			2		0			0	0			Fine.....	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va.	29.67	753.6	59	15.0	28	SSE	28	12.5	.. ..		8ks			0.02	0.5			Threatening	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, N. 15° 25′, W. 59° 56′.....†	29.89	759.2	78	25.6	.....	N			1		2		NW	Rain Squalls		Long	N	Clear.....	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 36° 26′, W. 3° 30′.....†*	30.23	767.8	63	17.2	.....	Calm			0		2		S			Sm'h		Foggy	Capt B. F. Woodbury.
Brigantine George, ‡ N. 27° 30′, W. 72° 45′.....†	30.32	770.1	70	21.1	.....	Calm			0		8		Calm	0	0	Mcd.	E	Clearing.....	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va†	29.84	757.9	62	16.7	94	S	6	2.7	.....		10n		.....	0.04	1.0			Raining	.....
Ship Jumna.....																			Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 29° 25′, W. 24° 44′.....†	30.14	765.5	72	22.2	90	E			3		8		E	0	0	Sm'h		Cloudy.....	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 13, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.98	761.6	65.1	18.4	75	NE			3		1			0	0	Very fair	Dr. Ollive.
Nemours			30.04	762.9	62.2	16.8	90	NW			5		0			0	0	Clear	Raynard.
Algiers			30.02	762.6	57.9	14.4	53	WNW			3		8			0	0	Very cloudy	Nicolas.
La Calle			29.89	759.3	51.8	11.0	73	NNW			6		7			0.051	1.3	Very cloudy	Fonfréde.
Tunis			29.81	757.2															Jacques.
Sfax			29.95	760.6															Gau.
Saida			30.04	763.1	57.6	14.2	58	WNW			1		2			0	0	Fair	Dumas.
Tebessa			29.97	761.3	43.2	6.2	53	NW			5		7			0	0	Very cloudy	Watrin.
Geriville																			Lonchamp.
Laghouat			30.03	762.7	57.9	14.4	40	N			2		4			0	0	Cloudy	Herbin.
Biskra			29.97	761.3															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.02	762.5	30.11	764.8	60.7	15.9	59	WSW	23	10.3			10			0.02	0.5	Squally	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			29.90	759.4	79	26.1		SW			3		4kn			0.22	5.6		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.36	745.8	29.94	760.4	32.0	0.0	87	NW			2		5			0.012	0.3		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.06	738.2	29.87	758.8	23.0	— 5.0	95	WNW	11.2	5.0			10			0.012	0.3		Dr. Wiersbicki.
Eperies	28.84	732.5	29.76	756.0	27.3	— 2.6	79	NW			2		cs		SE	0	0		Julius Mikolik.
Gratz‡	28.60	726.5	29.90	759.4	34.3	1.3	54	WNW			5		0			0	0		Andreas Rospini.
Hermannstadt	28.25	717.5	29.73	755.2	30.4	— 0.9	86	NW			3		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28 62	726.9	30.05	763.2	24.4	— 4.2	97	WSW			2		10			0.024	0.6		The Staff.
Lemberg	28.62	726.9	29.65	753.1	26.4	— 3.1	76	NW			3		10			0.012	0.3		Dr. T. Stanecki.
Pola	29.72	755.0	29.84	758.0	41.0	5.0	39	ENE			1		0			0	0		I. R. HydrographicOffice
Szathmar	29.29	744.0	29.86	758.5	28.4	— 2.0	68	N			2		5			0	0		Beicht Peter, S. J.
Szegedin	29.51	749.6	29.81	757.1	29.3	— 1.5	78	NW			3		6			0	0		Karl Stancel.
Trieste	29.76	756.0	29.87	758.6	41.9	5.5	23	NNE			2		0			0	0	Clear	P. Busin.
Vienna	29.21	742.0	29.97	761.2	26.6	— 3.0	78	WNW			4		10			0.098	2.5		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.94	760.5	30.15	765.8	33.6	0.9	67	NNE			2		8		SSW	0	0		Royal Observatory
Furnes	30.04	763.1	30.07	763.7	37.8	3.2	59	SSE			2		3			0	0		M. E. de Cae.
Maeseyck	29.99	761.7	30.11	764.9	28.2	— 2 1	71	NNE			2		3			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 15, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.72	754.9	29.82	757.4	33.4	0.8	95	S	14	6.3			10			0.755	19.18	Rain & snow	W. Boswell.
Armagh, Observatory	29.38	746.2	29.61	752.1	44.9	7.2	86	SSE	18	8.0									S. Call.
Bidston, Liverpool Obs'y			29.79	756.7	35.8	2.1	90	SE	26	11.6			10					Snowing	John Hartnup.
Bolton, Sharples	29.30	744.2	29.85	758.2	34.2	1.2	81	SSE					10					Snowing	Thomas Mackereth.
Bradford, Yorkshire																			
Bridgetown, Barbadoes	29.89	759.2	29.92	760.0	82	27.8	63				2		2			0.23	5.8	Snowing	J. McLandsborough, F.R.S
Cardington			29.98	761.5	37.4	3.0	59	SE			0.6		8					D. clouds	Pvt. J. Surgenor, A. H. C.
Chatham, School M. E.	29.93	760.2	30.07	763.8	40.1	4.5	58	SW			1		6					Overcast	John McLaren.
Falmouth, Observatory	29.52	749.8	29.75	755.6	46.7	8.2	98	S			6		10					D. clouds	Lance Cpl. R. Tear, R.C.
Fort Napier, Natal	27.88	708.1	30.09	764.3	64.4	18.0	71	SE			2		7					Raining	The Staff.
Free Town, Sierra Leone	29.61	752.1	29.85	758.2	87	30.6	84	W			1		4					Overcast	Pvt. E. K. Anniss, A.H.C.
Galway, Queen's College								Calm			0		10					D. clouds	C. E. Keane.
Gibraltar, Mediterranean	30.00	762.0	30.05	763.3	60.2	15.7	89	NE			3		4					Overcast	J. O'Donaghadue.
Glasgow, Observatory	29.53	750.0	29.73	755.1	36.3	2.4	86	SE			3							Blue sky	2nd Cpl. O. Baldwin.
Greenwich, Royal Obs'y	29.85	758.2	30.03	762.7	39.6	4.2	69	S			2		10			Blank		Overcast	D. G. MacLean.
Guernsey	29.68	753.9	29.90	759.4	41	5.0	78	SE			6		8					Overcast	The Staff.
Kew, Observatory	29.99	761.7	30.03	762.7	40.1	4.5	62	S	16	7.2			10					Showery	Dr. S. E. Hoskins, F. R. S.
Leicester, Museum	29.69	754.1	29.95	760.7	37.6	3.1	52	S			3		10					Misty	The Met'g'l Office.
Malta, Mediterranean	29.64	752.8	29.72	754.9	54	12.2	67	NW			3		6			Blank		Overcast	J. E. Carryer.
Nassau, Bahamas			30.07	763.8	68.0	20.0	74	NW			4		10					D. clouds	F. S. Vine, A. H. C.
Oscott, St. Mary's College	29.39	746.5	29.93	760.2	35.5	1.9	80	SSE			4		10					Overcast	C. S. Duncombe.
Oxford, Radcliffe Obs'y	29.74	755.4	30.00	762.0	39.8	4.3	67	SSE			5		10					Snowing	Robert Pate.
Plymouth	29.77	756.1	29.84	757.9	42.3	5.7	95	SSE			4		10					Snowing	The Staff.
Sandwick Manse, Orkneys			29.72	754.9	36	2.2	99	S	14	6.3			10					Drizzling	John Merrifield.
Scutari Cemetery, Turkey	29.46	748.3	29.52	749.8	43.2	6.2	90	NE			2		10					Drizzling	Rev. C. Clouston, L. L. D.
Sheffield	29.64	752.8	29.93	760.2	37.2	2.9	78	SSW			2		10					Raining	Serg't W. H. Lyne.
Silloth Rectory	29.74	755.4	29.77	756.1	36.5	2.5	95	Calm			0		10			0.08	2.0	Snowing	W. F. Cooper.
Stonyhurst, Observatory			29.87	758.7	35.4	1.9	77	S	10	4.5			10			0.345	8.77	Raining	Rev. F. Redford, M. A.
Strathfield Turgiss	29.77	756.1	29.99	761.7	39.1	3.9	63	SE			3		10					Overcast	Rev. S. J. Perry.
Truro, Royal Institution	29.66	753.4	29.72	754.9	49	9.4	93	SW			8		10					Squally	Rev. C. H. Griffith, F.M.S.
Valencia, Observatory	29.55	750.6	29.58	751.3	49.3	9.6	83	ESE	3	1.3			7					Raining	W. Newcombe.
																		D. clouds	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.21	741.9	29.26	743.2	33	0.6	86	SE	27	12.1			10n			0.925	23.50	Heavy rain	H. J. Cundall, C. E.
Chatham, N. B.*	29.09	738.9	29.15	740.4	29.1	— 1.6	94	NE	5	2.2			10n		NE	0.60	15.2	Cloudy	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.20	741.7	29.22	742.2	17	— 8.3	74	NE	15	6.7			10n			0.30	7.6	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.66	753.4	30.64	778.2	—18	—27.8	100	N	10	4.5		0	0			0	0	Clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.16	740.7	29.29	744.0	39	3.9	98	SE	18	8.0			10n		SE	1.005	25.53	Heavy rain	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	28.99	736.3	29.34	745.2	25	— 3.3	91	SW	17	7.6			10n		SW	0.50	12.7	Light snow	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	28.98	736.1	29.18	741.2	29	— 1.7	97	SW	29	13.0			10n			0.79	20.1	Light snow	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	28.74	730.0	29.49	749.0	8	—13.3	87	W	12	5.4			10n		W	0.22	5.6	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	28.79	731.3	29.52	749.8	21	— 6.1	99	SW	16	7.2			10n			0.02	0.5	Threatening	H. Morgan.
Port Stanley, Ontario	28.93	734.8	29.61	752.1	19	— 7.2	84	W	24	10.7			10n		W	0.06	1.5	Cloudy	M. Payne.
Quebec, Quebec*	28.82	732.0	29.15	740.4	24	— 4.4	100	E			6		10n		E	0.50	12.7	Light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	28.85	732.8	29.33	745.0	13	—10.6	85	NW	10	4.5			10s		NW	0.56	14.2	Cloudy	K. Stewart.
Saugeen, Ontario*	28.80	731.5	29.57	751.1	13	—10.6	83	NE	20	8.9			10ks			0.07	1.8	Cloudy	W. H. McIntyre.
St. Andrews	29.08	738.6	29.13	739.9	39	3.9	90	SW	6	2.7			Fog			1.36	34.5	Foggy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.65	753.1	29.69	754.1	30	— 1.1	93	SE	18	8.0			10n			0.28	7.1	Light rain	T. C. Hill, C. E.
Toronto, Ontario*	29.03	737.3	29.42	747.3	26	— 3.3	92	W	22	9.8			10n		W	0.06	1.5	Light snow	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.14	740.1	29.21	741.9	39	3.9	99	S	15	6.7			Fog			1.31	33.3	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	30.07	763.8	30.34	770.6	21	— 6.1	100	SE	2	0.9			10			0	0		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't
Stations marked with a * are telegraph'd daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY, SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape St. Francis Lt., House	30.25	768.3			68.0	20.0	88	SE	15.4	6.9			3s			0.126	3.20	Fine	John Duthie.
Cape Town, C. G. H. Obs'y	30.04	763 0	30.08	764.0	99.0	37.2	34	SSW	20.9	9.3		0	0			0	0	Hazy	The Staff, for D. Gill.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.20	767.0	30.23	767.7	37.4	3.0	84	WNW	11.2	5.0			10			0.130	3.3	Covered	M. Marc Dechevrens, S J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.25	667.0	29.98	751.5	66.6	19.2	64	NE			3	3d		NE		0	0	Fair	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.97	761.1	30.01	762.3	15.4	— 9.2	78	NNE	13	6			0						Oversergent Fischer.
Fanöe	30.11	764.9	30.13	765.4	20.7	— 6.3	79	NNW			4		0						Overloerer Lauridsen.
Godthaab, Greenland	29.24	742.8	29.29	743.9	9.3	—12.6	81	SSE			5		9						S. Kleinschmidt.
Stykkisholm, Iceland	29.48	748.9	29.53	750.0	—3.3	—19.6	87	E			4		8						A. O. Thorlacius.
Thorshavn	29.56	750.7	29.59	751.6	39.2	4.0	61	WNW	20	9			3						Overloerer Bergh.
Vestervig	30.06	763.4	30.15	765.8	21.7	— 5.7		Calm			0		9						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.46	748.3	30.13	765.4	42.1	5.6	58	SE			1	c	k			0	0		M. Labroue, Director.
Alençon	29.58	751.4	30.13	765.4	36.7	2.6	93	S			2		10		S	0	0	Covered	M. Nicot, Director.
Arras, Engineer School	29.91	759.6	30.17	766.4	36.5	2.5	93	SSW	9.6	4.3			km						M. Klein, Commandant.
Avignon, Normal School	29.92	760.0	30.00	762.0	39.6	4.2	44	N			6		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.60	751.8	30.18	766.6	33.1	0.6	88	ESE			1		2k		SE	0	0	Slightly cl'dy	M. Saillard, Director.
Beauvais, Normal School	29.87	758.8	30.15	765.9	35.1	1.7	74	SSE			1		8	N	SSE	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.30	744.2	30.24	768.1	33.8	1	72	NE			2		cn		NE	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.82	757.5	30.10	764.4	44.8	7.1	54	S			1		8		WNW	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.57	751.0	30.14	765.5	39.2	4	36	SSE			1		km		SSE	0	0		M. Postel, Director.
Brest, Naval Observatory	29.65	753.0	29.89	759.2	45.7	7.6	94	SW			3		10		SW			Raining	M. de Rermaree, Dir.
Caen, Normal School	29.93	760.3	30.01	762.3	40.3	4.6	100	ESE			1		10			0	0	Covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.87	758.8	30.21	767.4	33.4	0.8	94	NW			1		2			0.063	1.6	Slightlycl'dy	M. Jadot, Director.
Charleville, Normal School	29.60	751.9	30.07	763.7	37.8	3.2	66	ESE			1		0			0	0	Clear	M. Grimard.
Clermont-Ferrand Obs'y	28.72	729.6	30.14	765.6	35.1	1.7	63	NW			1		8			0	0	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.29	743.9	30.11	764.8	35.2	1.8	82	N			3		1	N	N	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.29	743.9	30.22	767.7	30.0	—1.1	77	NW			1	ck		NW	NW	0	0		Dr. Coulet, Director.
Gap, Normal School	27.33	694.2	29.97	761.1	31.1	—0.5	89	N			2					0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.84	732.4	29.98	761.4	39.2	4	36	NW			3		0			0	0	Clear	M. Kina, Director.
Grenoble, Normal School	29.30	744.3	30.11	764.8	34.3	1.3		N			1	ck			E	0.075	1.90		M. Ablard, Director.
Guéret, Normal School	28.45	722.5	30.06	763.6	37.4	3	77	NNW			1	c				0	0		M. Rivoir, Director.
Lamballe, Normal School	29.71	754.5	29.99	761.7	42.4	5.8	74	ENE			2		10		ENE			Raining	M. Ollitrault, Director.
Lescar, Normal School	29.46	748.2	30.14	765.6	46.8	8.2	67	E			1		2			0	0	Slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	29.87	758.8	29.98	761.4	45.3	7.4	94	SE			4		10			0	0	Covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	29.06	738.2	30.11	764.9	33.8	1.0	70	N			3		2k		N	0	0	Slightly cl'dy	M. André, Director.
Mans, Normal School	29.82	757.3	30.14	765.5	37.9	3.3	78	S			1		5		NNW	0	0	Cloudy	M. Piboen, Director.
Marseille, Observatory	29.65	753.0	29.92	760.0	42.1	5.6	51	NNW			2		0			0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.64	625.9	29.88	758.9	41.9	5.5	59	SW	13.0	5.8			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.93	760.3	30.04	763.1	44.6	7	40	NNW			1		2		NNW	0	0	Slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	29.36	745.8	30.17	766.4	30.6	—0.8	58	NNW			1	2c			N	0.110	2.8	Slightly cl'dy	M. Hasse.
Nantes, Observatory	29.93	760.1	30.09	764.2	41.7	5.4	81	ESE			2		9n		W	8	0		M. Larocque, Director.
Nice	29.83	757.7	29.87	758.6	53.2	11.8	43	SW			1		1	SW	SW	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.94	760.4	30.04	763.1	46.2	7.9	35	NW	16.8	7.5			2	NW		0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.39	568.7			28.8	—1.8							1		N	0	0	Clear	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.99	736.4	30.10	764.6	37.4	3	66	N			1		1k	N	N	0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.02	635.6			15.8	—9.0	97	ENE			3		2	NNW	ENE	0.291	7.4		M. Alluard, Director.
Rochefort, Naval Obs'y	30.05	763.6	30.10	764.4	44.6	7.0	57	SE			1		5		WNW	0.08	2.	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.88	758.9	30.10	764.5	41.0	5	69	SSE			1		10			0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	27.92	709.2	30.18	766.6	31.6	—0.2	65	NW			1		2s			0	0		M. Richard, Director.
Rouen, Normal School	30.02	762.6	30.11	764.8	37.0	2.8	72	SSE			1		5		SE	0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.88	758.9	30.04	762.9	39.2	4	92	SE			2		10		ENE	0	0	Coverpd	M. Delaplanche, Dir.
Saint Maur, Observatory	29.99	761.8	30.16	766.0	35.6	2.0	68	SSE			1		2	NNW	SSE	0	0		M. Renou, Director.
Toulouse, Observatory	29.41	747.1	30.14	765.5	37.9	3.3	63	WNW			1		1		NNW	0	0	Clear	M. Bailland, Director.
Tours	29.92	760.0	30.12	765.0	39.2	4.0	67	SE			2		2	NNW	S	0	0	¼ covered	M. de Tastes.
Versailles, Observatory	29.65	753.0	30.14	765.5	35.2	1.8	74	S			2					0.005	0.12		Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.17	740.9	30.03	762.8	25.4	—3.1	80	N			3		1s			0.004	0.1	Snowing	Prof. Dr. Hoh.
Berlin	29.83	757.7	30.02	762.4	23.0	—5.0	74	NW			2		10			0.008	0.2		Prof. Dr. Arndt.
Breslau	29.40	740.7	29.93	760.1	22.3	—5.4	80	WNW			2		10			0.047	1.20	Snowing	Royal University Obs'y.
Carlsruhe	29.71	754.6	30.16	766.1	29.5	—1.4	73	NE			2		10	NW				Light snow	Albert Senz.
Cassel	29.48	748.8	30.09	764.3	23.7	—4.6	84	N			6		2	N		0.095	2.43	Snowing	Dr. H. Möhl.
Frankfort on the Main	29.86	758.4	30.25	768.3	29.5	—1.4	55	N			1		4			0	0		Physical Society.
Friedrichshafen	28.65	727.7	30.17	766.2	28.4	—2.0	82	NE			3		8	SW		0.004	0.1	Light snow	Chief Telegrapher Wilhelm.
Hamburg	30.02	762.6	30.10	764.4	20.8	—6.2	69	N			3		3			0	0		Dr. R. Kleeman.
Kiel	30.06	763.3	30.08	763.9	19.2	—7.1	77	NW			4		4			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.62	752.4	30.07	763.8	22.6	—5.2	80	NW			3		10			0.071	1.8	Snowing	Prof. Dr. Bruhns.
Magdeburg	29.82	757.3	30.05	763.4	22.6	—5.2	80	NW			6		10ks	NW		0.016	0.4	Snowing	Dr. Assmann.
Memel	29.74	755.4	29.79	756.6	29.3	—1.5	92	W			2		10n						Reinbrecht & Issermann.
Munich	28.20	716.3	30.05	763.6	26.6	—3.0	62	W			3		10			0.035	0.9	Snowing	Central Station.
Neufahrwasser	29.73	755.2	29.75	755.6	31.1	—0.5	83	SW			3		8			0.004	0.1		A Lothes.
Neustadt, Palatinate																			Dicknether.
Stuttgart	29.15	740.5	30.11	764.7	26.1	—3.3	80	W			1		7	W		0	0		Prof. Dr. Schoder.
Thorn	29.63	752.5	29.81	757.2	26.4	—3.1	70	NW			4		10			0.035	0.9		Dr. O. Cunerth.
Weissenburg, Bavaria	28.50	724.0	30.02	762.6	25.2	—3.8	80	NW			4		9	W		0.012	0.3		Prof. Kemlein.
Wustrow	30.03	762.8	30.06	763.4	17.2	—8.2	97	N			3		3s			0.091	2.3		Profs. Brandes & Reimer.

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

GREEK SERIES.

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

Athens	29.13	739.8	29.52	749.8	54.0	12.2	.....	SW	.....	.....	4.0	.....	10	.....	.....	.....	.....	Covered.....	Schmidt & Wourlisch.

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	29.92	760.0	29.98	761.4	74.1	23.4	87	SW	16.0	7.2	.....	.....	4	SW	.....	0	0	D. clouds.....	
Deesa	29.44	747.8	29.88	759.0	84.6	29.2	21	W	6.9	3.1	.....	.....	9	W	.....	0	0	D. clouds.....	
Bombay	29.89	759.2	29.93	760.2	78.9	25.1	65	NW	19.0	8.5	.....	.....	0	.....	.....	0	0	Blue sky.....	
Poona, Yarrowda	28.01	711.4	29.83	757.7	88.0	31.1	11	NNE	14.0	6.3	.....	.....	0	.....	.....	0	0	Blue sky.....	
Belgaum	27.35	694.8	29.87	758.8	80.3	26.8	28	SW	2.0	0.9	.....	.....	0	.....	.....	0	0	Blue sky.....	
Lahore	29.22	742.2	29.98	761.6	70.7	21.5	39	Calm	0.7	0.3	.....	.....	8	.....	.....	0	0	D. clouds.....	
Roorkee	29.03	737.4	29.96	760.8	68.6	20.3	39	N	2.3	1.0	.....	.....	8	.....	.....	0	0	.....	
Agra	29.41	747.0	29.99	761.7	74.3	23.5	28	W	1.9	0.8	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28.86	733.1	29.90	759.4	84.2	29.0	38	NE	3.0	1.3	.....	.....	2	W	.....	0	0	D. clouds.....	
Jubbulpore	28.58	725.9	29.95	760.9	76.3	24.6	16	N	1.3	0.6	.....	.....	0	.....	.....	0	0	Blue sky.....	
Lucknow	29.57	751.1	29.95	760.7	78.2	25.7	34	ENE	1.3	0.6	.....	.....	0	.....	.....	0	0	Blue sky.....	
Allahabad	29.63	752.5	29.94	760.6	75.8	24.8	38	N	1.4	0.6	.....	.....	7	W	.....	0	0	D. clouds.....	
Patna	29.82	757.5	30.01	762.2	71.2	21.8	63	W	0.8	0.4	.....	.....	0	.....	.....	0	0	Blue sky.....	
Hazaribagh	27.91	708.8	29.97	761.2	66.6	19.2	32	WNW	7.7	3.4	.....	.....	0	.....	.....	0	0	Blue sky.....	
Cuttack	29.83	757.8	29.92	759.8	80.2	26.8	46	Calm	0.1	0.04	.....	.....	0	.....	.....	0	0	Blue sky.....	
Calcutta, Alipore	29.89	759.3	29.92	759.8	76.2	24.6	34	NW	5.0	2.2	.....	.....	0	.....	.....	0	0	Blue sky.....	
Goalpara	29.49	749.0	29.90	759.5	65.2	18.4	64	N	8.4	3.8	.....	.....	10	.....	W	0	0	Thh'd & Lt'g	
Chittagong	29.84	758.0	29.94	760.3	72.8	22.7	78	S	3.1	1.4	.....	.....	3	.....	.....	0	0	Blue sky.....	
Sibsagar	29.65	753.1	30.00	762.0	61.9	16.6	89	SE	2.8	1.2	.....	.....	10	SW	SW	0.04	1.0	D. clouds.....	

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.44	747.8	29.86	758.5	41.0	5.0	22	Calm	0	0	.....	.....	0	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.33	744.9	29.85	758.5	43.7	6.5	30	ENE	4.9	2.2	.....	.....	2	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.78	756.3	29.89	759.2	41.7	5.4	44	SE	2.5	1.1	.....	.....	0	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.98	736.1	29.91	759.8	41.5	5.3	36	E	3.1	1.4	.....	.....	0	.....	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.67	753.6	29.87	758.6	45.5	7.5	22	N	6.3	2.8	.....	.....	0	.....	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	27.94	709.6	29.92	759.9	37.2	2.9	53	E	.....	.....	4	.....	0	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.80	757.0	29.85	758.3	42.3	5.7	45	NW	18.6	8.3	.....	.....	3	.....	.....	0.287	7.3	.....	Prof. Luigi Guidi.
Florence	29.53	750.0	29.79	756.6	43.7	6.5	23	N	.....	.....	6	.....	0	.....	.....	0	0	.....	Cav. F. Meucci.
Leghorn	29.76	755.8	29.84	758.0	45.7	7.6	33	NE	6.3	2.8	.....	.....	1	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.50	749.3	29.68	753.8	47.1	8.4	35	N	19.9	8.9	.....	.....	2	.....	.....	0.067	1.7	.....	Prof. P. S. Ferrari.
Lecce	29.28	743.8	29.54	750.3	47.8	8.8	53	N	13.6	6.1	.....	.....	9	N	.....	0.311	7.9	.....	Prof. C. de Giorgi.
Cosenza	28.65	727.8	29.57	751.0	41.4	5.2	73	NNW	5.6	2.5	.....	.....	10	WNW	.....	1.630	41.4	.....	Prof. D. Conti.
Cagliari	29.60	751.8	29.80	756.8	47.7	8.7	54	NW	.....	.....	4	.....	3	NW	.....	0.039	1.0	.....	Prof. A. Pacinotti.
Palermo	29.41	746.9	29.66	753.3	51.8	11.0	43	NW	23.7	10.6	.....	.....	8	NW	.....	0.390	9.9	.....	Prof. G. Ciacciatore.
Syracuse																			Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R.	29.10	739.0	29.62	752.4	49.5	9.7	32	NNE	8.1	3.6	.....	.....	6	NE	.....	0.520	13.2	.....	Prof. F. Brioschi.
Stelvio	21.99	558.6	.....	.....	1.8	—16.8	66	NE	.....	.....	6	.....	1	.....	.....	0	0	Clear.....	P. F. Denza.
Valdobbia	21.81	554.0	.....	.....	10.6	—11.9	71	E	.....	.....	2	.....	0	.....	.....	0	0	Clear.....	

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	30.14	765.5	30.16	766.0	38.7	3.7	81	NNE	0.6	0.3	.....	.....	10s	.....	.....	0.251	6.38	Overcast.....	K. Sasaki.
Kioto	29.97	761.2	30.16	766.0	37.2	2.9	83	.....	.....	.....	.....	.....	10s	.....	.....	0.200	5.08	Cloudy.....	.....
Nagasaki, I. M. Obs'y	29.89	758.7	30.07	763.8	44.7	7.1	82	SE	3.9	1.7	.....	.....	10n	.....	.....	0.850	21.59	Light rain...	S. Takehayashi.
Tokei Obs'y, Yeddo	30.07	763.8	30.14	765.5	41.7	5.4	75	SSE	4.4	2.0	.....	.....	10ks;s	.....	SW	0	0	Cloudy.....	The Staff.
Wakayama	30.09	764.3	30.14	765.5	40.9	4.9	60	E	0.1	0.04	.....	.....	10s	.....	.....	0.118	3.00	Cloudy.....	S. Iwahashi.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.79	756.6	29.98	761.4	80.6	27.0	78	NE	19.5	8.7	.....	2	3	.....	NE	0.01	0.3	Squally.....	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Leon	24.53	623.0	30.48	774.2	41.0	5.0	78	SW	.....	.....	1	4c	0	.....	.....	0	0	Clear.....	Prof. M. Leal.
Mazatlan	29.83	757.7	30.09	764.4	62.0	16.7	83	ESE	0.9	0.4	.....	1cs	0	.....	.....	0	0	Hazy.....	F. Quijano, C. E.
Mexico, Central Obs'y	23.17	588.4	30.30	769.5	39.2	4.0	81	Calm	0	0	.....	2c	0	.....	.....	0	0	Foggy.....	The Staff.
Pabellon, Aguascalientes	24.00	609.7	30.18	766.5	36.7	4.3	75	N	.....	.....	2	1cs	0	WSW	.....	0	0	Clear.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.45	595.5	30.51	774.9	35.6	2.0	33	Calm	0	0	.....	0	1	.....	SSE	0	0	Clear.....	Prof. P. Spina.
San Luis Potosi	24.32	617.7	30.49	774.5	38.9	3.8	72	SW	0.9	0.4	.....	.....	10	.....	SW	0	0	Covered.....	G. Barroeta, M. D.
Tlacotalpam	30.36	771.2	30.38	771.5	60.1	15.6	91	NW	1.7	0.8	.....	.....	10	.....	NW	0.043	1.1	Threatening	Prof. M. Cházaro.
Zacatecas	22.58	573.5	30.41	772.5	33.8	1.0	86	Calm	0	0	.....	0	9ks	.....	.....	0	0	Very cloudy	J. A. Bonilla, M. E.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	30.15	765.7	30.15	765.7	35.2	— 1.8	.....	SE	.....	.....	4	.....	.....	.....	.....	0.0081	0.2	.....	.....
Groningen	30.09	764.3	30.15	765.7	30.2	— 1.0	.....	N	.....	.....	1	.....	.....	.....	.....	0	0	.....	.....
Helder	30.14	765.6	30.14	765.6	29.8	— 1.2	.....	SE	.....	.....	1	.....	.....	.....	.....	0	0	.....	.....
Hellevoetsluis	30.15	765.8	30.15	765.8	32.5	0.3	88	SE	.....	.....	2	.....	.....	.....	.....	0	0	.....	.....
Utrecht	30.13	765.3	30.18	766.5	31.1	— 0.5	68	NNW	.....	.....	2	.....	2	.....	.....	0	0	Slightly cl'dy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.02	762.4	30.08	764.0	28.0	— 2.2	71	S	7.6	3.4			6			0	0		
Christiania	30.05	763.2	30.21	767.2	20.7	— 6.3	36	ENE	7	3			0			0	0		
Gjæsvær	29.91	759.6	29.93	760.2	16.3	— 8.7		Calm			0		10						
Lodingen	29.97	761.1	30.01	762.3	28.2	— 2.1	59	Calm			0		0			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.76	755.0	29.92	760.0	58.6	14.8	75	WSW	8.7	3.9			4			0.177	4.5		Dr. J. A. Sampaio.
Campo Major	29.10	739.1	30.11	764.8	55.8	13.2	55	ESE	1.3	0.6			8			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.05	763.3	30.14	765.5	64.0	17.8	57	ESE	3.1	1.4			8			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.79	756.6	30.15	765.9	54.9	12.7	66	NNW	3.1	1.4			6	WNW		0	0		The Staff.
Ponta Delgada, Azores	29.95	760.9	30.03	762.7	61.2	16.2	94	WSW	9.8	4.4			10			0.047	1.2		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.93	734.8	30.09	764.2	16.2	— 8.8	57	Calm	0	0			0						Capt. Lasarew.
Archangel	30.01	762.3	30.03	762.8	8.2	—13.2	88	NNE	4	2			0						Capt. Sselliwerstow.
Astrakhan	29.91	759.8	29.83	757.7	32.5	0.3	98	Calm	0	0			10n			Blank		Heavy cld's	Capt. Wisganow.
Barnaul	29.82	757.4	30.39	771.8	— 3.1	—19.5	71	Calm	0	0			0						Meteorological Obs'y.
Dorpat	29.59	751.6	29.85	758.1	19.8	— 6.8	86	N	7	3			10n						Observatory.
Ekaterinburg	28.95	735.3	29.96	761.0	24.8	— 4.0	44	SE	4	2			c	5cs				Light clouds	Meteorological Obs'y.
Kasan	29.65	753.1	29.94	760.4	16.9	— 8.4	98	SSE	2	1			10						Observatory.
Kertch	29.65	753.2	29.67	753.7	48.9	9.4	86	S	4	2			0						Lagorio.
Kieff	28.67	728.2	29.32	744.6	32.7	0.4	94	SE	9	4			10ks;n						Cand. Fatjanow.
Lugan	29.43	747.4	29.64	752.8	34.5	1.4	87	SW	2	1			10						Meteorological Obs'y.
Moscow	29.08	738.6	29.65	753.2	27.5	— 2.5	81	SSW	7.8	3.5			10s						Meteorological Obs'y.
Nertchinsk	27.70	703.5	30.30	769.6	—11.2	—24.0	66	NW	4	2			10						Meteorological Obs'y.
Nikolaiev	29.49	749.1	29.52	749.9	36.3	2.4	84	S	22	10			7ks;n					Light clouds	Meteorological Obs'y.
Nikolaievsk, on the Amoor	29.58	751.3	29.67	753.5	9.3	—12.6	88	W	13	6			10s						1st. Lieut. Kurdakov.
Nukuss	29.45	748.0	29.69	754.1	44.2	6.8	94	SW	2.2	1.0			10n						Lieut. Iwanow.
Pekin, China	30.24	768.1	30.38	771.7	24.4	— 4.2	27	NW	16	7			0						Dr. Dobrochotow.
St. Petersburg	29.89	759.2	29.91	759.6	14.2	— 9.9	84	NNE	13	6			10n						Physical Observatory.
Tashkend, Laboratory	28.17	715.5	29.71	754.7	59.0	15	46						10						Central Physical Obs'y.
Tiflis	28.29	718.6	29.67	753.5	66.7	19.3	25	NW	4	2			0						Teich, A. M.
Warsaw	29.35	745.4	29.79	756.7	25.2	— 3.8	80	NW	16	7			10n					Light snow.	Physical Observatory.
Wilna	29.20	741.6	29.63	752.6	31.5	— 0.3	92	NNW	7	3			10					Light snow.	Astronomical Obs'y.
Yeniseisk	30.13	765.2	30.46	773.6	— 9.2	—22.9	74	Calm	0	0			0						Berg, Assistant.
																			M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.79	756.6	37.0	2.8	83	SW			2		10kts			0.291	7.4	Snow & sleet	Andrew Gibb.
Monach Lt. House, Hebrides			29.60	751.8	42	5.6	91	E			4		10			0.201	5.1	Overcast	J. Youngclause.
North Unst, Shetland Isl'ds			29.67	753.6				SW			7		10			Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.91	759.7	30.02	762.4	49.6	9.8	63	SE	2.7	1.2			0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.98	761.4	30.03	762.8	59.7	15.4	60	SE	2.2	1.0		2	3	NW		0	0	Cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.08	687.9			44.6	7.0	71	SW	7.6	3.4		0	9			0	0	Almost cov'd	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.84	707.2	30.10	764.5	48.2	9.0	64	NE	2.5	1.1			10			0	0	Covered	The Staff.
Murcia, Met. Obs'y ‡	29.92	759.9	30.07	763.7	62.6	17.0	39	NNW	4.2	1.9		0	3			0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.05	737.9	29.95	760.9	50.9	10.5	98	SSW	13.6	6.1			10			0.142	3.6	Misty	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.09	764.3	30.16	766.0	68.9	20.5	59	NNW	8.0	3.6			10ks;n		NNW	0.012	0.3	Cloudy	Benito Vines, S. J.
Manilla, Phillippine Islands	29.94	760.4	29.99	761.7	78.8	26.0	71	SE	2.6	1.2			2ck			0	0	Fair	Federico Faura, S. J
San Fernando, Naval Obs'y	30.01	762.3	30.11	764.8	57.7	14.3	62	NW	4.7	2.1		5	5	NW	NW	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.91	759.6	30.00	761.9	70.9	21.6	95	SW	0	0		6k	7km	SW	SW	0.207	5.25	Raining	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.91	759.7	30.05	763.4	74.2	23.4	80	NW	2.9	1.3		7ck		SE		Inap.	Inap.	Covered	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.19	766.8	30.23	767.8	— 7.6	—22.0	100	Calm			0		0			0	0		
Umea	30.21	767.3	30.26	768.6	9.7	—12.4	77	Calm			0		0			0	0		
Hernosand	30.21	767.4	30.25	768.7	3.4	—15.9	76	Calm			0		0			0	0		
Stockholm	29.89	759.2	30.07	763.7	16.2	— 8.8	82	NE			6		10			0.031	0.8	Light snow	
Wisby	29.78	756.3	29.84	757.8	26.6	— 3.0	87	ENE			4		10			0.102	2.6		
Sub-Series.																			
Upsala	29.98	761.5	30.07	763.7	13.6	—10.2	92	N	14.8	6.6			7	ENE	NNE	0.006	0.15		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.63	727.2	30.13	765.2	32.4	0.2	79	N			4		0			0	0	Clear	The Observatory.
Zurich	28.44	722.3	30.16	766.1	29.5	— 1.4	60	W			1		4			0	0	Fair	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. +0.8 mm.; Ther. —3°.4 cent.; Hum. +7 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.57	751.1	44.8	7.1	96	N	6	2.5			10		N	0.945	24.0	Raining	The Observatory.
Valona			29.46	748.3	51.3	10.7		NW			1		10			0.71	18.	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.94	760.4	65.1	18.4	67	SW			3		7k		SW	0.05	1.3		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.
By authority of the SECRETARY OF WAR.
Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	29.33	745.0	29.41	747.0	32	0.0	79	W	10	4.5			10s		W	0.56	14.2	Cloudy	
Alpena, Michigan	28.98	736.1	29.68	753.9	0	—17.8	70	NW	15	6.7		0	5s		NW	0.50	12.7	Fair	
Atlanta, Georgia	28.86	733.0	30.06	763 5	31	— 0.6	60	NW	3	1.3			10s		NW	0	0	Cloudy	
Atlantic City, New Jersey	29.63	752.6	29.64	752.8	32	0.0	59	W	14	6.3		8k	0	W		0.14	3.6	Fair	
Attou Id., Alaska‡	30.10	764.5			34	1.1	79	NE	26	11.6			10s		NE	0	0	Cloudy	
Augusta, Georgia	29.88	758.9	30.09	764.3	38	3.3	63	S	5	2.2		0	5s		W	0	0	Fair	
Baltimore, Maryland	29.70	754.4	29.75	755.6	31	— 0.6	79	SW	12	5.4		5cs	0	S		0.30	7.6	Fair	
Barnegat, New Jersey	29.59	751.6	29.61	752.1	32	0.0	89	W	26	11.6		8ck	0	W		0.47	11.9	Clearing	
Benton, Montana	27.54	699.5			— 7	—21.7	100	NE	8	3.6			1on		Calm	0.04	1.0	Light snow.	
Bismarck, Dakota	28.60	726.4	30.46	773.7	— 7	—21.7	100	NW	20	8.9		10cs	0	Calm		0	0	Cloudy	
Boise City, Idaho	27.11	688.6	30.07	763.8	39	3.9	91	S	1	0.4			10s		SW	0.28	7.1	Cloudy	
Boston, Massachusetts	29.10	739.1	29.25	742.9	39	3.9	73	SW	20	8.9			10s		SW	1.92	48.8	Cloudy	
Brackettville, Texas	29.29	744.0	30.45	773.4	25	— 3.9	62	NE	1	0.4		0	0			0	0	Clear	
Brownsville, Texas	30.48	774.2	30.53	775.4	38	3.3	91	N	4	1.8		5c	0	Calm		0	0	Fair	
Buffalo, New York	28.74	730.0	29.44	747.8	22	— 5.6	86	SW	17	7.6			1on		Calm	0.39	9.9	Light snow.	
Burlington, Vermont	28.96	735.6	29.25	742.9	32	0.0	89	SW	7	3.1			1on		SW	0.39	9.9	Light snow.	
Cairo, Illinois	29.86	758.4	30.29	769.4	20	— 6.7	85	NW	11	4.9			10s		NW	0.11	2.8	Cloudy	
Campo, California	27.54	699.5	30.11	764.8	28	— 2.2	88	SE	4	1.8		0	0			0	0	Clear.	
Camp Thomas, Arizona	27.40	696.0			26	— 3.3	75	Calm			0	0	0			0	0	Clear.	
Cape Henry, Virginia	29.75	755.6	29.77	756.1	36	2.2	71	W	20	8.9		0	0			0.09	2.3	Clear	
Cape May, New Jersey																			
Castroville, Texas	29.68	753.9	30.46	773.7	27	— 2.8	76	NW	1	0.4		0	0			0	0	Clear	
Cedar Keys, Florida	30.15	765.8	30.18	766.6	41	5.0	65	NW	16	7.2		0	0			0	0	Clear	
Champaign, Illinois	29.15	740.4	30.01	762.2	16	— 8.9	83	W	21	9.4			1on		NW	0.21	5.3	Light snow.	
Charleston, S. Carolina	29.99	761.7	30.05	763.3	41	5.0	57	SW	8	3.6		0	0			0	0	Clear	
Charlotte, N. Carolina	29.07	738.4	29.92	760.0	30	— 1.1	68	W	4	1.8		0	Sm'e		Calm	0	0	Clear	
Chattanooga, Tennessee	29.31	744.5	30.17	766.3	24	— 4.4	74	NW	11	4.9			10s		W	Inap.	Inap.	Cloudy	
Cheyenne, Wyoming	24.01	609.8	29.95	760.7	10	—12.2	79	SW	8	3.6			10s		Calm	0	0	Cloudy	
Chicago, Illinois	29.22	742.2	29.96	761.0	15	— 9.4	82	NW	6	2.7			10s		Calm	0.04	1.0	Cloudy	
Chincoteague, Virginia	29.71	754.6	29.73	755.1	36	2.2	53	W	19	8.5		5k	0	W		0.42	10.7	Fair	
Cincinnati, Ohio	29.33	745.0	30.02	762.5	22	— 5.6	72	W	14	6.3			10ks		W	0.04	1.0	Cloudy	
Cleveland, Ohio	28.95	735.3	29.71	754.6	21	— 6.1	93	SW	18	8.0			1on		Calm	0.04	1.0	Light snow.	
Coleman City, Texas	28.66	728.0	29.50	749.3	21	— 6.1	57	NW	8	3.6		5c	0	Calm		0	0	Fair	
Columbus, Ohio	29.00	736.6	29.88	758.9	18	— 7.8	84	W	26	11.6			1on		W	0.11	2.8	Light snow.	
Concho, Texas	28.49	723.6	30.34	770.6	19	— 7.2	85	Calm	0	0		2c	0	Calm		0	0	Clear	
Corsicana, Texas	30.07	763.8	30.59	777.0	26	— 3.3	63	NW	4	1.8		0	0			0	0	Clear	
Davenport, Iowa	29.38	746.2	30.06	763.5	18	— 7.8	84	NW	6	2.7			10s		Calm	0.33	8.4	Cloudy	
Dayton, Washington T'y	28.33	719.6	30.08	764.0	26	— 3.3	100	SW	6	2.7			1on		Calm	0.22	5.6	Light snow.	
Deadwood, Dakota	25.46	646.7			— 5	—20.6	63	SW	1	0.4		8cs	0	Calm		0	0	Cloudy	
Decatur, Texas	29.28	743.7	30.57	776.5	21	— 6.1	86	N	8	3.6		0	0			0	0	Clear	
Delaware Breakwater, Del	29.66	753.4	29.69	754.1	31	— 0.6	75	W	29	13.0		0	5ks		W	0.11	2.8	Fair	
Denison, Texas	29.67	753.6	30.55	776.0	21	— 6.1	86	NW	8	3.6		0	0			0	0	Clear	
Denver, Colorado	24.83	630.7	30.05	763.3	7	—13.9	65	S	2	0.9		8ck	0	W		0	0	Fair	
Des Moines, Iowa	29.28	743.7	30.25	768.3	11	—11.7	80	N	10	4.5		0	5s		Calm	0.02	0.5	Fair	
Detroit, Michigan	28.97	735.8	29.69	754.1	24	— 4.4	87	W	16	7.2			10s		Calm	0.10	2.5	Cloudy	
Dodge City, Kansas	27.72	704.1	30.27	768.8	9	—12.8	57	N	4	1.8		0	0			0	0	Clear	
Dubuque, Iowa	29.30	744.2	30.05	763.3	15	— 9.4	65	NW	9	4.0			10s		Calm	0.01	0.3	Cloudy	
Duluth, Minnesota	29.52	749.8	30.27	768.8	5	—15.0	87	NE	6	2.7		0	2s		Calm	0	0	Clear	
Eagle Pass, Texas	29.72	754.9	30.52	775.2	31	— 0.6	69	E	2	0.9		0	0			0	0	Clear	
Eagle Rock, Idaho	25.19	639.8	29.84	757.9	31	— 0.6	100	SW	24	10.7			1on		Calm	0.33	8.4	Light snow.	
Eastport, Maine	28.98	736.1	29.05	737.9	40	4.4	100	S	15	6.7			Fog		S	1.56	39.6	Dense fog	
Edinburg, Texas																			
El Paso, Texas	26.41	670.8			24	— 4.4	48	N	2	0.9		0	0			0	0	Clear	
Erie, Pennsylvania	28.80	731.5	29.53	750.0	25	— 3.9	100	W	25	11.2			1on		Calm	0.25	6.3	Light snow.	
Escanaba, Michigan	29.28	743.7	30.01	762.2	5	—15.0	75	NW	22	9.8			10s		NW	0.23	5.8	Cloudy	
Florence, Arizona	28.52	724.4	30.12	765.0	43	6.1	51	E	3	1.3		0	0			0	0	Clear	
Fort Apache, New Mexico	25.12	638.0	30.57	776.5	24	— 4.4	48	NE	2	0.9		0	0			0	0	Clear	
Fort Assinniboine, Montana	27.51	698.7			— 8	—22.2	58	SW	12	5.4			10s		Calm	0	0	Cloudy	
Fort Bennett, Dakota	28.83	732.3			— 6	—21.1	61	NW	6	2.7			10ks		NW	0	0	Cloudy	
Fort Buford, Dakota	28.44	722.4	30.61	777.5	—12	—24.4	75	Calm	0	0		10cs	0	Calm		0	0	Cloudy	
Fort Custer, Montana	27.00	685.8			— 3	—19.4	66	N	4	1.8			10s		Calm	0	0	Cloudy	
Fort Davis, Texas	25.35	643.9	30.31	769.9	20	— 6.7	70	SW	1	0.4		0	0			0	0	Clear	
Fort Elliott, Texas	27.54	699.5	30.10	764.5	7	—13.9	31	Calm	0	0		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.90	759.4	30.50	774.7	13	—10.6	81	NW	12	5.4		0	0			0	0	Clear	
Fort Grant, Arizona	25.28	642.1	30.08	764.0	33	0.6	51	Calm	0	0		0	0			0	0	Clear	
Fort Griffin, Texas	29.11	739.4	30.50	774.7	22	— 5.6	58	NW	4	1.8		0	0			0	0	Clear	
Fort Keogh, Montana	27.87	707.9			—10	—23.3		Calm	0	0		10cs	0	Calm		0	0	Cloudy	
Fort McKavett, Texas	28.11	714.0	30.24	768.1	17	— 8.3	67	Calm	0	0		4c	0	Calm		0	0	Fair	
Fort Macon, North Carolina	29.87	758.7	29.88	758.9	38	3.3	54	W	16	7.2		0	0			0.68	17.3	Clear	
Fort St. Michaels	30.42	772.7	30.46	773.7	4	—15.6	100	N	20	8.9		0	0						
Fort Missoula, Montana	26.64	676.6			17	— 8.3	83	E	5	2.2			1on		E	0.18	4.6	Light snow.	
Fort Shaw, Montana	26.61	675.9			— 4	—20.0	100	E	5	2.2			1on		Calm	0.13	3.3	Light snow.	
Fort Sill, Indian Territory	29.18	741.2	30.42	772.7	17	— 8.3	67	NW	10	4.5		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.57	725.7			0	—17.8	84	NW	6	2.7			10ks		NW	0	0	Cloudy	
Fort Verde, Arizona					28	— 2.2	66	W			1	5cs	0	W		0	0	Fair	
Fredericksburg, Texas	28.69	728.7	30.41	772.4	24	— 4.4	74	NW	1	0.4		0	0			0	0	Clear	
Galveston, Texas	30.46	773.7	30.50	774.7	35	1.7	53	NW	10	4.5		0	0			0	0	Clear	
Grand Haven, Michigan	29.14	740.1	29.83	757.7	19	— 7.2	85	NW	18	8.0			1on		Calm	0.17	4.3	Light snow.	
Hatteras, North Carolina	29.81	757.2	29.83	757.7	39	3.9	64	W	25	11.2		0	0			0.86	21.8	Clear	
Helena, Montana	25.89	657.6			— 2	—18.9	100	W	4	1.8			1on		Calm	0.13	3.3	Heavy snow	
Henrietta, Texas	29.48	748.8	30.52	775.2	20	— 6.7	56	NW	4	1.8		0	2s		Calm	0	0	Clear	
Indianapolis, Indiana	29.14	740.1	29.97	761.2	18.5	— 7.5	68	W	6	2.7			10s		W	0.03	0.8	Cloudy	
Indianola, Texas	30.50	774.7	30.52	775.2	37	2.8	53	N	25	11.2		2cs	0	N		0	0	Fair	
Jacksboro, Texas	29.30	744.2	30.54	775.7	25	— 3.9	75	NW	5	2.2		5cs	0	W		0	0	Fair	
Jacksonville, Florida	30.11	764.8	30.16	766.1	45	7.2	53	W	7	3.1		0	0			0	0	Clear	
Keokuk, Iowa	29.42	747.3	30.12	765.0	17	— 8.3	75	NW	14	6.3			10s		Calm	0.02	0.5	Cloudy	
Key West, Florida	30.14	765.5	30.17	766.3	65	18.3	63	NW	18	8.0		10k	0	NW		Inap.	Inap.	Cloudy	
Kittyhawk, North Carolina	29.79	756.7	29.81	757.2	39	3.9	46	W	17	7.6		0	0			0.33	8.4	Clear	
Knoxville, Tennessee	29.06	738.1	30.14	765.5	21	— 6.1	85	W	14	6.3			1on		Calm	0.02	0.5	Light snow.	
La Crosse, Wisconsin	29.35	745.5	30.16	766.1	8	—13.3	78	N	15	6.7			10s		Calm	0.04	1.0	Cloudy	
La Mesilla, New Mexico	26.28	667.5	30.42	772.7	22	— 5.6	45	NE	1	0.4		0	0			0	0	Clear	
Laredo, Texas	30.07	763.8	30.44	773.2	41	5.0	74	Calm	0	0		5c	0	Calm		0	0	Fair	
Leavenworth, Kansas	29.44	747.8	30.39	771.9	7	—13.9	77	NW	12	5.4		0	0			0	0	Clear	
Lewiston, Idaho	29.16	740.7	29.83	757.7	31	— 0.6	100	W	8	3.6			1on		Calm	0.01	0.3	Light snow.	
Little Rock, Arkansas	30.05	763.3	30.40	772.1	22	— 5.6	72	NW	10	4.5		0	0			0	0	Clear	
Los Angeles, California	29.80	756.9	30.18	766.6	45	7.2	76	E	2	0.9		0	0			0	0	Clear	
Louisville, Kentucky	29.48	748.8	30.08	764.0	21	— 6.1	71	SW	16	7.2			10s		Calm	Inap.	Inap.	Cloudy	
Lynchburg, Virginia	29.14	740.1	29.85	758.2	28	— 2.2	66	W	7	3.1		0	0			0	0	Clear	
Madison, Wisconsin	28.94	735.1	30.01	762.2	9	—12.8	78	NW	20	8.9			1on		Calm	0.02	0.5	Cloudy	
Marquette, Michigan	29.27	743.4	30.05	763.3	2	—16.7	72	NW	23	10.3			10s		N W	1.21	30.7	Cloudy	
Mason, Texas	28.80	731.5	30.76	781.3	19	— 7.2	70	NW	2	0.9		0	0			0	0	Clear	

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—CONTINUED.																			
Memphis, Tennessee	29.89	759.2	30.26	768.6	23	— 5.0	86	W	2	0.9			10s		Calm	0	0	Cloudy	
Milwaukee, Wisconsin	29.19	741.4	29.98	761.5	10	—12.2	79	NW	16	7.2			10s		NW	0.25	6.3	Cloudy	
Mobile, Alabama	30.22	767.6	30.30	769.6	32	0.0	59	N	8	3.6		0	0			0	0	Clear	
Montgomery, Alabama	29.99	761.7	30.24	768.1	30	— 1.1	78	W	12	5.4		8k	0	W		0	0	Fair	
Moorhead, Minnesota	29.36	745.7	30.48	774.2	—10	—23.3	77	N	12	5.4		0	5s		N	0.02	0.5	Fair	
Morgantown, W. Virginia	28.79	731.3	29.80	756.9	32	0.0	79	SW	24	10.7			10n		SW	0.03	0.8	Light rain	
Mt. Washington, N. H.	22.90	581.6	29.26	743.2	20	— 6.7	100	W	9	4.0			10n;fog		C;W	0.36	9.1	Light snow.	
Nashville, Tennessee	29.63	752.6	30.21	767.3	22	— 5.6	72	W	9	4.0			10n		SW	0.07	1.8	Light snow.	
New Haven, Connecticut	29.31	744.5	29.42	747.3	33	0.6	51	W	14	6.3		0	2s		W	2.21	56.1	Fair	
New London, Connecticut	29.35	745.5	29.40	746.7	36	2.2	80	W	12	5.4			10s		W	1.45	36.8	Cloudy	
New Orleans, Louisiana	30.30	769.6	30.36	771.1	37	2.8	53	NW	14	6.3		0	0			0	0	Clear	
Newport, Rhode Island	29.31	744.5	29.36	745.7	36	2.2	80	SW	20	8.9			10s		SW	1.43	36.3	Cloudy	
New River, N. Carolina					38	3.3	67	W			4	2k	0	Calm				Clear	
New Shoreham, Rhode I'd	29.37	746.0	29.40	746.7	36	2.2	71	SW	22	9.8			10s		SW	0.77	19.6	Cloudy	
New York, New York	29.36	745.7	29.54	750.3	28	— 2.2	88	W	21	9.4		0	2s		Calm	1.13	28.7	Fair	
Norfolk, Virginia	29.75	755.6	29.81	757.2	38	3.3	54	SW	12	5.4		0	0			Inap.	Inap.	Clear	
North Platte, Nebraska	27.38	695.4	30.33	770.4	— 4	—20.0	83	NW	10	4.5		2c	0	Calm		0	0	Clear	
Olympia, Washington T'y	30.11	764.8	30.15	765.8	34.5	1.4	95	SE	2	0.9		5k	2s	NW	Calm	0.80	20.3	Cloudy	
Omaha, Nebraska	29.14	740.1	30.37	771.4	5.5	—14.7	88	NW	26	11.6		0	8s		NW	0	0	Fair	
Oswego, New York	29.08	738.6	29.41	747.0	28	— 2.2	77	SW	20	8.9			10n		Calm	0.47	11.9	Light snow.	
Pensacola, Florida	30.26	768.6	30.30	769.6	34	1.1	70	NW	5	2.2		0	0			0	0	Clear	
Philadelphia, Pa	29.58	751.3	29.63	752.6	30	— 1.1	78	W	20	8.9		5k	0	W		0.40	10.2	Fair	
Phœnix, Arizona	29.00	736.6	30.90	784.8	38	3.3	72	E	1	0.4		5ck	0	N		0	0	Fair	
Pike's Peak, Colorado	17.53	445.2	29.74	755.4	5	—15.0	37	NW	40	17.9		5cs	0	Calm		0	0	Fair	
Pilot Point, Texas	29.76	755.9	30.69	779.5	21	— 6.1	86	NW	3	1.3		0	0			0	0	Clear	
Pioche, Nevada	24.02	610.1	29.79	756.7	28	— 2.2	48	S	1	0.4			10ks		Calm	0	0	Cloudy	
Pittsburg, Pennsylvania	28.91	734.3	29.75	755.6	22	— 5.6	86	SW	16	7.2			10n		SW	0.09	2.3	Light snow.	
Port Huron, Michigan	28.95	735.3	29.64	752.8	17	— 8.3	83	NW	8	3.6			10n		NW	0.19	4.8	Light snow.	
Portland, Maine	29.10	739.1	29.14	740.1	38	3.3	91	SW	7	3.1			Fog			2.11	53.6	Dense fog	
Portland, Oregon	30.17	766.3	30.24	768.1	39	3.9	77	SW	7	3.1		0	8s		NW	1.09	27.7	Fair	
Portsmouth, N. Carolina					38	3.3	72	W	32	14.3		2k	0	W		0.68	17.3	Clear	
Prescott, Arizona	24.83	630.7	30.19	766.8	26	— 3.3	52	SE	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	30.13	765.3	30.15	765.8	58	14.4	58	N	20	8.9			10ks		NW	Inap.	Inap.	Cloudy	
Red Bluff, California	29.84	757.9	30.20	767.1	48.0	8.9	89	S	7	3.1			10n		Calm	0.14	3.6	Light rain	
Rio Grande City, Texas	30.33	770.4	30.57	776.5	35	1.7	80	N	5	2.2		0	0			0	0	Clear	
Rochester, New York	28.79	731.3	29.41	747.0	24	— 4.4	87	W	18	8.0			10s		W	0.16	4.1	Cloudy	
Roseburg, Oregon	29.78	755.9	30.36	771.1	37.5	3.1	86	Calm	0	0		0	0			0.46	11.7	Clear	
Sacramento, California	30.12	765.0	30.20	767.1	49	9.4	93	SE	12	5.4			10n		Calm	0.15	3.8	Light rain	
St. Louis, Missouri	29.55	750.6	30.18	766.6	14	—10.0	82	W	17	7.6			10n		Calm	0.08	2.0	Light snow.	
St. Paul, Minnesota	29.31	744.5	30.21	767.3	11	—11.7	80	NW	8	3.6		2cs	2ks	NW	NW	0	0	Fair	
Salt Lake City, Utah	25.63	651.0	29.96	761.0	39	3.9	55	SE	8	3.6			10s		Calm	0	0	Cloudy	
San Antonio, Texas	29.80	756.9	30.57	776.5	32	0.0	69	Calm	0	0		0	0			0	0	Clear	
San Diego, California	30.12	765.0	30.20	767.1	44	6.7	84	N	3	1.3		0	0			0	0	Clear	
Sandusky, Ohio	29.02	737.1	29.72	754.9	23	— 5.0	86	SW	24	10.7			10n		Calm	0.04	1.0	Light snow.	
Sandy Hook, New Jersey	29.52	749.8	29.55	750.6	29	— 1.7	67	W	36	16.1		8cs	0	W		0.40	10.2	Cloudy	
San Francisco, California	30.09	764.3	30.10	766.1	53	11.7	93	SE	12	5.4			10n		S	0.44	11.2	Light rain	
Santa Fé, New Mexico	23.32	592.3	29.86	758.4	15	— 9.4	65	N	10	4.5		0	0			0	0	Clear	
Savannah, Georgia	30.01	762.2	30.10	764.5	41	5.0	57	W	10	4.5		0	0			0	0	Clear	
Shreveport, Louisiana	30.24	768.1	30.51	774.9	24	— 4.4	74	NW	10	4.5		0	0			0	0	Clear	
Silver City, New Mexico	24.38	619.2	29.97	761.2	20	— 6.7	56	N	1	0.4		0	0			0	0	Clear	
Smithville, North Carolina	29.94	760.5	29.97	761.2	37	2.8	63	W	3	1.3		0	1ks		Calm	0.01	0.3	Clear	
Socorro, New Mexico	25.54	648.7	29.60	751.8	31	— 0.6	69	E	2	0.9		0	0			0	0	Clear	
Springfield, Illinois	29.37	746.0	30.09	764.3	18	— 7.8	76	W	12	5.4			10n			0.06	1.5	Light snow.	
Springfield, Massachusetts	29.23	742.4	29.36	745.7	35	1.7	70	NW	9	4.0			10s		Calm	1.48	37.6	Cloudy	
Stockton, Texas	27.24	691.9	30.24	768.1	26	— 3.3	88	S	8	3.6		0	0			0	0	Clear	
St. Vincent, Minnesota	29.58	751.3	30.53	775.4	—16	—26.7	100	NW	12	5.4		0	0			0	0	Clear	
Thatcher's Island, Mass	29.21	741.9	29.26	743.2	33	0.6	79	SW	20	8.9			10ks		W	1.83	46.5	Cloudy	
Toledo, Ohio	29.02	737.1	29.72	754.9	27	— 2.8	88	W	12	5.4			10s		Calm	0.03	0.8	Threatening	
Tucson, Arizona	27.63	701.8	30.18	766.6	39	3.9	31	S	4	1.8		0	0			0	0	Clear	
Umatilla, Oregon	29.79	756.7	30 32	770.1	28.5	— 1.9	95	NW	4	1 8			10s		Calm	0.20	5.1	Cloudy	
Uvalde, Texas	29.50	749.3	30.41	772.4	25	— 3.9	62	Calm	0	0		0	0			0	0	Clear	
Vicksburg, Mississippi	30.11	764.8	30.39	771.9	29	— 1.7	67	NW	13	5.8		0	0			0	0	Clear	
Visalia, California	29.81	757.2	30.19	766.8	48.5	9.2	74	SE	3	1.3		8c	0	NW		0	0	Fair	
Washington, D. C.	29.61	752.1	29.73	755.1	29	— 1.7	67	NW	7	3.1		0	0			0.50	12.7	Clear	
Wickenburg, Arizona					29	— 1.7	56	NW			1	2c	2s	Calm	Calm	0	0	Clear	
Wilmington, N. Carolina	29.89	759.2	29.95	760.7	39	3.9	53	NW	6	2.7		0	0			0	0	Clear	
Winnemucca, Nevada	25.59	650.0	29.95	760.7	42	5.6	66	SW	14	6.3			10s		SW	0.01	0.3	Cloudy	
Wood's Holl, Mass	29.30	744.2	29.34	745.2	36	2.2	80	SW	36	16.1		0	8ks		W	1.30	33.0	Cloudy	
Yankton, Dakota	29.07	738.4	30.54	775.7	2	—16.7	72	NW	17	7.6			10s		NW	0.17	4.3	Cloudy	
Yuma, Arizona	29.99	761.7	30.14	765 5	42	5.6	58	NE	1	0.4		0	0			0	0	Clear	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.07	560.6			52.5	11.4	82	Calm	0	0		10kjck	0			0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jam ica	29.85	758.2	30.17	766.3	66	18.9	78	E				0	0						
Havana, Cuba, W. I.	30.11	764.8	30.16	766.1	69	20.6	60	N	16.8	7.5			10n		N	0	0	Cloudy	Charles Hasselbrink
Jakobshavn, Greenland	29.33	745.0	29.39	746.5	—17.3	—27.4		W			2		0			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	30.02	762.5	30.03	762.7	68.4	20.2	72	Calm	0	0		0	0			0	0	Fine	Robert Johnstone.
Navassa, W. I.	29.94	760.5	30.02	762.5	74	23.3	68	NE	16.5	7.4		2k	5s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	75	23.9	90	E			2		8ks	E		1.160	29.46	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.44	747.8	30.00	762.0	78	25.6	84	N			1		10ks		N	0	0	Cloudy	Francesco J. Cisnero
Rivas, Nicaragua					75.2	24		SE			5	0	1ks		SE	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.02	762.5	30.05	763.3	73	22.8	75	NNE	3.6	1.6		0	0			0	0	Clear	Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	29.38	746.3	29.45	747.9	—17.7	—27.6		W			4		3			0	0		K. Elberg.
York Factory, B. A.	30.04	763.0	30.09	764.3	—15.0	—26.1	71.8	SW	10	4.5		2c	0	S		0	0	Fair	J. Fortescue & W. W

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.71	754.6	52	11.1	73	W			5-6		6	WNW						Showery	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 19′, E. 51° 37′	30.03	762.7	71	21.7	62	NNW			5		1	N				4	N	Squally	Comm. G. Hand.
H. M. S. Bittern, Constantinople, Turkey			47	8.3		Calm			0		10					1	SW	Raining	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	30.22	767.6	73	22.8	56	SSW			6		5					6	SSW	D. clouds	Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, Syracuse, Sicily	29.67	753.6	55	12.8		WNW			6		1	W						Squally	Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 30° 59′, E. 122° 21′	30.13	765.3	42	5.6	91	Calm			0		0?					2	NW	Overcast?	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt, C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.98	761.5	63.0	17.2	89	SSW			2-4		1	S						Blue sky	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 34′ E. 81° 14′	29.86	758.4	80.5	26.9		N			1		1	N				2	NE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Capt. F. St. J. Garforth.
H. M. S. Egeria, Singapore, Malay Peninsula	29.88	758.9	80	26.7		NE			2		2	NE				1	E	D. clouds	Capt. W. H. Maxwell.
H. M. S. Emerald																			Comm. C. Johnstone.
H. M. S. Encounter, Shanghai, China	30.21	767.3	39	3.9	82	WNW			2-4		9							Squally	Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.85	758.2	77	25.0	77	NW			3-5		5							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 10° 50′, W. 61° 42′	30.00	762.0	78	25.6		NNE			3		3	NNE				2	NE	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo, N. 31° 21′, W. 64° 24′	30.05	763.3	70	21.1	90	S			4		6	S				4	S	D. clouds	Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Panama, Panama	29.99	761.7	75	23.9	81	NNW			3		3							Showery	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	28.96?	735.6?				NW			4									Raining	Capt. L. F. Jones.
H. M. S. Griffin, N. 24° 12′, W. 63° 35′	30.03	762.7	72	22.2	85	ENE			2		6	ENE				2	NE	D. clouds	
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris, Besika Bay, Turkey,	29.51	749.5	52	11.1	93	NNE			2		4	N				2	N	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 149° 57′	30.12	765.0	66	18.9	89	Calm			0		10	NE						D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton,
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Africa	29.80	756.9	82	27.8	96	Calm			0		3							D. clouds	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 36′, E. 122° 02′	30.19	766.8	42.0	5.6	83	NW			4		10					2	E	Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 35° 57′, W. 5° 20′	30.09	764.3	56	13.3	87	E			2-3		3	NW				5	NW	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, Vigo, Spain	30.04	763.0	56	13.3	90	SSW			5		10	W		Blank				Overcast	Capt. H. Rawson.
H. M. S. Modeste, N. 5° 24′, E. 100° 20′	29.89	759.2	79	26.1	95	S			2		1							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 11° 35′, W. 62° 45′	29.93	760.2	76	24.4	82	N			3		9	NNE				1	N	D. clouds.	Capt. E. Drummond.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, S. 3° 55′, W. 10° 35′	29.81	757.2	82	27.8	87	ENE			1		2					4	Var.	D. clouds.	Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.79	756.7	83	28.3	99	Calm			0		5							D. clouds.	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	30.14	765.5	56	13.3	75	SSE			1		5							D. clouds.	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.47	748.5	78	25.6	82	Calm			0	6ck						1	ESE	D. clouds.	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	30.00	762.0	68	20.0	95	Ca'm			0		3					1	SW	D. clouds.	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos, N. 6° 49′, W. 58° 11′	29.96	761.0	79	26.1	84	NNE			2		9					Sm'h		D. clouds.	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, N. 36° 30′, E. 14° 38′	29.66	753.4	49	9.4	85	WNW			8		7					7	WNW	Showery.	Capt. P. H. Colomb.
H. M. S. Triumph, S. 27° 57′, W. 72° 10′	29.97	761.2	63.5	17.5	86	SSW			1		10					3	SW	Misty.	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.02	762.5	75	23.9		N			1		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark. Busrah, Palestine	30.03	762.7	68.5	20.3	52	WNW			1		1							Blue sky.	Capt. F. Negham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Bulama, Senegambia	29.89	759.1	81.9	27.7	92	SE			2		1							Blue sky	S. C. da Silva Costa, Comd't.
Sado. St. Paul de Loando, Africa	29.84	758.0	84.2	29.0	73	WNW			3		4		W			2	W	D° clouds	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis. ‡																			Com. Th. Uher.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction							
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.	Character.	Dir'n from.		
N. Yard, Pensacola, Fla	30.37	771.4	39	3.9	55	NW	3	1.3			5		NW	0	0			Fair	
N. Yard, Portsmouth, N. H.	29.21	741.9	35	1.7	70	SW	7	3.1		5c?		SW		1.8	46.			Raining?	
Naval Hospital, Yokohama, Japan	29.97	761.2	43.5	6.4	63	S			1		10		W	0	0			Cloudy	
Adams, N. 4° 40′, W. 80° 40′	29.95	760.7	81	27.2	74	N			4		2		N			Mod.	N	Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.14	765.5	52	11.1	86	SE			2		10			0.06	1.5			Drizzling	
Alert, Hong-Kong, China *.	29.97	761.2	67	19.4	79	ENE			1		10		E	0	0	Sm'h		Cloudy.	
Alliance, New Orleans, La	30.37	771.4	40	4.4	56	WNW			2		0			0	0	Sm'h		Clear.	
Ashuelot, Tientsin, China	30.28	769.1	31	— 0.6	100	NNW			5		5							Fair	
Colorado, New York, N. Y	29.60	751.8	30	— 1.1	100	WNW	8	3.6			10			0.02	0.5			Cloudy	
Constitution, N. Yard, League I'd., Pa			30	— 1.1		W	17	7.6			2		WNW					Squally	
Franklin, Norfolk, Va	29.75	755.6	36	2.2	55	WSW	12	5.4			0			0	0			Clear	
Galena, Naples, Italy	29.58	751.3	47	8.3	62	NE			3		5		NE			Mod.	NE	Fair	
Independence, N. Yard, Mare I'd, Cal	30.18	766.6	51	10.6	93	E	3.6	1.6			8		E	0.02	0.5			Cloudy	
Jamestown, Sitka, Alaska *	30.33	770.4	30	— 1.1		E			2		8			0	0	Sm'h		Cloudy	
Kearsarge, Warrington, Florida	30.27	768.8	40	4.4	73	W			4		0					Sm'h		Clear	
Lackawanna, Callao, Peru †.	30.10	764.5	70	21.1	95	SE			1		5		SE	0	0			Fair	
Marion, Sandy P't, Terra del Fuego	29.17	740.9	51	10.6	65	W			3		10		WSW	Mod	erate	Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	29.50	749.3	22	— 5.6		W	10	4.5			10							Snowing	
Minnesota, New York, N. Y	29.55	750.6	31	— 0.6		W			3-6		2		W					Misty	
Monocacy, Shanghai, China	30.19	766.8	40	4.4	82	WNW			5		10		Calm					Cloudy	
New Hampshire, Port Royal, S. C	30.02	762.5	43	6.1	67	W	16	7.2			0			0	0			Clear	
Nipsic, Barcelona, Spain	30.05	763.3	60	15.6	49	SSW			1		2		SW			Sm'h		D. clouds	
Onward, Callao, Peru †.	29.93	760.2	70	21.1	90	Calm			0		5		N			Long	W	Fair	
Palos, Shanghai, China	30.23	767.8	38	3.3	81	NW			3		10							Overcast	
Passaic, Washington, D. C	29.76	755.9	32	0.0	89	W			4		0							Clear	
Pensacola, Panama, Panama	30.01	762.2	76	24.4	86	WNW			2		5			c	0	Sm'h		Fair	
Portsmouth, Washington, D. C	29.73	755 1	29	— 1.7	56	W			2		2		W					Clear	
Powhatan, New York, N. Y	29.53	750.0	29	— 1.7	78	W			4		2		W					Fair	
Quinnebaug, Villafranca, France	29.85	758.2	52	11.1	54	SW			2		1					Sm'h		Clear	
Richmond, Hong-Kong, China	30.13	765.3	66	18.9	100	ENE			2		8			0	0			Cloudy	
Saratoga, Baltimore, Md	29.71	754.6	27	— 2.8	100	NW			3		0			0	0			Clear	
Shenandoah, Montevideo, Uruguay *	29.96	751 0	71	21.7	80	NNE			3		0					Sm'h		Clear	
St. Louis, League Island, Pa	29.73	755.1	29	— 1.7	67	WNW	29	13.0			8		WNW	0.04	1.0			Fair	
Swatara, Nagasaki, Japan †	29.98	761.5	48	8.9	78	E			1		10		ESE			Sm'h		Raining	
Tennessee, New Orleans, La	30.35	770.9	38	3.3	54	NW	15	6.7			2		NW	0	0			Clear	
Ticonderoga, N. Yard, Mare Id., Cal.	30.21	767.3	53	11.7	100	E			1		10		SE	0.02	0.5			Cloudy	
Trenton, Villafranca, France *	29.83	757.7	62	16.7	18	SW			2-3		0			0	0	Sm'h		Clear	
Vandalia, St. George, Granada, W.I.	29.90	759.4	76	24.4	91	NNW			1		5		Calm					Fair	
Wabash, Boston, Massachusetts	29.31	744.5	37	2.8	81	SW	18	8.0			8		W	1.12	28.4			Cloudy	
Wachusetts, Panama, Panama *.	29.61	752.1	74	23.3	90	NNW			2		2		S			Sm'h		Fair	
Wyoming, Villafranca, France	29.87	758.7	51	10.6	59	SSW			2		0					Sm'h		Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mil.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mil.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
S. 3° 55′, W. 22° 15′	29.92	760.0	83.5	28.6	79	SE			2		3							D. clouds	Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle
Barque Belleisle,																			
N. 18° 17′, W. 44° 28′	29.97	761.2	78.5	25.8	70	S			2		3							D. clouds	Capt. A. J. Brown.
British Merchant. ‡																			Capt. E. J. Molony.
Chin Yang, ‡																			
N. 11° 21, W. 46° 16′	29.95	760.7	81.7	27.6	70	E			2		6							D. clouds	Capt. H. Youlden.
S. S. Cipero,																			
Port of Spain, Trinidad, W.I	29.99	761.7	77	25.0		E			1		3							D. clouds	Capt W. N. Lailey.
City of Agra, ‡																			
S. 17° 32′, W. 30° 11′	30.01	762.2	85.0	30.0	76	ENE			2		3							D. clouds	Capt. T. Young.
Barque Commewyne, ‡																			
N. 34° 03′, W. 57° 10′	30.20	767.1	63.8	17.7	66	SE			4		10							Overcast	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 9° 41′, W. 12° 56′	29.97	761.2	83	28.3	67	ESE			2		4							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart,																			
N. 3° 47′, E. 90° 06′	29.88	758.9	79.5	26.4	78	ENE			2		5							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡																	WSW;		
N. 52° 56′, W. 26° 46′	29.88?	758.9?	50	10.0	85	SW			4		9					4	WNW	Overcast	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope, ‡																			
S. 4° 50′, W. 35° 20′	29.94	760.5	81.5	27.5	91	SE			3	5c		N				Con.	N;E	D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 17° 40′, W. 52° 22′	29.96	761.0	76.8	24.9	94	SSE			4		7					4	NNW	D. clouds	Capt. H. W. Dyke.
Barque Merlola,																			
N. 37° 06′, W. 7° 16′	30.13	765.3	58.5	14.7	76	ENE			2		10							Overcast	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cumbria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee, ‡																			
N. 2° 11′, W. 23° 55′	29.91	759.7	79.7	26.5	96	SSE			2		7							D. clouds	Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven ‡																			Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton,																			
N. 26° 24′, E. 34° 49′	30.02	762.5	71.5	21.9	55	Calm			0		0							Blue sky	Capt. R. J. Blacklin.
S. S. Yorkshire,																			
N. 34° 10′, W. 11° 25′	30.09	764.3	61	16.1	83	Var.			2		3					4	WNW	D. clouds	
ALLAN LINE.																			
A. Schumacher & Co.																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE.																			
Ch. G. Francklyn.																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE.																			
Ismay, Imrie & Co.																			
S. S. Adriatic																			Capt. J. W. Jennings
S. S. Baltic,																			
N. 41° 56′, W. 59° 41′ †	29.64	752.8	60	15.6	94	S			5		8		S;SW			R'gh	S	Squally	Capt. H. Parsell.
S. S. Britanic,																			
N. 51° 02′, W. 14° 39′ †	29.70	754.4	53	11.7		S			4		10		SE			Long	NW	Showery	Capt. H. Perry.
S. S. Celtic,																			
N. 49° 29′, W. 31° 27′ †	29.13	739.9	45	7.2		NW			6		8		NW	Sho	wers	H'vy	NW	Cloudy	Capt. Benj. Gleadell
S. S. Germanic,																			
Sandy Hook, N. J. †	29.49	749.0	32	0.0		WNW			4		5		W	0	0	Sm'h		Clear	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen.																			
A. Schumacher & Co.																			
S. S. Hermann																			Capt. H. Baur.
S. S. Köln, ‡																			
N. 49° 19′, W 32° 15′	29.13	739.9	44.6	7.0		NW			6-8		10		NW	Mod erate rain	Mod erate squalls	Cross	NW	Cloudy	
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			Capt. Albert Fredholm.
Ship Pern ‡																			Capt. O. F. Skötdebrand.

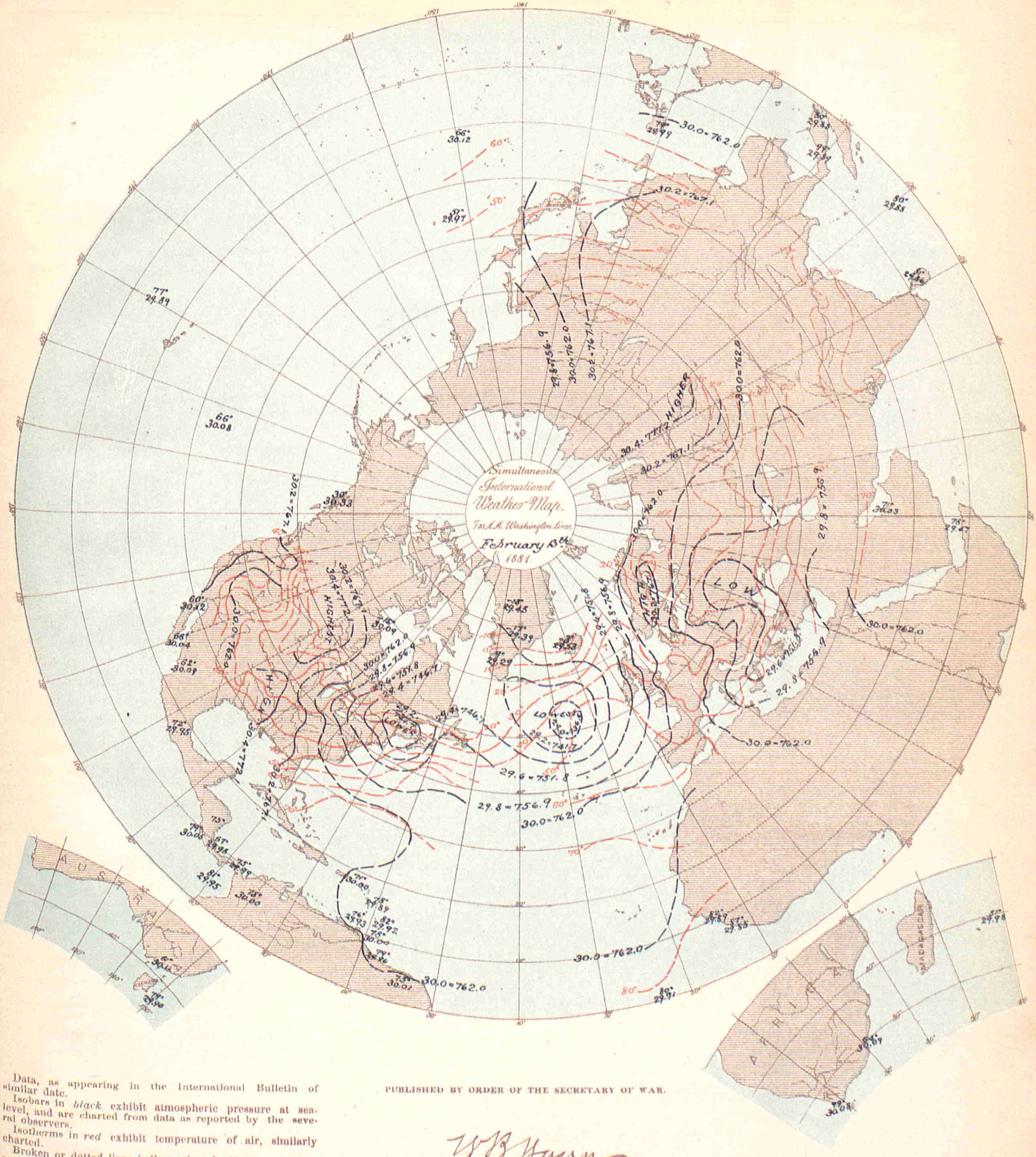
UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. ‡ Liverpool, England....*†	29.74	755.4	43	6.1	92	SE.			6		10		SE					Raining	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 42° 17′, W. 62° 38′.....†	29.58	751.3	41	5.0	82	NW			6		8		NW	0	0	R'gh	NW	Cloudy	Capt. R. W. Sargent.
S. S. Ohio, N. 41° 20′, W. 64° 05′...†*	29.52	749.8	58	14.4	94	SSW			6		10		SSW	Hea	vy	L'ge	SSW	Raining	Wm. Shakford, 1st Off'r
S. S. Pennsylvania, Philadelphia, Pa.....†	29.53	750.0	30	— 1.1	89	W			4		Fog			1.	25.			Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 23° 41′, W. 108° 07′....†	30.04	763.0	66	18.9	74	NW			4		2		NW	0	0	Short	WNW	Clear.	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 36° 17′, E. 153° 44′.....†	29.97	761.2	51	10.6	72	NNW			5		8		NW	0	0	High	NNW	Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 33° 00′, E. 134° 25′..†*	30.23	767.8	38	3.3	54	SSE			1		10		SE			Sm'h	NW	Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 32° 54′, W. 145° 48′.....	30.08	764.0	66	18.9	94	S			4		8		S	0.09	2.3	Sl't	S	Cloudy	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Otterendorp.*																			
S. S. Columbia.....																			Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon.....†	30.14	765.5	39.0	3.9	91	NE			1		2		WNW					Clear	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, Santa Barbara, Cal.....†	30.12	765.0	47	8.3	77	NW			2		0					Sm'h		Clear	Capt. J. N. Ingalls.
S. S. Idaho, ‡ N. 43° 20′, W. 124° 50′.... †	29.92	760.0	50	10.0	100	SE			4		10		SE			H'vy	SW	Rainy	C. E. Lyons, 1st Officer.
S. S. Orizaba.....																			
S. S. Senator, N. 35° 43′, W. 121° 24′....†	30.22	767.6	53	11.7	93	SE			1		8		S			Sm'h		Misty	Thos. Wallace.
S. S. State of California, N. 43° 30′, W. 124° 25′.... †	30.33	770.4	45	7.2	92	NW			6		2		W	0	0	Short	SW	Clear	Capt. G. Debney.
S. S. Victoria, N. 44° 33′, W. 125° 05′....†	30.24	758.1	46	7.8	84	NW			4		0					Long	NW	Clear	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 13° 36′, W. 159° 53′.....	29.89	759.2	77	25.0	100	NNE			3		5		NE			Mod.	NE	Fair	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.....†	30.35	770.9	72	22.2	90	E			2		5		E	0	0			Fine	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 9° 43′, W. 85° 35′.....†	30.05	763.3	79	26.1	74	NE			4		2		NE	0	0	Sm'll	NE	Clear	Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China.....†	30.09	764.3	63	17.2	83	NE			3		8		SE	0	0	Sm'h		Cloudy	Capt. G. G. Berry.
S. S. City of Sidney.....																			Capt. H. C. Dearborn.
S. S. City of Tokio.....																			A. L. Ritchie, 2d Officer.
S. S. Colima, N. 16° 36′, W. 99° 36′.....†	29.95	760.7	72	22.2	85	N			3		2		Calm	0	0	Mod.	wsw	Fair	Capt. R. R. Searle.
S. S. Dakota.....																			Capt. D. E. Griffiths.
S. S. Granada, N. 28° 18′, W. 114° 20′....†	30.12	765.9	60	15.6	76	NW			6		0			0	0	R'gh	NW	Clear.	
S. S. Zealandia, S. 33° 50′, E. 152° 47′.....	29.86	758.4	70	21.1	75	SW			6		5		W			Sm'h	SW	Fine	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland, ‡ N. 49° 13′, W. 25° 20′.....†	29.03	737.3	52	11.1	86	SW			9		5		WSW			Cross	W	Showery	Capt. Sam'l Jackson.
S. S. Nederland..... ‡																			Capt. S. Stokes.
S. S. Rhynland, ‡ Portland, England.....	29.96	761.0	43	6.1		SSE			6		10		S	0.1	3.	Chop	S	Hazy	Capt. W. Geo. Randle.
S. S. Vaderland.....																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, ‡ Jacksonville, Florida...†	30.09	764.3	65	18.3		SW			5		0			0	0			Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va.....	29.76	755.9	36	2.2	70	WSW	12	5.4			0			0	0			Clear	Capt J. Jorgensen.
Sch'r Annie R. Lewis, Martinique, W. I..... ..†	29.89	759.2	78	25.6		NNE			1		2		N	0	0	Long	NNE	Clear	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 36° 20′, W. 4° 22′.....†*	30.22	767.6	62	16.7		ESE			3		0					Sm'h		Fair	Capt. B. F. Woodbury.
Brigantine George, ‡ N. 28° 59′, W. 73° 05′.....†	30.22	767.6	74	23.3		SW			5		2		WSW	0	0	Mod.	E	Clear	Capt. W H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va.†	29.84	757.9	35	1.7	70	WSW	3	1.3		0	2c			0	0			Clear	
Ship Jumna.....																			Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 2° 30′, W. 25° 50′.. .†	30.17	756 3	72	22.2	90	NE			3		8		NE	0	0	Sm'h		Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 14, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.97	761.2	65.8	18.8	70	W			1		4			0	0	Cloudy	Dr. Ollive.
Nemours			29.95	760.8	59.4	15.2	93	NW			4		0			0	0	Clear.	Raynard.
Algiers			30.04	763.1	57.2	14.0	71	E			2		0			0	0	Clear.	Nicolas.
La Calle			30.01	762.2	57.2	14.0	90	NW			2		4			0	0	Cloudy	Fonfrède.
Tunis			29.94	760.5															Jacques.
Sfax			30.06	763.5															Gau.
Saida			30.04	762.9	67.6	19.8	26	E			4		0			0	0	Clear.	Dumas.
Tebessa			30.03	762.7	52.2	11.2	22	WNW			1		0			0	0	Clear.	Watrin.
Geriville																			Lonchamp.
Laghouat			30.07	763.7	59.4	15.2	62	SE			2		3			0	0	Pretty fair	Herbin.
Biskra			30.10	764.4															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.20	767.1	30.29	769.3	57.0	13.9	71	S	8	3.6			1			0	0	Very fine	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania			30.20	767.1	71	21.7		SW			2		4k			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.50	749.4	30.09	764.2	28.8	— 1.8	81	Calm			0		8			0.012	0.3		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.17	740.9	29.98	761.6	22.3	— 5.4	98	W	16.1	7.2			10			0.004	0.1		Dr. Wiersbicki.
Eperies	28.99	736.3	29.91	759.7	30.6	— 0.8	57	NW			3		cs		SE	0	0		Julius Mikolik.
Gratz‡	28.75	730.2	30.07	763.7	28.9	— 1.7	84	NW			2		0			0	0		Andreas Rospini.
Hermannstadt	28.44	722 4	29.95	760.7	27.0	— 2.8	92	N			3		9			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.70	728.9	30.13	765.3	23.4	— 4.8	90	Calm			0		10			0	0		The Staff.
Lemberg	28.79	731.3	29.83	757.6	27.3	— 2.6	74	NW			3		10			0.024	0.6		Dr. T. Stanecki.
Pola	29.88	758.9	30.00	761.9	41.4	5.2	45	ENE			1		2			0	0		I. R. HydrographicOffice.
Szathmar	29.51	749.5	29.97	761.1	28.0	— 2.2	81	NW			3		7			0	0		Beicht Peter, S. J.
Szegedin	29.69	754.2	29.99	761.7	28.4	— 2.0	78	NW			1		6			0	0		Karl Stancel.
Trieste	29.86	758.5	29.93	760.1	40.1	4.5	48	E			1		2			0	0	Clear	P. Busin.
Vienna	29.35	745.4	30.11	764.7	25.9	— 3.4	65	NW			2		8			0.028	0.7		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.74	755 5	29.95	760.8	34.3	1.3	73	SE			3	1		N		0	0		Royal Observatory.
Furnes	29.86	758.4	29.88	759.0	35.1	1.7	72	SSE			4		5			0	0		M. E. de Cae.
Maeseyck	29.89	759 1	30.01	762.3	31.5	— 0.3	74	E			2		0			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 15, 1882.

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

BRITISH SERIES.

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

Aberdeen	29.61	752.1	29.71	754.6	36.4	2.4	90	SSE	33	14.8			10			0.470	11.94	Drizzling	W. Boswell.
Armagh, Observatory	29.20	741.7	29.43	747.5	44.0	6.7	92	SE	21	9.4			10					Gloomy	S. Call.
Bidston, Liverpool Obs'y			29.54	750.3	37.8	3.2	92	ESE	32	14.3			10					Overcast	John Hartnup.
Bolton, Sharples	29.08	738.6	29.62	752.3	34.6	1.4	94	SE	5	2.2			10					Raining	Thomas Mackereth.
Bradford, Yorkshire	29.26	743.2	29.66	753.4	34.1	1.2	92	SE			2		10			0.98	24.9	Raining	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.93	760.2	29.96	761.0	84	28.9	61				1		8					Overcast	Pvt. J. Surgenor, A. H. C.
Cardington			29.70	754.4	37.0	2.8	90	SE			2.0		10					Drizzling	John McLaren.
Chatham, School M. E.	29.63	752.6	29.77	756.1	37.1	2.8	73	SE			2		10			Blank		Gloomy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.22	742.2	29.44	747.8	50	10.0	98	S			4		10					Rain & fog	The Staff.
Fort Napier, Natal	27.82	706.6	30.04	763.0	64.3	17.9	94	NE			1		6					Overcast	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.61	752.1	29.85	758.2	88	31.1	88	NE			1		5					D. clouds	C. E. Keane.
Galway, Queen's College			29.32	744.7				NE			1		10					Gloomy	J. O'Donaghadue.
Gibraltar, Mediterranean	29.85	758.2	29.91	759.7	61.4	16.3	95	W			4		7					D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.39	746.5	29.59	751.6	35.8	2.1	84	E			4		10			Blank		Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.56	750.8	29.74	755.4	38.6	3.7	83	SE			1		10					Raining	The Staff.
Guernsey	29.36	745.7	29.58	751.3	44	6.7	92	SSE			6		10					Raining	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.70	754.4	29.74	755.4	38.3	3.5	88	SE	14	6.3			10					Raining	The Met'g'l Office.
Leicester, Museum	29.39	746.5	29.65	753.1	37.8	3.2	98	SW			3		10					Raining	J. E. Carryer.
Malta, Mediterranean	29.82	757.4	29.90	759.4	55.2	12.9	60	NW			3		3					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			30.13	765.3	66.2	19.0	63	N			1		10					Overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.12	739.6	29.66	753.4	36.0	2.2	94	SSE			3		10					Raining	Robert Pate.
Oxford, Radcliffe Obs'y	29.42	747.3	29.68	753.9	38.7	3.7	100	SE			4		10					Gloomy	The Staff.
Plymouth	29.41	747.0	29.48	748.8	48.6	9.2	99	SE			4		10					Drizzling	John Merrifield.
Sandwick Manse, Orkneys			29.58	751.3	37.4	3.0	94	S	48	21.5			10					Raining	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.66	753.4	29.73	755.1	38.4	3.6	93	NNE			3		10					Drizzling	Serg't W. H. Lyne.
Sheffield	29.41	747.0	29.70	754.4	34.6	1.4	100	SE			2		10			0.51	13.0	Raining	W. F. Cooper.
Silloth Rectory	29.55	750.6	29.58	751.3	37.2	2.9	93	SE			2		10			0.223	5.67	Raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.62	752.3	35.5	1.9	90	E	13	5.8			10					Raining	Rev. S. J. Perry.
Strathfield Turgiss	29.46	748.3	29.68	753.9	39.1	3.9	91	SE			2		10					Raining	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	29.39	746.5	29.45	748.0	52	11.1	93	S			6		10					Raining	W. Newcombe.
Valencia, Observatory	29.33	745.0	29.35	745.5	50.7	10.4	96	SE	7	3.1			10			Blank		Misty	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.53	750.0	29.57	751.1	23	— 5.0	71	NW	11	4.9			10n			0.420	10.67	Threatening	H. J. Cundall, C. E.
Chatham, N. B.*	29.58	751.3	29.64	752.8	12.5	—10.8	83	NW	8	3.6		0	0			0.27	6.9	Clear	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.81	757.2	29.84	757.9	6	—14.4	72	NW	6	2.7		0	2ks			0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.70	754.4	30.69	779.5	—22	—30.0	100	NW	5	2.2		0	0			0	0	Clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.48	748.8	29.61	752.1	32	0.0	81	W	9	4.0			10ks		W	0.063	1.60	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.79	756.7	30.17	766.3	2	—16.7	92	NW	4	1.8		2c	0			0.01	0.3	Clear	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.92	760.0	30.14	765.5	3	—16.1	68	W				0	0			0.01	0.3	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.58	751.3	30.38	771.6	— 7	—21.7	59	W	4	1.8		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.57	751.1	30.35	770.9	7	—13.9	100	Calm	0	0		0	0			0.01	0.3	Clear	H. Morgan.
Port Stanley, Ontario	29.63	752.6	30.35	770.9	10	—12.2	78	NW	4	1.8			5ks		NW	0.02	0.5	Cloudy	M. Payne.
Quebec, Quebec*	29.61	752.1	29.97	761.2	0	—17.8	70	NW			3	0	2s		NW	0.03	0.8	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.80	756.9	30.32	770.1	— 9	—22.8	87	Calm	0	0		0	0			0	0	Clear	K. Stewart.
Saugeen, Ontario*	29.57	751.1	30.38	771.6	1	—17.2	91	NE	6	2.7		5cs	0			0.15	3.8	Fair	W. H. McIntyre.
St. Andrews	29.65	753.1	29.71	754.6	19	— 7.2	78	NW	7	3.1		0	0			0.01	0.3	Clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.43	747.5	29.47	748.5	31	— 0.6	87	W	8	3.6			10n			0.73	18.5	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.93	760.2	30.36	771.1	5	—15.0	90	NW	11	4.9		0	0			Inap.	Inap.	Clear	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.62	752.3	29.69	754.1	26	— 3.3	87	NW	18	8.0		10k	0	NW		Inap.	Inap.	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.27	743.4	29.52	749.8	33	0.6	100	SW	2	0.9		5k	10s			1.15	29.2		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony					69.0	20.6	93	SE	24.4	10.9			0			0	0	Hazy	John Duthie.
Cape St. Francis Lt. House	30.04	763.0																	
Cape Town, C. G. H. Obs'y	29.76	755.9	29.80	756.9	81.5	27.5	50	S	3.2	1.4		0	2s			0	0		The Staff, for D. Gill.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.32	770.0	30.34	770.6	34.7	1.5	89	ENE	2.2	1.0		4ck		SW		0	0	Cloudy	M. Marc Dechevrens, S J

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	25.25	666.7	29.97	761.2	60.8	16.0	84	NE			4		0			0	0	Clear	Federico Maison.

DANISH SERIES.

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

Copenhagen	30.11	764.7	30.15	765.9	17.8	— 7.9	89	NE	9	4			1						Oversergent Fischer.
Fanöe	30.17	766.2	30.19	766.7	19.9	— 6.7	97	ESE			4		10						Overloerer Lauridsen.
Godthaab, Greenland	29.06	738.2	29.11	739.3	15.3	— 9.3	97	NNE			4		10					Snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.50	749.4	29.55	750.5	25.5	— 3.6	87	S			7		8						A. O. Thorlacius.
Thorshavn	29.52	749.9	29.56	750.8	40.1	4.5	90	Calm	0	0			10					Raining	Overloerer Bergh.
Vestervig	30.11	764.9	30.21	767.3	18.1	— 7.7		ENE			2		5						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.21	742.0	29.87	758.6	49.6	9.8	54	SE			2	c				0	0		M. Labroue, Director.
Alençon	29.31	744.4	29.86	758.4	35.7	2.6	93	S			2		10		S	0.094	2.4	Raining	M. Nicot, Director.
Arras, Engineer School	29.68	753.8	29.95	760.6	32.7	0.4	88	SSE					km						M. Klein, Commandant.
Avignon, Normal School	29.89	759.2	29.97	761.2	43.7	6.5	49	NNE			1		0			0	0	Very clear	M. Giraud, Director.
Bar-sur-Seine	29.35	745.6	29.93	760.2	41.9	5.5	46	SSE			1		5n			0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.61	752.2	29.89	759.2	37.0	2.8	55	E			1		10			0	0	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.09	738.8	30.02	762.5	32.0	0	82	ENE			1		0			0	0	Clear	M. Gobin, Director.
Bordeaux, Observatory	29.49	749.1	29.76	755.8	52.5	11.4	71	SSE			1		8		SSW	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.26	743.3	29.83	757.7	41.0	5	84	ENE			1		1		ENE	0	0	Clear	M. Postel, Director.
Brest, Naval Observatory	29.35	745.6	29.60	751.8	51.1	10.6	97	SW			3		10		SW	0.276	7.00	Raining	M. de Rermaree, Dir.
Caen, Normal School	29.59	751.5	29.67	753.5	41.2	5.1	97	SSE			2		10			0.138	3.5	Covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.65	753.0	29.98	761.4	36.0	2.2	93	S			1		2		W	0	0	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.45	748.1	30.02	762.5	33.1	0.6	75	S			1		0			0	0	Clear	M. Grimard.
Clermont-Ferrand Obs'y	28.49	723.6	29.87	758.7	43.3	6.3	42	N			1		2			0	0	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.07	738.3	29.92	760.0	40.6	4.8	81	NE			2		1	NE	NE	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.10	739.2	30.02	762.5	30.2	—1	73	E			1					0	0		Dr. Coulet, Director.
Gap, Normal School	27.35	694.8	29.94	760.5	48.6	9.2	46	N			1		5		N			½ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.82	732.0	29.96	761.0	48.6	9.2	46	N			1		2		NE	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.19	741.5	29.99	761.8	35.6	2		SSE			1		0			0	0	Clear	M. Ablard, Director.
Guéret, Normal School	28.25	717.6	29.80	756.9	59.0	15	58	SE			1		n		NW	0	0		M. Rivoir, Director.
Lamballe, Normal School	29.38	746.2	29.66	753.4	44.8	7.1	98	E			1		10		E	0.291	7.4	Light rain	M. Ollitrault, Director.
Lescar, Normal School	29.01	736.8	29.66	753.3	63.0	17.2	59	E			1		1		N	0	0	Clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.56	750.8	29.66	753.4	51.1	10.6	97	SSE			3		10			0.51	13.0	Covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.86	733.1	29.93	760.1	36.9	2.7	62	SE			1		Haze		E	0	0	Hazy	M. André, Director.
Mans, Normal School	29.52	749.7	29.83	757.7	36.9	2.7	98	S			3		10			0.08	2.	Covered	M. Piboen, Director.
Marseille, Observatory	29.66	753.3	29.93	760.2	52.2	11.2	57	SW			1		1		SW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.62	625.4	29.86	758.4	40.6	4.8	60	W	7.4	3.3			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.82	757.4	29.93	760.2	43.9	6.6	57	NNE			2		0			0	0	Clear	M. Galzin, Director.
Nancy, Normal School	29.20	741.7	30.00	762.1	30.9	—0.6	73	N			1		0			0	0	Clear	M. Hasse.
Nantes, Observatory	29.60	751.9	29.76	756.0	44.6	7.	97	SE			1		10		SW			Rainy	M. Larocque, Director.
Nice	29.91	759.8	29.95	760.7	53.2	11.8	56	E			3		10	E	E	0	0	Covered	Capt. Boissière, Director.
Perpignan, Observatory	29.79	756.7	29.90	759.4	47.8	8.8	68	E	9.4	4.2			3		SE	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.31	566.6			35.8	2.1							1		SW	0	0	Clear	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.94	735.0	30.04	762.9	40.3	4.6	74	N			1		1	N	N	0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.94	633.4			26.4	—3.1	90	S			1		2			0	0	Misty	M. Alluard, Director.
Rochefort, Naval Obs'y	29.78	756.3	29.81	757.1	49.6	9.8	86	SSE			1		10			0	0	Covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.56	750.7	29.78	756.3	42.8	6	94	SE			1		10			0.055	1.4	Covered	M. Mouillot, Director.
Rodez, Normal School	27.67	702.7	29.82	757.4	48.6	9.2	25	E			1	ick				0	0		M. Richard, Director.
Rouen, Normal School	29.74	755.4	29.82	757.4	35.6	2.0	62	SE			1		5			0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.56	750.7	29.71	754.7	41.2	5.1	92	S			1		10		SSE	0.059	1.5	Raining	M. Delaplanche, Dir.
Saint Maur, Observatory	29.72	754.9	29.89	759.1	36.0	2.2	60	SSE			2		10		W	0	0		M. Renou, Director.
Toulouse, Observatory	29.13	739.8	29.85	758.1	47.7	8.7	62	SSE			2		1		W	0	0	Clear	M. Baillaud, Director.
Tours	29.64	752.9	29.82	757.3	43.3	6.3	67	ESE			1		10			0.012	0.3	Covered	M. de Tastes.
Versailles, Observatory	29.36	745.8	29.85	758.3	35.6	2.0		S			1		10			0.004	0.11	Covered	Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

GERMAN SERIES.

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

Bamberg	29.22	742.3	30.09	764.3	26.6	—3.0	84	E			2		0			0	0		Prof. Dr. Hoh.
Berlin	29.97	761.1	30.15	765.8	24.8	—4.0	68	NW			4		8			0	0		Prof. Dr. Arndt.
Breslau	29.49	749.1	30.02	762.6	21.2	—6.0	85	WNW			4		10			0.068	1.73	Light snow	Royal University Obs'y.
Carlsruhe	29.61	752.0	30.06	763.4	29.1	—1.6	71	E			2		0			0	0		Albert Senz.
Cassel	29.46	748.2	30.07	763.7	26.6	—3.0	76	E			2		4	NE		0	0		Dr. H. Möhl.
Frankfort on the Main	29.82	757.3	30.21	767.2	28.8	—1.8	62	E			1		1			0	0		Physical Society.
Friedrichshafen	28.57	725.6	30.09	764.2	26.2	—3.2	76	S			2		0			0	0		Chief Telegrapher Wilhelm.
Hamburg	30.10	764.4	30.17	766.2	23.4	—4.8	65	SSE			3		2			0	0		Dr. R. Kleeman.
Kiel	30.14	765.5	30.15	765.9	21.0	—6.1	94	NE			2		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.73	755.1	30.18	766.6	22.3	—5.4	80	SW			0-1		10			0.004	0.1	Hazy	Prof. Dr. Bruhns.
Magdeburg	29.93	760.2	30.17	766.3	23.4	—4.8	81	N			1		9ks	NE		0.004	0.1		Dr. Assmann.
Memel	29.86	758.5	29.91	759.7	21.9	—5.6	90	NE			4		8cs						Reinbrecht & Issermann.
Munich	28.19	716.1	30.06	763.4	23.2	—4.9	64	Calm			0		1			0.004	0.1		Central Station.
Neufahrwasser	29.93	760.1	29.94	760.5	30.2	—1.0	88	NNW			3		10			0.083	2.1		A Lothes.
Neustadt, Palatinate	29.52	749.8	30.05	763.2	30.2	—1.0										0	0		Dicknether.
Stuttgart	29.07	738.4	30.02	762.4	27.0	—2.8	87	S			1		0			0	0		Prof. Dr. Schoder.
Thorn	29.71	754.6	29.89	759.3	29.5	—1.4	80	NW			5		10			0.106	2.7		Dr. O. Cunerth.
Weissenburg, Bavaria	28.52	724.4	30.04	763.0	25.3	—3.7	54	NW			4			E		0.012	0.3		Prof. Kemlein.
Wustrow	30.15	765.7	30.17	766.3	21.9	—5.6	100	N			2		10			0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.30	744.2	29.70	754.4	49.5	9.7		NE			0.5		5					⅛ clear.	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.88	758.9	29.93	760.2	75.8	24.3	62	SW	24.0	10.7			0			0	0	Blue sky	
Deesa	29.42	747.3	29.90	759.3	82.2	27.9	23	S	8.5	3.8			10	S		0	0	Overcast	
Bombay	29.87	758.6	29.90	759.6	78.7	25.9	77	WNW	11.0	4.9			6		NW	0	0	D. clouds	
Poona, Yarrowda	28.00	711.3	29.84	757.8	85.8	29.9	22	W	14.0	6.3			9	WNW		0	0	D. clouds	
Belgaum	27.33	694.2	29.86	758.5	77.7	25.4	38	SW	6.0	2.7			9	W		0	0	D. clouds	
Lahore	29.17	740.9	29.93	760.2	72.8	22.7	31	Calm	0.8	0.4			7			0	0	D. clouds	
Roorkee	29.01	736.9	29.93	760.2	71.8	22.1	42	Calm	1.0	0.4			4			0	0		
Agra	29.39	746.5	29.94	760.6	82.3	27.9	22	W	2.3	1.0			0			0	0		
Nagpur	28.87	733.3	29.91	759.6	86.2	30.1	37	Calm	2.3	1.0			9		W	0	0	D. clouds	
Jubbulpore	28.59	726.2	29.98	761.4	74.8	23.8	28	NE	1.9	0.8			9		W	0	0	Overcast	
Lucknow	29.59	751.5	29.97	761.2	77.4	25.2	38	N	1.8	0.8			2		[illegible]	0	0	D. clouds	
Allahabad	29.65	753.1	29.97	761.2	74.8	23.8	40	NW	1.8	0.8			2	SW		0	0	D. clouds	
Patna	29.79	756.7	29.98	761.5	69.2	20.7	63	W	1.3	0.6			4	W	W	0	0	D. clouds	
Hazaribagh	27.93	709.5	29.98	761.5	70.3	21.3	30	N	6.6	3.0			10			0	0	D. clouds	
Cuttack	29.88	758.9	29.96	761.0	80.0	26.7	45	NE	0.5	0.2			0			0	0	Blue sky	
Calcutta, Alipore	29.95	760.7	29.97	761.3	74.3	23.5	45	WSW	1.0	0.4			7	SW		0	0	D. clouds	
Goalpara	29.58	751.4	30.00	762.0	68.1	20.1	60	Calm	5.3	2.4			0			0	0	Blue sky	
Chittagong	29.89	759.3	29.99	761.6	74.0	23.3	58	WNW	2.6	1.2			0			0	0	Blue sky	
Sibsagar	29.69	754.2	30.04	763.0	66.3	19.1	77	NW	1.6	0.7			0			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.57	751.1	29.99	761.8	37.8	3.2	46	Calm	0	0			0			0	0		Prof. Giovanni Clodig
Milan	29.43	747.5	29.97	761.1	40.6	4.8	55	ESE	3.8	1.7			0			0	0		Prof. Schiaparelli.
Padua	29.89	759.1	30.00	762.0	39.4	4.1	69	ENE	4.3	1.9			1	SE		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.02	737.2	29.96	760.9	39.7	4.3	49	ESE	2.5	1.1			0			0	0		Prof. P. F. Denza.
Genoa	29.77	756.1	29.97	761.1	48.2	9.0	51	SE	7.4	3.3			6	S		0	0		Prof. G. M. Garibaldi.
Mondovi	27.99	710.8	29.97	761.1	35.6	2.0	52	W			2		0			0	0		Prof. D. C. Bruno.
Pesaro	29.95	760.7	30.00	762.0	41.7	5.4	58	SW	8.1	3.6			4	W		0	0		Prof. Luigi Guidi.
Florence	29.71	754.7	29.97	761.3	41.0	5.0	30	NE			2					0	0		Cav. F. Meucci.
Leghorn	29.90	759.4	29.98	761.6	44.2	6.8	44	SSE	2.5	1.1			3			0	0		Prof. P. Monte.
Rome	29.79	756.6	29.97	761.2	45.9	7.7	22	NNW	6.9	3.1			0			0	0		Prof. P. S. Ferrari.
Lecce	29.60	751.7	29.85	758.2	40.5	4.7	68	WNW	18.1	8.1			4	W		0	0		Prof. C. de Giorgi.
Cosenza	28.97	735.9	29.89	759.1	40.6	4.8	64	NE	0.7	0.3			3	NNE		0	0		Prof. D. Conti.
Cagliari	29.79	756.6	29.98	761.6	51.3	10.7	46	Calm			1		0			0.031	0.8		Prof. A. Pacinotti.
Palermo	29.71	754.5	29.96	760.9	51.3	10.7	51	NW	11.9	5.3			7	NW		0.409	10.4		Prof. G. Ciacciatore.
Syracuse	29.84	757.8	29.88	758.9	53.1	11.7	76	NE	4.9	2.2			9	NNE		0	0		Prof. Vincenzo Gulliano
Sub-Series.																			
Naples, S. R	29.39	746.6	29.94	760.4	44.2	6.8	50	ENE	1.8	0.8			1	NW		0	0		Prof. F. Brioschi.
Stelvio	22.00	559.0			12.6	—10.8	38	SE			2		0			0	0	Clear	P. F. Denza.
Valdobbia	21.89	556.2			19.2	— 7.1	43	E			2		0			0	0	Clear	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y	30.16	766.0	30.17	766.3	37.8	3.2	73	NNE	1.7	0.8			0			0	0	Clear	K. Sasaki.
Kioto	29.93	760.2	30.12	765.0	34.9	1.6	90						2s			0.095	2.41	Clear	
Nagasaki, I. M. Obs'y	30.02	762.5	30.24	768.1	39.6	4.2	73	NW	1.2	0.5		ck	9s			0	0	Cloudy	S. Takehayashi.
Tokei Obs'y, Yeddo	29.85	758.4	29.93	760.2	34.3	1.3	95	NNW	1.8	0.8		2c;cs	0	WSW		0.195	4.95	Fair	The Staff.
Wakayama	30.05	763.3	30.11	754.8	38.9	3.8	92	E	2.7	1.2		ck	7ks		W	0.106	2.69	Cloudy	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.83	757.7	30.02	762.5	77.0	25.	86	ENE	9.0	4.0			10n		NE	1.16	29.5	Overcast	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.44	620.7	30.26	768.6	48.8	9.3	83	N			1	7c	0	SW		0	0	Cloudy	Prof. M. Leal.
Mazatlan	29.77	756.2	30.04	762.9	66.0	18.9	71	E	0	0		10cs	0	WSW		0	0	Covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.10	586.6	30.25	768.3	44.4	6.9	72	Calm	0	0		5cs	0			0	0	Foggy	The Staff.
Pabellon, Aguascalientes	23.91	607.3	30.00	761.9	48.6	9.2	64	SW			1	9cs	0	SW		0	0	Cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.46	595.8	30.52	775.2	35.8	2.1	33	Calm	0	0		0	2		SE	0	0	Clear	Prof. P. Spina.
San Luis Potosi	24.20	614.8	30.32	770.1	37.8	3.2	49	NE	0.9	0.4		0	7		SW	0	0	Cloudy	G. Barroeta, M. D.
Tlacotalpam	30.32	770.0	30.34	770.3	59.7	15.4	90	SW	0.9	0.4		4	6		E	0.024	0.6	Covered	Prof. M. Cházaro.
Zacatecas	22.54	572.6	30.30	769.8	43.2	6.2	71	Calm	0	0		0	9ks			0	0	Very cloudy	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.96	760.9	29.96	760.9	34.9	1.6		SE			4					0	0		
Groningen	30.00	762.1	30.06	763.5	25.9	— 3.4		ESE			3					0	0		
Helder	30.02	762.4	30.02	762.4	26.4	— 3.1		ESE			5					0	0		
Hellevoetsluis	29.97	761.2	29.97	761.2	31.5	— 0.3	93	ESE			4					0	0		
Utrecht	29.98	761.5	30.03	762.7	30.0	— 1.1	72	ESE			2		2			0	0	Lt'ly cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.05	763.2	30.11	764.8	30.9	— 0.6	66	Calm	0	0		4				0	0		
Christiania	30.18	766.5	30.34	770.6	11.1	—11.6	57	ENE	7	3		0				0	0		
Gjæsvær	29.85	758.2	29.87	758.8	30.7	— 0.7		SSE			4	10							
Lodingen	29.99	761.7	30.04	762.9	34.5	1.4	59	W			6	10				0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores																			Dr. J. A. Sampaio.
Campo Major	28.86	733.1	29.87	758.8	51.4	10.8	77	SSE	4.9	2.2		9				0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.98	761.4	30.05	763.6	64.4	18.0	60	ESE	2.5	1.1		5				0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.46	748.2	29.85	758.3	54.9	12.7	89	SSW	19.2	8.6		10				0.004	0.1		The Staff.
Ponta Delgada, Azores	30.13	765.2	30.20	767.0	57.2	14.0	53	N	8.0	3.6		4				0.110	2.8		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.82	732.1	29.97	761.1	20.8	— 6.2	61	Calm	0	0		2							Capt. Lasarew.
Archangel	30.37	771.3	30.39	771.8	— 4.4	—20.2	84	Calm	0	0		0							Capt. Sselitwerstow.
Astrakhan	30.08	764.0	30.00	761.9	34.5	1.4	89	ENE	7	3		10cp						Heavy cl'ds.	Capt. Wisganow.
Barnaul	29.71	754.6	30.25	768.4	13.5	—10.3	59	Calm	0	0		0							Meteorological Obs'y.
Dorpat	29.77	756.1	30.03	762.7	18.1	— 7.7	85	NE	16	7		9k;n							Obervatory.
Ekaterinburg	28.83	732.2	29.82	757.4	32 2	0.1	57	N	9	4		10ck							Meteorological Obs'y.
Kasan	29.80	756.8	30.08	764.0	18.9	— 7.3	100	Calm	0	0		10							Observatory.
Kertch	29.62	752.3	29.64	752.8	37.2	2.9	80	N	4	2		10						Heavy cl'ds.	Lagorio.
Kieff	29.05	737.9	29.71	754.7	28.2	— 2.1	87	W	7	3		c	10cs;ks						Cand. Fatjanow.
Lugan	29.58	751.2	29.78	756.5	34.7	1.5	94	E	22	10			10			Blank			Meteorological Obs'y.
Moscow	29.37	745.9	29.95	760.6	28.4	— 2.0	88	SE	7.8	3.5			8ks						Meteorological Obs'y.
Nertchinsk	27.71	703.8	30.31	769.9	—11.2	—24.0	76	Calm	0	0			10					Light clouds	Meteorological Obs'y.
Nikolaiev	29.66	753.4	29.73	755.2	30.6	— 0.8	92	N	22	10			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	30.08	764.0	30.17	766.2	— 0.8	—18.2	66	Calm	0	0			10s						Lieut. Iwanow.
Nukuss	29.61	752.1	29.85	758.2	43.3	6.3	84	WNW	2.7	1.2			10n						Dr. Dobrochotow.
Pekin, China	30.02	762.4	30.16	766.0	23.9	— 4.5	33	Calm	0	0			0						Physical Observatory.
St. Petersburg	30.15	765.9	30.17	766.3	15.1	— 9.4	75	ENE	16	7		c	4cs					Light clouds	Central Physical Obs'y.
Tashkend, Laboratory	28.32	719.3	29.87	758.7	58.6	14.8	57						8						Teich, A. M.
Tiflis	28.44	722.3	29.81	757.2	68.2	20.1	40	Calm	0	0			8cs						Physical Observatory.
Warsaw	29.39	746.4	29.83	757.7	25.2	— 3.2	85	N	11	5			10n					Snowing	Astronomical Obs'y.
Wilna	29.34	745.1	29.77	756.2	29.7	— 1.3	88	N	4	2			10					Heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.12	765.0	30.45	773.3	— 6.9	—21.6	73	SE	2	1			1						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.64	752.8	37.4	3.0	86	S			2		10k			0.19	4.8	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides			29.52	749.8	43	6.1	92	SSE			6		10			0.4	10.2	Overcast	J. Youngclause.
North Unst, Shetland Isl'ds			29.74	755.4				S			8		10			Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.80	756.9	29.91	759.6	56.5	13.6	73	SSW	3.4	1.5			0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.69	754.0	29.74	755.4	62.2	16.8	54	S	3.1	1.4		2	6	SE		0.008	0.20	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.84	681.8			50.4	10.2	80	S	9.2	4.1		0	9			0.059	1.50	Almost cov'd	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.68	703.0	29.92	759.9	51.8	11.0	65	SE	2.9	1.3		1	1			0.008	0.20	Light clouds	The Staff.
Murcia, Met. Obs'y ‡	29.76	756.0	29.91	759.8	64.6	18.1	56	ENE	0.7	0.3		0	3			0	0	Clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.63	727.3	29.53	750.0	49.6	9.8	93	SSE	28.9	12.9			10			0.374	9.50	Raining	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.09	764.4	30.16	766.1	68.0	20.0	65	N	9.8	4.4			10ks;s		N	0	0	Cloudy	Benito Vines, S. J.
Manilla, Phillippine Islands	29.95	760.8	30.00	762.1	77.5	25.3	83	ESE	6.6	3.0			s			0	0	Fair	Federico Faura, S. J
San Fernando, Naval Obs'y	29.85	758.1	29.95	760.6	63.7	17.6	67	SE	7.0	3.1		3	4	W	W	0.025	0.66		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.93	760.1	30.02	762.4	70.9	21.6	95	E	7.8	3.50		5cs	4k	E	E	0.256	6.75	Raining	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.93	760.2	30.08	763.9	74.4	23.6	84	WNW	2.0	0.9			9kn		W	Inap.	Inap.	Cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.35	770.9	30.39	771.9	— 4.0	—20.0	100	Calm				0		0		0	0		
Umea	30.37	771.4	30.42	772.7	8.6	—13.0	92	Calm				0		0		0	0		
Hernosand	30.35	771.0	30.41	772.3	— 1.7	—18.7	83	Calm				0		2		0	0		
Stockholm	30.03	762.7	30.21	767.2	14.4	— 9.8	74	NNE				4		4		0	0		
Wisby	29.94	760.5	30.00	762.0	23.0	— 5.0	95	ENE				4		10		0.028	0.71		
Sub-Series.																			
Upsala	30.15	765.8	30.24	768.0	13.3	—10.4	86	N	8.7	3.9			1	E		0	0		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.54	724.8	30.03	762.8	31.6	— 0.2	71	N			2		0			0	0	Clear	The Observatory.
Zurich	28.35	720.0	30.09	764.3	24.8	— 4.0	83	NW			2		0			0	0	Clear	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —1.5 mm.; Ther. —3°.8 cent.; Hum. —1 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.80	757.0	37.4	3.0	84	N	27	12.0			10		N	0.094	2.4	Raining	The Observatory.
Valona			29.73	755.2	47.7	8.7		NW			1		2			0	0	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.81	757.1	71.1	21.7	46	SW			2	6c				0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.08	764.0	30.17	766.3	18	— 7.8	84	NW	10	4.5	.....	8cs	0	Calm	.....	Inap.	Inap.	Fair	
Alpena, Michigan	29.71	754.6	30.46	773.7	—10	—23.3	54	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Atlanta, Georgia	29.10	739.1	30.35	770.9	21	— 6.1	71	NW	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Atlantic City, New Jersey	30.15	765.8	30.16	766.1	23	— 5.0	73	NW	14	6.3	.....	0	0	.....	.....	0	0	Clear	
Atton Id., Alaska‡	29.94	760.5	.....	.....	30	— 1.1	79	N	20	8.9	.....	.....	0	.....	.....	0	0	Clear	
Augusta, Georgia	30.16	766.1	30.38	771.6	27	— 2.8	76	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Baltimore, Maryland	30.20	767.1	30.26	768.6	27	— 2.8	88	NW	9	4.0	.....	Haze	0	Calm	.....	0	0	Clear	
Barnegat, New Jersey	30.12	765.0	30.15	765.8	23	— 5.0	86	NW	18	8.0	.....	2k	0	NW	.....	0	0	Clear	
Benton, Montana	27.72	704.1	.....	.....	—14	—25.6	73	NW	6	2.7	.....	2cs	0	Calm	.....	0.09	2.3	Clear	
Bismarck, Dakota	28.04	727.4	30.50	774.7	— 2	—18.9	100	N	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Boise City, Idaho	27.37	695.2	30.33	770.4	18	— 7.8	84	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Boston, Massachusetts	29.80	756.9	29.97	761.2	19	— 7.2	54	NW	24	10.7	.....	2cs	0	NW	.....	Inap.	Inap.	Fair	
Brackettville, Texas	28.99	736.3	30.10	764.5	32	0.0	79	SE	8	3.6	.....	4c	0	SE	.....	0	0	Fair	
Brownsville, Texas	30.17	766.3	30.22	767.6	45	7.2	92	E	4	1.8	.....	8cs	0	SW	.....	0	0	Fair	
Buffalo, New York	29.50	750.8	30.34	770.6	10	—12.2	79	NW	6	2.7	.....	.....	1s	.....	Calm	0.01	0.3	Clear	
Burlington, Vermont	29.83	757.7	30.14	765.5	11	—11.7	60	NW	8	3.6	.....	0	10s	.....	NW	0.01	0.3	Cloudy	
Cairo, Illinois	30.10	764.5	30.54	775.7	18	— 7.8	84	N	6	2.7	.....	0	0	.....	.....	0.01	0.3	Clear	
Campo, California	27.44	697.0	30.01	762.2	36	2.2	80	S	3	1.3	.....	.....	Fog	.....	Calm	0	0	Dense fog	
Camp Thomas, Arizona	27.24	691.9	.....	.....	24	— 4.4	74	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	30.21	767.3	30.23	767.8	30	— 1.1	78	NW	24	10.7	.....	0	0	.....	.....	0	0	Clear	
Cape May, New Jersey	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Castroville, Texas	29.44	747.8	30.20	767.1	29	— 1.7	78	Calm	0	0	.....	2c	0	Calm	.....	0	0	Fair	
Cedar Keys, Florida	30.27	768.8	30.30	769.6	35	1.7	90	N	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Champaign, Illinois	29.58	751.3	30.48	774.2	7	—13.9	54	NW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Charleston, S. Carolina	30.23	767.8	30.29	769.4	30	— 1.1	89	NW	10	4.5	.....	0	0	.....	.....	0.07	1.8	Clear	
Charlotte, N. Carolina	29.42	747.3	30.31	769.9	23	— 5.0	60	NW	1	0.4	.....	0	Sm'e	.....	Calm	0	0	Clear	
Chattanooga, Tennessee	29.55	750.6	30.43	772.9	21	— 6.1	71	N	12	5.4	.....	.....	10s	.....	N	Inap.	Inap.	Cloudy	
Cheyenne, Wyoming	23.90	608.0	29.90	759.4	— 6	—21.1	61	N	10	4.5	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Chicago, Illinois	29.68	753.9	30.45	773.4	11	—11.7	80	NW	5	2.2	.....	2ck	0	NW	.....	Inap.	Inap.	Clear	
Chincoteague, Virginia	30.20	767.1	30.22	767.6	27	— [illegible]	64	NW	15	6.7	.....	1k	0	Calm	.....	0	0	Clear	
Cincinnati, Ohio	29.77	756.1	30.49	774.4	18	— 7.8	68	NW	5	2.2	.....	.....	10s;sk'	.....	Calm;NW	0.04	1.0	Cloudy	
Cleveland, Ohio	29.61	752.1	30.40	772.1	15.5	— 9.2	82	N	7	3.1	.....	.....	10n	.....	Calm	0.02	0.5	Light snow	
Coleman City, Texas	28.35	720.1	30.13	765.3	27	— 2.8	76	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Columbus, Ohio	29.50	749.3	30.41	772.4	18	— 7.8	84	NW	11	4.9	.....	.....	10ks	.....	NW	0.02	0.5	Cloudy	
Concho, Texas	28.15	715.0	29.91	759.7	31	— 0.6	89	SE	6	2.7	.....	5c	0	Calm	.....	0	0	Fair	
Corsicana, Texas	29.80	758.4	30.37	771.4	28	— 2.2	54	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Davenport, Iowa	29.78	756.4	30.53	775.4	— 7	—21.7	80	W	1	0.4	.....	5cs	0	Calm	.....	0	0	Fair	
Dayton, Washington T'y	28.03	727.2	30.48	774.2	11	—11.7	79	N	4	1.8	.....	2cs	5ks	NW	N	0.13	3.3	Fair	
Deadwood, Dakota	25.50	647.7	.....	.....	7	—13.9	77	NE	1	0.4	.....	.....	10n	.....	Calm	0.14	3.6	Light snow	
Decatur, Texas	29.00	736.6	30.26	768.6	26	— 3.3	76	SE	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Delaware Breakwater, Del.	30.17	766.3	30.19	766.8	27	— 2.8	88	NW	30	13.4	.....	0	0	.....	.....	0	0	Clear	
Denison, Texas	29.45	748.0	30.30	769.6	28	— 2.2	88	SE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Denver, Colorado	24.77	629.2	29.99	761.7	4	—15.6	74	N	12	5.4	.....	5ck	5n	N	N	0.02	0.5	Light snow	
Des Moines, Iowa	29.55	750.6	30.56	776.2	1	—17.2	71	NE	1	0.4	.....	0	5s	.....	Calm	0	0	Fair	
Detroit, Michigan	29.60	753.4	30.42	772.7	18	— 7.8	92	W	6	2.7	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Dodge City, Kansas	27.35	694.7	29.80	756.9	16	— 8.9	66	SE	28	12.5	.....	.....	10s	.....	Calm	0	0	Cloudy	
Dubuque, Iowa	29.71	754.6	30.53	775.4	— 9	—22.8	78	NW	2	0.9	.....	0	5s;fg	.....	Calm	0	0	Fair	
Duluth, Minnesota	29.76	755.9	30.54	775.7	1	—17.2	85	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Eagle Pass, Texas	29.41	747.0	30.19	766.8	35	1.7	70	SE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Eagle Rock, Idaho	25.24	641.1	29.89	759.2	—11	—23.9	76	N	18	8.0	.....	5cs	0	N	.....	1.03	26.2	Fair	
Eastport, Maine	29.66	753.4	29.73	755.1	19	— 7.2	54	NW	18	8.0	.....	2c	0	NW	.....	0	0	Fair	
Edinburg, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
El Paso, Texas	26.10	662.9	.....	.....	44	6.7	16	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Erie, Pennsylvania	29.54	750.3	30.32	770.1	15	— 9.4	82	NW	14	6.3	.....	.....	10s	.....	Calm	0.07	1.8	Cloudy	
Escanaba, Michigan	29.72	754.9	30.47	773.9	— 3	—19.4	83	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Florence, Arizona	28.46	722.9	30.06	763.5	39	3.9	55	SW	4	1.8	.....	2c	0	Calm	.....	0	0	Fair	
Fort Apache, New Mexico	24.93	633.2	30.38	771.6	27	— 2.8	64	NE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Fort Assininiboine, Montana	27.64	702.0	.....	.....	—12	—24.4	50	Calm	0	0	.....	0	0	.....	.....	0.17	4.3	Clear	
Fort Bennett, Dakota	28.85	732.8	.....	.....	— 2	—18.9	67	N	5	2.2	.....	.....	10n	.....	Calm	Inap.	Inap.	Light snow	
Fort Buford, Dakota	28.49	723.6	30.60	777.2	0	—17.8	100	N	8	3.6	.....	.....	10n	.....	Calm	0.06	1.5	Light snow	
Fort Custer, Montana	27.25	692.1	.....	.....	— 2	—18.9	100	N	4	1.8	.....	.....	10n	.....	Calm	0.29	7.4	Light snow	
Fort Davis, Texas	25.09	637.3	30.05	763.3	37	2.8	45	S	14	6.3	.....	0	0	.....	.....	0	0	Clear	
Fort Elliott, Texas	27.18	690.4	29.55	750.6	26	— 3.3	63	SE	28	12.5	.....	.....	10s	.....	SE	0	0	Cloudy	
Fort Gibson, Indian T'y	29.74	755.4	30.32	770.1	22	— 5.6	72	E	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Grant, Arizona	25.09	637.3	29.89	759 2	42	5.6	14	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Fort Griffin, Texas	28.70	730.5	30.08	764.0	33	0.6	61	SE	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Fort Keogh, Montana	27.96	710.2	.....	.....	2	—16.7	72	N	8	3.6	.....	.....	10s	.....	Calm	0.15	3.8	Cloudy	
Fort McKavett, Texas	27.72	704.1	29.73	755.1	30	— 1.1	68	SE	4	1.8	.....	5ck	0	Calm	.....	0	0	Fair	
Fort Macon, North Carolina	30.23	767.8	30.24	768.1	30	— 1.1	47	NW	20	8.9	.....	0	0	.....	.....	0	0	Clear	
Fort St. Michaels	30.05	763.3	30.09	764.3	7	—13.9	100	NE	12	5.4	.....	.....	10k	.....	S	.....	.....	.....	
Fort Missoula, Montana	27.00	687.3	.....	.....	— 8	—22.2	100	Calm	0	0	.....	0	0	.....	.....	0.10	2.5	Clear	
Fort Shaw, Montana	26.82	681.2	.....	.....	—14	—25.6	100	W	4	1.8	.....	0	0	.....	.....	0.22	5.6	Clear	
Fort Sill, Indian Territory	28.90	734.0	30.08	764.0	28	— 2.2	66	S	18	8.0	.....	0	0	.....	.....	0	0	Clear	
Fort Stevenson, Dakota	28.62	726.9	.....	.....	0	—17.8	85	W	10	4.5	.....	.....	10ks	.....	N	0.02	0.5	Cloudy	
Fort Verde, Arizona	.....	.....	.....	.....	29	— 1.7	56	W	.....	.....	1	0	0	.....	.....	0	0	Clear	
Fredericksburg, Texas	28.42	721.9	30.08	764.0	31	— 0.6	89	SW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Galveston, Texas	30.27	768.8	30.32	770.1	44	6.7	60	SE	11	4.9	.....	0	0	.....	.....	0	0	Clear	
Grand Haven, Michigan	29.73	755.1	30.47	773.9	5	—15.0	75	Calm	0	0	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Hatteras, North Carolina	30.21	767.3	30.23	767.8	31	— 0.6	79	NW	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Helena, Montana	26.13	663 7	.....	.....	—14	—25.6	100	Calm	0	0	.....	0	0	.....	.....	0.12	3.0	Clear	
Henrietta, Texas	29.25	742.9	30.26	768.6	28	— 2.2	66	SE	21	9.4	.....	0	0	.....	.....	0	0	Clear	
Indianapolis, Indiana	29.60	751.8	30.47	773.9	8	—13.3	78	Calm	0	0	.....	0	5s;sk	.....	Calm	Inap.	Inap.	Fair	
Indianola, Texas	30.25	768.3	30.28	769.1	45	7.2	61	NE	18	8.0	.....	0	0	.....	.....	0	0	Clear	
Jacksboro, Texas	28.99	736.3	30.19	766.8	30	— 1.1	78	SE	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Jacksonville, Florida	30.26	768.6	30.31	769.9	35	1.7	53	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Keokuk, Iowa	29.77	756.1	30.51	774.9	5	—15.0	75	NW	1	0.4	.....	5cs	0	Calm	.....	0	0	Fair	
Key West, Florida	30.17	766.3	30.20	767.1	60	15.6	77	E	9	4.0	.....	.....	10s	.....	NE	0	0	Cloudy	
Kittyhawk, North Carolina	30.23	767.8	30.26	768.6	34	1.1	70	NW	14	6.3	.....	0	0	.....	.....	0	0	Clear	
Knoxville, Tennessee	29.37	746.0	30.47	773.9	20	— 6.7	70	NE	6	2.7	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
La Crosse, Wisconsin	29.71	754.6	30.58	776.7	—13	—25.0	100	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
La Mesilla, New Mexico	26.01	660.6	30.16	766.1	26	— 3.3	52	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Laredo, Texas	29.78	756.4	30.14	765.5	42	5.6	74	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Leavenworth, Kansas	29.52	749.8	30.46	773.7	10	—12.2	79	NE	4	1.8	.....	.....	10s	.....	.....	0	0	Cloudy	
Lewiston, Idaho	29.59	751.6	30.29	769.4	23	— 5.0	72	W	1	0.4	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Little Rock, Arkansas	30.10	764.5	30.45	773.4	24	— 4.4	74	N	4	1.8	.....	5ck	0	Calm	.....	0	0	Fair	
Los Angeles, California	29.68	753.9	30.04	763.0	52	11.1	79	NE	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Louisville, Kentucky	29.83	757.7	30.44	773.2	20	— 6.7	70	N	8	3.6	.....	.....	10n	.....	Calm	Inap.	Inap.	Light snow	
Lynchburg, Virginia	29.50	750.8	30.29	769.4	25	— 3.9	62	NW	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Madison, Wisconsin	29.37	746.0	30.50	774.7	— 2	—18.9	67	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Marquette, Michigan	29.04	752.8	30.44	773.2	0	—17.8	39	W	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Mason, Texas	28.52	724.4	30.40	772.1	31	— 0.6	79	SE	6	2 7	.....	2cs	0	SE	.....	0	0	Fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
United States Series—Continued.																			
Memphis, Tennessee	30.07	763.8	30.44	773.2	24	— 4.4	74	NE	4	1.8		0	0			0	0	Clear	
Milwaukee, Wisconsin	29.66	753.4	30.49	774.4	4	—15.6	74	NW	11	4.9		2c	1s	NW	Calm	0	0	Fair	
Mobile, Alabama	30.32	770.1	30.40	772.1	30	— 1.1	68	NW	8	3.6		0	0			0	0	Clear	
Montgomery, Alabama	30.16	766.1	30.41	772.4	27	— 2.8	77	N	6	2.7		0	0			0	0	Clear	
Moorhead, Minnesota	29.52	749.8	30.70	779.8	—28	—33.3	45	N	4	1.8		0	0			0	0	Clear	
Morgantown, W. Virginia	29.27	743.4	30.34	770.6	25	— 3.9	62	NW	12	5.4			10s		W	Inap	Inap.	Cloudy	
Mt. Washington, N. H.	23.20	589.3	29.50	750.8	— 6	—21.1	61	NW	60	26.8		5c	8s	Calm	NW	0.43	10.9	Fair	
Nashville, Tennessee	29.88	758.9	30.46	773.7	24	— 4.4	74	NE	2	0.9			10ks		NE	0.02	0.5	Cloudy	
New Haven, Connecticut	29.93	760.2	30.06	763.5	19	— 7.2	69	NW	3	1.3		5c	0	W		0	0	Fair	
New London, Connecticut	29.98	761.5	30.03	762.7	21	— 6.1	71	NW	16	7.2		2c;k	0	N;NW		0	0	Fair	
New Orleans, Louisiana	30.32	770.1	30.39	771.9	37	2.8	53	NE	7	3.1		1c	0	W		0	0	Clear	
Newport, Rhode Island	29.93	760.2	29.99	761.7	22	— 5.6	72	W	16	7.2		1c	0	Calm		0	0	Clear	
New River, N. Carolina																			
New Shoreham, Rhode I'd	29.98	761.5	30.02	762.5	21	— 6.1	71	NW	24	10.7		0	0			0	0	Clear	
New York, New York	29.94	760.5	30.13	765.3	21	— 6.1	86	W	15	6.7		2cs	2s	W	Calm	Inap.	Inap.	Fair	
Norfolk, Virginia	30.21	767.3	30.28	769.1	28	— 2.2	54	N	11	4.9		0	0			0	0	Clear	
North Platte, Nebraska	27.25	692.1	30.13	765.3	0	—17.8	86	NE	22	9.8			10n		Calm	0.10	2.5	Light snow	
Olympia, Washington T'y	30.34	770.6	30.38	771.6	32.0	0.0	100	W	4	1.8			10s		Calm	0	0	Cloudy	
Omaha, Nebraska	29.25	742.9	30.50	774.7	3	—16.1	86	N	6	2.7			10s		Calm	0	0	Cloudy	
Oswego, New York	29.90	759.4	30.25	768.3	11	—11.7	70	NW	10	4.5			10s		NW	0.18	4.6	Cloudy	
Pensacola, Florida	30.36	771.1	30.40	772.1	32	0.0	69	N	4	1.8		0	0			0	0	Clear	
Philadelphia, Pa	30.13	765.3	30.18	766.6	23	— 5.6	73	NW	16	7.2		1cs	0	W		0	0	Clear	
Phœnix, Arizona	28.86	733.0	30.74	780.8	36	2.2	61	E	5	2.2		2c	0	Calm		0	0	Clear	
Pike's Peak, Colorado	17.21	437.1	29.42	747.3	0	—17.8	100	NW	6	2.7			10n		NW	0.10	2.5	Light snow	
Pilot Point, Texas	29.45	748.0	30.36	771.1	27	— 2.8	76	E	10	4.5		0	0			0	0	Clear	
Pioche, Nevada	23.94	608.1	29.71	754.6	22	— 5.6	45	NW	6	2.7		1c	0	Calm		Inap.	Inap.	Clear	
Pittsburg, Pennsylvania	29.48	748.8	30.36	771.1	22	— 5.6	85	W	10	4.5			10s		W	0.06	1.5	Cloudy	
Port Huron, Michigan	29.66	753.4	30.40	772.1	10	—12.2	79	W	9	4.0			10s		Calm	0.04	1.0	Cloudy	
Portland, Maine	29.84	757.9	29.89	759.2	21	— 6.1	71	NW	10	4.5		2cs	0			Inap.	Inap.	Clear	
Portland, Oregon	30.32	770.1	30.40	772.1	32	0.0	84	N	2	0.9		5cs	0	NW		0	0	Fair	
Portsmouth, N. Carolina					30	— 1.1	57	N	24	10.7		0	0			0	0	Clear	
Prescott, Arizona	24.66	626.4	30.02	762.5	32	0.0	80	S	6	2.7		0	0			0	0	Clear	
Punta Rassa, Florida	30.21	767.3	30.23	767.8	47	8.3	62	N	14	6.3		8ck	0	W		0	0	Fair	
Red Bluff, California	29.82	757.4	30.18	766.6	43.0	6.1	75	N	5	2.2		9c	0	N		0.14	3.6	Cloudy	
Rio Grande City, Texas	30.05	763.3	30.28	769.1	40	4.4	73	E	4	1.8		0	0			0	0	Clear	
Rochester, New York	29.62	752.3	30.31	769.9	10	—12.2	79	W	9	4.0		1k	9ks	W	W	0.08	2.0	Cloudy	
Roseburg, Oregon	29.76	755.9	30.37	771.4	33	0 6	89	Calm	0	0			Fog		Calm	0	0	Dense fog	
Sacramento, California	30.09	764.3	30.17	766.3	48	8.9	93	NW	6	2.7		0	2s		Calm	0.11	2.8	Clear	
St. Louis, Missouri	29.87	758.7	30.52	775.2	12	—11.1	80	NW	4	1.8			10s		Calm	0.02	0.5	Cloudy	
St. Paul, Minnesota	29.52	749.8	30.54	775.7	— 4	—20.0	64	SW	2	0.9		0	0			0	0	Clear	
Salt Lake City, Utah	25.60	650.2	29.94	760.5	25	— 3.9	62	NW	4	1.8			10s		Calm	0.04	1.0	Cloudy	
San Antonio, Texas	29.56	750.8	30.31	769.9	32	0.0	79	Calm	0	0		0	0			0	0	Clear	
San Diego, California	30.01	762.2	30.08	764.0	52	11.1	79	E	2	0.9			10s		W	0	0	Cloudy	
Sandusky, Ohio	29.68	753.9	30.42	772.7	17	— 8.3	83	NW	15	6.7			10s		Calm	0.06	1.5	Cloudy	
Sandy Hook, New Jersey	30.08	764.0	30.12	765.0	22	— 5.6	58	W	32	14.3		2k	2s	NW	W	0	0	Fair	
San Francisco, California	30.10	764.5	30.17	766.3	51	10.6	86	N	4	1.8		0	1s		NW	0.04	1.0	Clear	
Santa Fé, New Mexico	23.01	584.4	29.55	750.6	28	— 2.2	66	Calm	0	0			10k			0	0	Cloudy	
Savannah, Georgia	30.23	767.8	30.33	770.4	30	— 1.1	68	NW	12	5.4		0	0			0	0	Clear	
Shreveport, Louisiana	30.12	765.0	30.39	771.9	31	— 0.6	69	E	7	3.1		0	0			0	0	Clear	
Silver City, New Mexico	24.16	613.6	30.53	775.4	30	— 1.1	47	Calm	0	0		0	0			0	0	Clear	
Smithville, North Carolina	30.24	768.1	30.28	769.1	29	— 1.7	78	N	7	3.1		0	0			0	0	Clear	
Socorro, New Mexico	25.31	642.9	30.37	771.4	32	0.0	59	SE	2	0.9		0	0			0	0	Clear	
Springfield, Illinois	29.76	755.9	30.52	775.2	11	—11.7	70	NW	3	1.3		0	0			Inap.	Inap.	Clear	
Springfield, Massachusetts	29.92	760.0	30.06	763.5	18	— 7.8	53	NW	8	3.6		0	0			0.10	2.5	Clear	
Stockton, Texas	26.87	682.5	29.87	758.7	36	2.2	71	S	12	5.4		5c	0	Calm		0	0	Fair	
St. Vincent, Minnesota	29.66	753.4	30.62	777.7	—18	—27.8	100	NW	4	1.8		0	0			0	0	Clear	
Thatcher's Island, Mass	29.88	758.9	29.94	760.5	17	— 8.3	67	NW	34	15.2		5c	0	W		0	0	Fair	
Toledo, Ohio	29.65	753.1	30.39	771.9	18	— 7.8	75	W	4	1.8			10s		NW	0.02	0.5	Cloudy	
Tucson, Arizona	27.57	700.3	30.00	763.5	37	2.8	38	S	4	1.8		0	0			0	0	Clear	
Umatilla, Oregon	30.17	766.3	30.72	780.3	23.5	— 4.7	86	NE	12	5.4			10s		N	0	0	Cloudy	
Uvalde, Texas	29.24	742.7	30.12	765.0	32	0.0	69	SE	2	0.9		2c	0	Calm		0	0	Clear	
Vicksburg, Mississippi	30.16	766.1	30.44	773.2	28	— 2.2	77	E	5	2.2		0	0			0	0	Clear	
Visalia, California	29.70	754.4	30.08	764.0	51	10.6	96	NW	4	1.8			Fog		Calm	0	0	Dense fog	
Washington; D. C.	30.12	765.0	30.24	768.1	26	— 3.3	75	NW	10	4.5		0	2ks		NW	0	0	Clear	
Wickenburg, Arizona					30	— 1.1	68	NW			1	2c	0	Calm		0	0	Clear	
Wilmington, N. Carolina	30.23	767.8	30.29	769.4	32	0.0	59	N	6	2.7		0	0			0	0	Clear	
Winnemucca, Nevada	25.71	653.0	30.07	763.8	26	— 3.3	63	N	4	1.8		5k	0	W		0.05	1.3	Fair	
Wood's Holl, Mass	29.92	760.0	29.96	761.0	22	— 5.6	72	NW	22	9.8		2k	0	NW		0	0	Fair	
Yankton, Dakota	29.12	739.6	30.00	777.2	1	—17.2	71	NE	2	0.9			10s		Calm	0	0	Cloudy	
Yuma, Arizona	29.82	757.4	29.97	761.2	45	7.2	68	Calm	0	0		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.05	560.1			51.5	10.8	75	Calm	0	0			10n			0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica	29.88	758.9	30.19	766.8	68	20.0	90	SE				5k	8k						
Havana, Cuba, W. I.	30.11	764.8	30.16	766.1	69	20.6	64	N	4.8	2.1			10n		N	0	0	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	29.24	742.6	29.30	744.1	0.0	—17.8		W			4		3			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	67.1	19.5	81	Calm	0	0		0	0			0	0	Fine	Robert Johnstone.
Navassa, W. I.	29.96	761.6	30.04	763.0	75	23.9	73	N	17	7.6		5n	2s	NE	N	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	29.95	761.0	29.99	761.0	79	26.1	87	E			2		8ks	E		0.020	0.51	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.45	748.0	30.01	762.2	79	26.1	85	Calm			0	5ck	5s	N	Calm	0	0	Hazy	Francesco J. Cisneros.
Rivas, Nicaragua					69.8	21.		E			3	0	1ks		E	0.20	5.		Earl Flint.
Santiago de Cuba, W. I.	30.05	763.3	30.08	764.0	72	22.2	75	E	3.6	1.6		0	1s			0	0	Clear	Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	29.28	743.6	29.34	745.2	— 8.3	—22.4		W			6		5			0	0		K. Elberg.
York Factory, B. A.	29.95	760.7	30.00	762.0	—14.0	—25.6	73	SW	9	4.0		5k	4s	W	SW	0	0	Cloudy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatros																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.94	760.5	54	12.2	61	NW			3-4		3	NW						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 18′, E 51° 32′	30.00	762.0	72	22.2	54	NW			4		2	NW				1	N	D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			40	4.4		NNE			2-4		10					2	N	Showery	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	30.16	756.1	73	22.8	60	S			3		9					7	SE	D. clouds	Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser, Syracuse, Sicily	29.87	758.7	56	13.3		NNW			1		2	NW						D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 31° 14′, E. 121° 29′	30.24	768.1	44	6.7	84	Calm			0		2							D. clouds	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.99	761.7	66	18.9	79	SW			1-2		7	SW						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 34′, E. 81° 14′	29.85	756.4	81	27.2		NE			1		3	N				2	NE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St. J. Garfortn.
H. M. S. Egeria, Singapore, Malay Peninsula	29.74	755.4	81	27.2		NE			2		9	NE				2	NE	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.92	760.0	78	25.6	73	W			1-2		8	W						D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 12° 40′, W. 60° 05′	30.00	762.0	75	24.4		NE			2-4		4	NE				2	NE	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, N. 30° 58′, W. 62° 22′	30.12	765.0	72	22.2	85	S			2		3	SW				2	SW	D. clouds	Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Panama, Panama	29.95	760.7	74	23.3	81	NW			3		1							Blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.20?	741.7?				SW			6									Squally	Capt. L. F. Jones.
H. M. S. Griffon, N. 26° 38′, W. 64° 07′	29.99	761.7	71.5	21.9	95	NE			1		2	NE				1	NE	D. clouds	
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, N. 39° 36′, E. 25° 50′	29.70	754.4	47	8.3	100	NE			6		7					4	NNE	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 149° 57′	30.10	764.5	67	19.4	89	SW			1		6	SW						D. clouds	Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Zanzibar, Africa	29.78	756.4	85	29.4	79	ENE			1		5	E		Blank		1	E	D. clouds	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 42′ E. 122° 05′	30.32	770.1	41.3	5.2	82	N			2		9					2	E	Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 38° 14′, W. 9° 36′	29.91	759.7	56	13.3	81	WSW			3-4		7	W				5	NW	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minatour, Vigo, Spain	29.61	752.1	54	12.2	93	S			6		10	S						Showery	Capt. H. Rawson.
H. M. S. Modeste, N. 4° 13′, E. 100° 34′	29.95	760.7	80	26.7	91	S			2		2					Sm'h		D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Ayas Bay, Turkey, Asia	29.78	756 4	64	17.8	68	SE			4		7	SE				Sm'h		D. clouds	Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 12° 28′, W. 65° 25′	29.97	761.2	77	25.0	77	NNE			2		3	NNE				1	N	D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, S. 2° 28′, W. 9° 09′	29.86	758.4	82	27.8	91	SSE			4		6	SE				3	SSE	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.83	757.7	84.5	29.2	79	NE			1		8			Blank				D. clouds	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Spain	29.81	757.2	58	14.4	82	SW			5		10							Overcast	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.52	749 8	79	26.1	86	Calm			0		0					1	ESE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	29.98	761.5	70	21.1	92	S			1		2					1	SW	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 60 49′, W. 58° 11′	29.99	761.7	80	26.7	87	NNE			2		4					Sm'h		D. clouds	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, S. 29° 55′, W. 71° 15′	29.97	761.2	61.5	16.4	88	NNW			3		10					3	SW	Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne, N. 49° 14′, E. 32° 37′	29.85	758.2	75	23.9		SSE			3		5					Sm'h		D. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.05	763.3	73	22.8		Calm			0		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, Palestine	30.03	762.7	69.5	20.8	61	Calm			0		1							Blue sky	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Bulama, Senegambia	29.89	759.2	82.4	28.0	85	SE			1		2							D. clouds	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando, Africa	29.85	758.2	83.1	28.4	77	N			2		10			4½	hour	1		Overcast	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

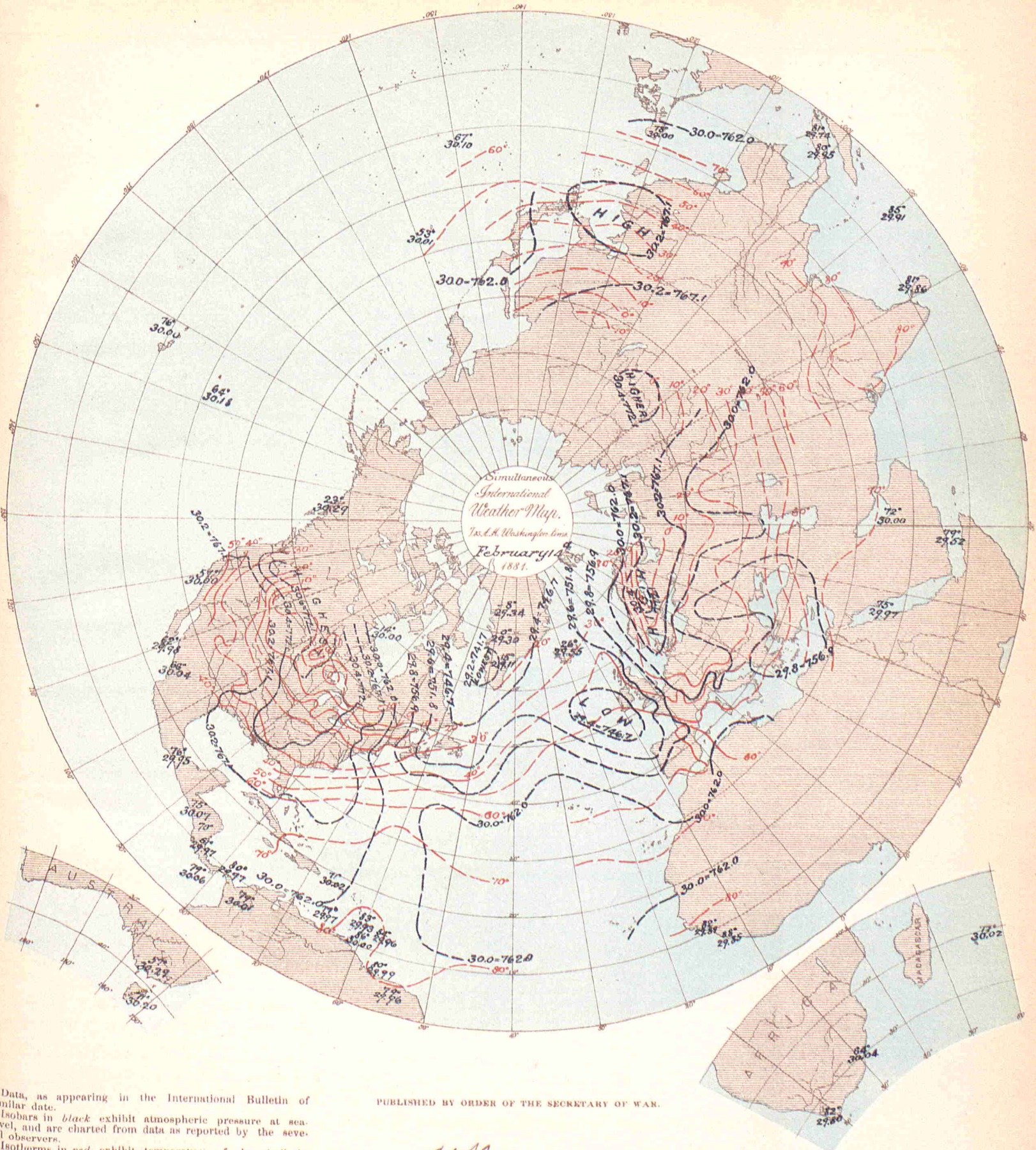
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.42	772.7	41	5.0	82	NW	2	0.9			8		NW	0	0			Fair	
N. Yard, Portsmouth, N. H.	29.91	759.7	16	— 8.9	82	NW	28	12.5			0			0	0			Clear	
Naval Hospital, Yokohama, Japan	29.78	756.4	38	3.3	90	NNW			1		0			0.47	11.9			Clear	
Adams, N. 60° 04′, W. 81° 19′	30.06	763.5	79	26.1	82	N			5		2		N			Long	NE	Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.10	764.5	50	10.0	?	Calm			0		10			0.03	0.8			Cloudy	
Alert, Hong-Kong, China *.	29.95	760.7	66	18.9	89	Calm			0		10		S	0	0	Sm'h		Cloudy	
Alliance, New Orleans, La	30.36	771.1	40	4.4	56	NNE			2		0			0	0	Sm'h		Clear	
Ashuelot, Tientsin, China	30.19	766.8	20	— 6.7	100	SE			1		0			0	0			Clear	
Colorado, New York, N. Y	30.14	765.5	22	— 5.6	86	W	6	2.7			2		Calm	0	0			Clear	
Constitution, N. Yard, League I'd., Pa			22	— 5.6		WNW	4	1.8			2		NW					Clear	
Franklin, Norfolk, Va	30.18	766.6	30	— 1.1		NNW	13	5.8			0			0	0			Clear	
Galena, Naples, Italy	29.92	760.0	45	7.2	53	E			4		2							Fair	
Independence, N. Yard, Mare I'd, Cal.	30.17	766.3	48	8.9	85	N	2.4	1.1			8		N	0	0			Cloudy	
Jamestown, Sitka, Alaska *	30.29	769.4	23	— 5.0		ENE			3		0			0	0			Clear	
Kearsarge, Warrington, Florida	30.35	770.9	35	1.7	70	N			2		0							Clear	
Lackawanna, Callao, Peru †	30.07	763.8	72	22.2	90	SE			1-2		8		SE	0	0			Fair	
Marion, Sandy Pt, Terra del Fuego	29.51	749.5	52	11.1	73	WSW			2		8		WSW			Sm'h		Fair	
Michigan, Erie, Pennsylvania	30.31	769.9	16	— 8.9		N	3	1.3			2		N					Fair	
Minnesota, New York, N. Y	30.08	764.0	22	— 5.6		NW			3		2		NW					Hazy	
Monocacy, Shanghai, China	30.35	770.9	38	3.3	81	E			1		2		Calm					Fair	
New Hampshire, Port Royal, S. C	30.24	768.1	33	0.6	61	NW	26	11.6			0			0	0			Clear	
Nipsic, Barcelona, Spain	29.96	761.0	59	15.0	65	S			1		0					Sm'h		Blue sky	
Onward, Callao, Peru †	29.93	760.2	70	21.1	85	SSE			1		5		N			Long	W	Fair	
Palos, Shanghai, China	30.44	773.2	36	2.2	90	ESE			1		2							Fair	
Passaic, Washington, D. C	30.31	769.9	28	— 2.2	88	W			1		0							Clear	
Pensacola, Panama, Panama	29.97	761.2	80	26.7	70	NNW			3		2			0	0	Sm'h		Fair	
Portsmouth, Washington, D. C	30.21	767.3	26	— 3.3	100	NW			2		2		W					Clear	
Powhatan, New York, N. Y	30.10	764.5	21	— 6.1	100	NW			3		2		W					Fair	
Quinnebaug, Villafranca, France	29.94	760.5	55	12.8	50	SSW			2		1					Sm'h		Clear	
Richmond, Hong-Kong, China	30.11	764.8	66	18.9	94	W			2		5		W	0	0			Fair	
Saratoga, Baltimore, Md	30.21	767.3	26	— 3.3	100	WNW			2		0			0	0			Clear	
Shenandoah, Montevideo, Uruguay *	29.79	756.7	75	23.9	90	ENE			2		2					Sm'h		Fair	
St. Louis, League Island, Pa	30.18	766.6	23	— 5.0	86	NW	15	6.7			2			0.62	15.7			Clear	
Swatara, Nagasaki, Japan †	30.12	765.0	45	7.2	76	NNE			2		2					Sm'h		D. clouds	
Tennessee, New Orleans, La	30.40	772.1	37	2.8	62	ENE	8	3.6			2		Calm	0	0			Clear	
Ticonderoga, N. Yard, Mare Id., Cal.	30.17	766.3	50	10.0	100	Calm			0		10		WNW	0.14	3.6			D. clouds	
Trenton, Toulon, France *.	29.90	759.4	63	17.2	42	SW			1		2			0	0	Sm'h		Fair	
Vandalia, St. George, Granada, W. I.	30.00	762.0	84	28.9	87	NE			1		2		Calm					Fair	
Wabash, Boston, Massachusetts	29.98	761.5	20	— 6.7	70	NW	20	8.9			2		NW	0	0			Hazy	
Wachusetts, Panama, Panama *.	29.58	751.3	74	23.3	90	NNW			2		5		N			Sm'h		Fair	
Wyoming, Villafranca, France	29.93	760.2	55	12.8	68	Calm			0		2					Sm'h		Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.							
										Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte,																			Capt. G. F. Parson.
Ship Baroda, ‡																			
S. 3° 00′, W. 23° 45′	29.92	760.0	84	28.9	79	E			3		2							Blue sky	Capt. C. J. Russell.
S. S. Bateshire,																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 18° 22′, W. 44° 50′	30.07	763.8	78.5	25.8	78	S			3		5							Showery	Capt. A. J. Brown.
British Merchant, ‡																			Capt. E. J. Molony.
Chin Yang, ‡																			
N. 10° 43′, W. 47° 22′	29.98	761.5	79.7	26.5	76	ENE			3		6							D. clouds	Capt. N. Youlden.
S. S. Cipero,																			
N. 12° 30′, W. 59° 30′	29.98	761.5	78	25.6		NNE			2		4					2	NE	D. clouds	Capt. W. N. Lailey.
City of Agra, ‡																			
S. 16° 00′, W. 29° 05′	29.99	761.7	85.7	29.8	72	ENE			3		3							D. clouds	Capt. T. Young.
Barque Commewyne, ‡																			
N. 36° 11′, W. 54° 19′	30.12	765.0	64.5	18.1	73	S			5		10							Overcast	Capt. W. Scott.
Barque Coppename,																			Capt. Jas. Buchan.
Denbigshire,																			Capt. H. Y. Murdoch.
Barque Dochra, ‡																			
S. 8° 50′, W. 13° 55′			83	28.3	67	SE			3		4							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart,																			
N. 3° 22′, E. 90° 06′	29.91	759.7	84.5	29.2	76	Calm			0		3							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa,																			Capt. A. Watson.
S. S. Ethiopia, ‡																			
N. 53° 50′, W. 19° 58′	29.33	745.0	47	8.3	100	W			4		10					5	WSW	Overcast	Capt. A. Campbell.
S. S. Fleurs Castle,																			Capt. J. Kidder.
Barque Gem,																			Capt. H. Park.
S. S. Gordon Castle,																			Capt. W. Waring.
Barque Harvest Home,																			Capt. H. H. Williams
Barquentine Hope, ‡																			Capt. Jas. Campbell.
Ship Iron Cross,																			Capt. W. Randall.
S. S. Kangaroo,																			Capt. A. Kellett.
Kryolith,																			Capt. Alex. Wilson.
S. S. Lamperts,																			Capt. G. H. Jones.
Laomene,																			Capt. W. P. Hughes.
Ship Lochee, ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania,																			Capt. O. A. F. Powell.
Majestic,																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 17° 50′, W. 54° 00′	30.00	762.0	73.5	23.1	95	ENE			4		9					3	NNW	Overcast	Capt. H. W. Dyke.
Barque Mertola,																			
N. 37° 06′, W. 7° 16′	29.91	759.7	59.7	15.4	88	S			3		8							D. clouds	Capt E. W. Turner.
Nairnshire,																			Capt. W. Niven.
S. S. Nizam,																			Capt. J. W. Brady.
Queen of Cambria,																			Capt. M. Parry.
S. S. Richmond,																			Capt. W. H. Stuart
Barque Shun Lee, ‡																			Capt. John M. Gray.
S. S. Seine,																			Capt. H. Manning.
S. S. Strathleven, ‡																			Capt. C. W. Pearson.
Schr. Traveller,																			Capt. A. Simpson.
S. S. Wyberton, ‡																			
N. 22° 52′, E. 36°-59′	29.97	761.2	75	23.9	59	NE			1		0							Blue sky	Capt. R. J. Blacklin.
S. S. Yorkshire,																			
N. 32° 50′, W. 15° 35′	30.02	762.5	61	16.1	77	WNW			3		10					3	WNW	Overcast	
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian,																			Capt. F. Archer.
S. S. Nova Scotian,																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria,																			Capt. W. Watson.
S. S. Bothnia,																			
S. S. Scythia,																			
WHITE STAR LINE. *Ismay, Imrie & Co.*																			Capt. W. H. P. Hains.
S. S. Adriatic,																			
S. S. Baltic,																			Capt. J. W. Jennings.
N. 43° 13′, W. 52° 03′	29.71	754.6	38	3.3	100	Var.			3		4		SSE			R'gh	SW	D. clouds	Capt. H. Parsell.
S. S. Britanic,																			Capt. H. Perry.
S. S. Celtic,																			
N. 47° 48′, W. 37° 54′ †	29.90	759.4	48	8.9		SSW			6		10		WSW	0	0	H'vy	WSW	Overcast	Capt. Benj. Gleadell.
S. S. Germanic,																			
New York, N. Y †	30.15	765.8	25	— 3.9		NW			4		5		WNW	0	0			Clear	Capt. Ch. W. Kennedy.
S. S. Republic,																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, ‡																			
S. S. Köln,																			
N. 48° 43′, W. 37° 20′	29.88	758.9	48.2	9.0		S			6		10		S	Heavy rain &	squalls; hail	Cross &h'vy	S; NNW	Cloudy	Capt. H. Baur.
S. S. Leipzig,																			
S. S. Ohio,																			Capt. F. Pfeiffer.
																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			Capt. Albert Fredholm
Ship Peru, ‡																			Capt. O. F. Skötdebran

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England...*†	29.45	748.0	41	5.0	91	SE	.....	.....	5	.....	10	.....	SE	.....	.....	.....	.....	Raining.....	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 41° 34′, W. 65° 57′.....†	29.67	753.6	33	0.6	80	W	.....	.....	4	.....	2	.....	NW	0	0	Mod.	NW	Cloudy..	Capt. R. W. Sargeht.
S. S. Ohio, ‡ N. 42° 15′, W. 57° 19′...*†	29.83	757.7	41	5.0	91	WNW	.....	.....	5	.....	5	.....	WNW	0	0	L'ge	WNW	Fair.....	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, Philadelphia, Pa.....†	30.08	764.0	32	0.0	79	W	.....	.....	3	.....	2	.....	E	0	0	.....	.....	Fair.....	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, La Paz, Lower Cal.....†	29.98	761.5	62	16.7	74	S	.....	.....	2	.....	5	.....	SW	0	0	.....	.....	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 36° 50′, E. 159° 15′....†	30.01	762.2	53	11.7	61	Var.	.....	.....	5	.....	5?	.....	NW	0	0	High	NW	Clear?.....	Capt. H. Davison.
S. S. Gaelic, N. 30° 59′, E. 130° 52′..*†	30.26	768.6	58	14.4	53	NW	.....	.....	1	.....	0	.....	.....	.....	.....	Sm'h	NW	Clear.....	Capt. W. H. Kidley.
S. S. Oceanic, N. 32° 34′, W. 150° 22′.....	30.18	766.6	64	17.8	89	WSW	.....	.....	4	.....	2	.....	W	0.04	1.0	Mod.	W	Fair.....	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Fred. Bolles
S. S. Oregon, Portland, Oregon.....†	30.29	769.4	31.0	— 0.6	89	NW	.....	.....	1	.....	2	.....	NW	.....	.....	.....	.....	Fair.....	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, N. 36° 21′, W. 121° 54′.....†	30.05	763.5	45	7.2	76	NW	.....	.....	5	.....	0	.....	.....	.....	.....	H'vy	W	Clear.....	Capt. J. N. Ingalls.
S. S. Idaho, N. 38° 41′, W. 123° 50′....†	30.23	767.8	48	8.9	78	NW	.....	.....	2	.....	2	.....	NW	.....	.....	Light	NW	Clear.....	C. E. Lyons, 1st Officer.
S. S. Orizaba..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Senator, N. 34° 04′, W. 119° 15′....†	30.06	763.5	53	11.7	93	E	.....	.....	1	.....	5	.....	SE	.....	.....	Sm'h	.....	Fair.....	Thos. Wallace.
S. S. State of California, N. 38° 20′, W. 124° —′...†	30.17	766.3	54	12.2	80	NW	.....	.....	3	.....	5	.....	NW	.....	.....	Sm'h	W	Light fog.....	Capt. G. Debney.
S. S. Victoria, N. 47° 18′, W. 125° 00′....†	30.24	768.1	46	7.8	84	E	.....	.....	2	.....	2	.....	SE	.....	.....	Long	NW	Clear.....	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 18° 01′, W. 158° 10′.....	30.00	762.0	76	24.4	100	NE	.....	.....	3	.....	5	.....	NE	.....	.....	Long	NE	Fair...	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.....†	30.33	770.4	70	21.1	100	SSE	.....	.....	4	.....	10	.....	SE	0	0	.....	.....	Cloudy..... ..	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 12° 36′, W. 88° ?′.....†	30.07	763.8	75	23.9	81	NNE	.....	.....	3	.....	2	.....	SW	0	●	Mod.	E	Clear.....	Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China.....†	30.07	763.8	66	18.9	60	Calm	.....	.....	0	.....	10	.....	SE	0	0	Sm'h	.....	Cloudy.....	Capt. G. G. Berry.
S. S. City of Sidney.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. H. C. Dearborn.
S. S. City of Tokio.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 15° 38′, W. 95° 32′.....†	29.95	760.7	76	24.4	68	E	.....	.....	4	.....	2	.....	N	0	0	Mod.	N	Clear.	Capt. R. R. Searle.
S. S. Dakota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. D. E. Griffiths.
S. S. Granada, N. 32° 04′, W. 118° 00′.....†	30.00	762.0	57	13.9	81	WNW	.....	.....	3	.....	10	.....	.....	0	0	Sm'll	WNW	Dense fog....	.....
S. S. Zealandia, Sydney, N. S. W.....	30.35	770.9	75	23.9	90	SE	.....	.....	4	.....	5	.....	S	.....	.....	.....	.....	Fine.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland, ‡ N. 48° 21′, W. 31° 09′....†	29.94	760.5	52	11.1	60	NW	.....	.....	7	.....	8	.....	SW	.....	.....	H'vy	NNW	Fair.....	Capt. Sam'l Jackson.
S. S. Nederland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. S. Stokes.
S. S. Rhynland, ‡ N. 49° 18′, W. 8° 30′.....	29.31	744.5	52	11.1	.....	S	.....	.....	3	.....	8	.....	SSW	0.3	8.	Mod.	SW	Foggy	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 40° 42′, W. 68° 03′.....	29.95	760.7	.....	.....	.....	N	.....	.....	6	.....	8	.....	N	0	0	Long	NW	Fair.....	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Jacksonville, Florida...†	30.19	766.8	30	— 1.1	.....	NE	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	Fine.....	Capt. A. Mohaffey.
Sch'r Addie Fuller, Newport News, Va	30.20	767.1	30	— 1.1	78	NNW	5	2.2	.....	.....	0	.....	.....	0	0	.....	.....	Clear.....	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, St. Pierre H'rbor, Martinique	29.93	760.2	83	28.3	.....	Calm	.....	.....	0	.....	2	.....	NE	0	0	.....	.....	Clear.....	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 36° 09′, W. 5° 10′.....†*	30.10	764.5	62	16.7	.....	E	.....	.....	2	.....	5	.....	E	.....	.....	Sm'h	.....	Fair.....	Capt B. F. Woodbury.
Brigantine George, ‡ N. 30° 15′, W. 72° 10′.....†	30.33	770.4	66	18.9	.....	NW	.....	.....	5	.....	10	.....	.....	0	0	Mod.	W	Cloudy.....	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va†	30.23	767.8	31	— 0.6	.....	NW	3	1.3	.....	28	28	.....	.....	0	0	.....	.....	Clear.....	.....
Ship Jumna.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 27° 20′, W. 27° 20′.....†	30.17	766.3	74	23.3	90	NE	.....	.....	5	.....	8	.....	NE	0	0	Sm'h	.....	Fair.....	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 15, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERA-TURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direc-tion. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.00	762.0	64.8	18.2	73	W			1		7			Inap.	Inap.	Very cloudy	Dr. Ollive.
Nemours			29.79	756.6	64.9	18.3	75	SW			4		3			Inap.	Inap.	Pretty fair.	Raynard.
Algiers			29.91	759.8	62.2	16.8	55	S			1		9			0	0	Covered.	Nicolas.
La Calle			29.99	761.8	61.9	16.6	87	SE			2		2			0	0	Fair	Fonfréde.
Tunis			30.01	762.2															Jacques.
Sfax			30.12	765.1															Gau.
Saida			29.93	760.1	63.5	17.5	24	SW			5		7			0	0	Very cloudy	Dumas.
Tebessa			30.05	763.5	63.3	17.4	22	N			1		1			0	0	Very fair.	Watrin.
Geriville																			Lonchamp.
Laghouat			30.04	762.9	63.3	17.4	54	SSE			4		4			0	0	Cloudy	Herbin.
Biskra																			Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.01	762.2	30.10	764.5	76.0	24.4	30	N	13	5.8			0			0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania			30.20	767.1	74	23.3		SW			2		48			0	0		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.56	750.9	30.15	765.7	30.4	— 0.9	87	SW			2		0			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.27	743.5	30.08	764.1	26.2	— 3.2	96	W	8.1	3.6			10			0.020	0.5		Dr. Wiersbicki.
Eperies	29.12	739.6	30.05	763.2	28.4	— 2.0	78	S			2		0			0	0		Julius Mikolik.
Gratz‡	28.77	730.7	30.08	764.0	32.2	0.1	60	SW			3		0			0	0		Andreas Rospini.
Hermannstadt	28.63	727.1	30.15	765.9	24.3	— 4.3	91	N			3		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.63	727.2	30.08	763.9	19.9	— 6.7	95	Calm			0		0			0	0		The Staff.
Lemberg	28.97	735.8	30.01	762.2	29.1	— 1.6	80	NW			2		10			0.008	0.2		Dr. T. Stanecki.
Pola	30.00	762.1	30.12	765.1	43.0	6.1	58	WNW			1		1			0	0		I. R. Hydrographic Office
Szathmar	29.70	754.4	30.20	767.0	29.7	— 1.3	90	W			2		10			0	0		Beicht Peter, S. J.
Szegedin	29.83	757.7	30.13	765.2	32.0	0.0	89	S			1		6			0	0		Karl Stancel.
Trieste	30.04	763.0	30.14	765.6	41.2	5.1	48	Calm			0		8			0	0	Cloudy	P. Busin.
Vienna	29.35	745.4	30.11	761.7	27.0	— 2.8	74	E			1		0			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.66	753.1	29.87	758.6	39.2	4.0	45	ESE			1		10					Raining	Royal Observatory.
Furnes	29.80	757.0	29.83	757.6	36.7	2.6	66	E			2		10					Raining	M. E. de Cae.
Maeseyck	29.77	756.1	29.89	759.3	35.8	2.1	64	E			2		2			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 16, 1882.

BRITISH SERIES.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
Aberdeen	29.63	752.6	29.74	755.4	36.2	2.3	98	S	5	2.2			9			0	0	Misty	W. Boswell.
Armagh, Observatory	29.54	750.3	29.77	756.1	41.7	5.4	85	NNE	1	0.4			10					Gloomy	S. Call.
Bidston, Liverpool Obs'y			29.72	754.9	42.9	6.1	97	WSW	10	4.5			10					Foggy	John Hartnup.
Bolton, Sharples	29.16	740.7	29.70	754.4	41.6	5.3	86	SE					10					Raining	Thomas Mackereth.
Bradford, Yorkshire	29.30	744.2	29.70	754.4	36.4	2.4	96	SE			1		10			0.02	0.5	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	81	27.2	66				2		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			29.77	756.1	41.0	5.0	97	S			0.6		10					Drizzling	John McLaren.
Chatham, School M. E.	29.70	754.4	29.83	757.7	39.1	3.9	93	SE			1		10					Raining	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.49	749.0	29.71	754.6	46.6	8.1	93	ESE			2		10					Overcast	The Staff.
Fort Napier, Natal	27.67	702.8	29.88	758.9	71.2	21.8	95	NE			1		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	87	30.6	88	S			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			29.72	754.9				ESE			1		10					Overcast	J. O'Donaghadue.
Gibraltar, Mediterranean	29.82	757.4	29.87	758.7	60.2	15.7	95	W			4		6					D. clouds	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.53	750.0	29.73	755.1	37.1	2.8	88	W			1							Blue sky	D. G. MacLean.
Greenwich, Royal Obs'y	29.63	752.6	29.80	756.9	39.6	4.2	93	ESE			1		10					Raining	The Staff.
Guernsey	29.47	748.5	29.69	754.1	45	7.2	80	ESE			2		5					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.78	756.4	29.81	757.2	40.4	4.7	88	SE	7	3.1			10					Drizzling	The Met'g'l Office.
Leicester, Museum	29.52	749.8	29.78	756.4	45.3	7.4	83	SW			1		10					Drizzling	J. E. Carryer.
Malta, Mediterranean	29.98	761.5	30.06	763.5	55	12.8	66	NE			2		3					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			30.18	766.6	71.5	21.9	78	NE			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.21	741.9	29.75	755.6	42.8	6.0	98	SSE			1		10					Drizzling	Robert Pate.
Oxford, Radcliffe Obs'y	29.55	750.6	29.81	757.2	40.1	4.5	98	S			1		10					Drizzling	The Staff.
Plymouth	29.63	752.6	29.70	754.4	47.0	8.3	94	E			3		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.76	755.9	38.4	3.6	97	SSE	16	7.2			9					D. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.88	758.9	29.95	760.7	34.6	1.4	90	NNE			3		10					Snowing	Serg't W. H. Lyne.
Sheffield	29.42	747.3	29.71	754.6	45.8	7.7	93	SW			1		10			0.02	0.5	Overcast	W. F. Cooper.
Silloth Rectory	29.71	754.6	29.74	755.4	42.4	5.8	90	SE			2		10			0.020	0.51	Overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.72	754.9	39.0	3.9	99	NE	1	0.4			10					Misty	Rev. S. J. Perry.
Strathfield Turgiss	29.57	751.1	29.79	756.7	42.1	5.6	86	SE			1		10					Raining	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	29.66	753.4	29.71	754.6	52	11.1	79	SSE			4		4					D. clouds	W. Newcombe.
Valencia, Observatory	29.73	755.1	29.75	755.6	49.8	9.9	85	N	10	4.5			10					D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.21	767.3	30.25	768.6	6	—14.4	100	W	4	1.8		0	2s			0	0	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.22	767.6	30.29	769.4	— 6.5	—21.4	92	Calm	0	0		0	0			0	0	Clear	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.16	766.1	30.18	766.6	7	—13.9	68	NW	5	2.2		2cs	5ks			0	0	Fair	J. McWilliams.
Fort Garry, Manitoba*	29.53	750.0	30.51	774.9	—21	—29.4	100	SW	3	1.3			Haze			0	0	Hazy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.23	767.8	30.37	771.4	13	—10.6	89	W	5	2.2		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.15	765.8	30.52	775.2	10	—12.2	86	Calm	0	0		8c	0			0	0	Fair	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.24	768.1	30.46	773.7	14	—10.0	72	SW	20	8.9			10s			0	0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	29.69	754.1	30.46	773.7	9	—12.8	79	SW	1	0.4		2cs	5ks	W	W	0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.76	755.9	30.52	775.2	16	— 8.9	98	S	4	1.8		10cs	0	SW		0.05	1.3	Cloudy	H. Morgan.
Port Stanley, Ontario	29.79	756.7	30.50	774.7	17	— 8.3	92	W	3	1.3			10n		SW	0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.99	761.7	30.35	770.9	4	—15.6	74	NW			3		10s		NW	0	0	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.95	760.7	30.47	773.9	1	—17.2	89	Calm	0	0		8c	0	W		0	0	Fair	K. Stewart.
Saugeen, Ontario*	29.69	754.1	30.47	773.9	15	— 9.4	96	S	8	3.6			10ks			0	0	Cloudy	W. H. McIntyre.
St. Andrews	30.32	770.1	30.37	771.4	12	—11.1	74	NW	3	1.3		0	0			0	0	Clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.18	766.6	30.22	767.6	13	—10.6	83	W	10	4.5		0	8ks		W	0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	30.10	764.5	30.53	775.4	12	—11.1	86	Calm	0	0		5cs	0			0	0	Fair	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.32	770.1	30.39	771.9	20	— 6.7	68	NW	9	4.0		2k	0	NW		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.86	758.4	30.13	765.3	14	—10.0	82	W	2	0.9		5k	5s			0	0	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			John Duthie.
Cape St. Francis Lt. House	29.72	754.9			67.8	19.9	76	SE	30.2	13.5			2k			0	0	Fine	The Staff, for D. Gill.
Cape Town, C. G. H. Obs'y	29.76	755.9	29.80	756.9	75.0	23.9	66	NNW	10.9	4.9		0	2ks		N;ENE	0	0		

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.25	768.4	30.28	769.0	41.9	5.5	93	S	0.7	0.3			10			0.21	5.3	Covered	M. Marc Dechevrens, S. J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	25.24	666.5	29.96	761.0	53.6	12.0	85	SE			5		0			0	0	Clear.	Federico Maison.

DANISH SERIES.

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

Copenhagen	30.08	764.0	30.13	765.2	21.4	—5.9	82	E	9	4			10						Oversergent Fischer.
Fanöe	30.06	763.6	30.08	764.1	19.6	—6.9	100	ESE			4		10						Overlaerer Lauridsen.
Godthaab, Greenland	28.61	726.7	28.65	727.8	21.9	—5.6	98	N			2		10					Snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.12	739.6	29.16	740.7	23.7	—4.6	90	SE			7		10					Snowing	A. O. Thorlacius.
Thorshavn	29.65	753.2	29.69	754.1	41.9	5.5	83	Calm	0	0			10						Overlaerer Bergh.
Vestervig	30.02	762.4	30.11	764.8	21.9	—5.6		E			4		10						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.04	737.7	29.68	753.8	58.3	14.6	60	SE			2		k		N	0	0		M. Labroue, Director.
Alençon	29.24	742.8	29.80	756.8	41.0	5	87	N			1		5km			0.110	2.8	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.57	751.0	29.84	757.8	35.6	2.0	67	SSE					10					Covered	M. Klein, Commandant.
Avignon, Normal School	29.89	759.2	29.97	761.2	51.1	10.6	60	ESE			1		10			0	0	Covered	M. Giraud, Director.
Bar-sur-Seine	29.27	743.4	29.83	757.7	46.4	8.0	59	SSE			1		8n			0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.54	750.4	29.82	757.4	40.1	4.5	81	E			1		10			0	0	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.04	737.6	29.96	760.9	39.2	4	52	E			1		km		E	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.41	747.0	29.67	753.5	57.9	14.4	65	SSE			2		2		S	0	0	Slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.22	742.2	29.77	756.2	47.1	8.4	77	ENE			1		cn		ENE	0	0		M. Postel, Director.
Brest, Naval Observatory	29.45	748.0	29.69	754.2	54.7	12.6	76	ESE			2		4		E	0.413	10.50		M. de Rermaree, Dir.
Caen, Normal School	29.58	751.3	29.66	753.3	45.7	7.6	100	S					5		N	0.35	9.	Cloudy	M. Bigtrix, Director.
Châlons-sur-Marne, N.Sch'l	29.54	750.3	29.87	758.6	41.7	5.4	93	SE			1		5		WSW	0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.35	745.6	29.92	759.9	37.0	2.8	83	SSE			1		10			0	0	Covered	M. Grimard.
Clermont-Ferrand Obs'y	28.40	721.4	29.76	755.8	49.5	9.7	56	S			2		8			0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	28.99	736.3	29.85	758.1	45.0	7.2	83	SE			4		3	SE	SE	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.02	737.1	29.92	759.9	36.1	2.3	64	E			1		km	E	E	0	0		Dr. Coulet, Director.
Gap, Normal School	27.43	696.8	30.04	762.9	46.8	8.2	67	E			3		10		SE	0	0		M. Jeangirard, Director.
Grénoble, Normal School	29.17	741.0	29.97	761.2	39.6	4.2	65	ENE			1		8		SE	0	0	Covered	M. Kina, Director.
Guéret, Normal School	28.14	714.7	29.69	754.0	55.4	13	64	SE			1		10		NW	0	0	Covered,	M. Ablard, Director.
Lamballe, Normal School	29.63	752.6	29.91	759.6	47.5	8.6	76	S			1		10		S	0.04	1.	Light rain	M. Rivoir, Director.
Lescar, Normal School	29.03	737.3	29.68	753.9	63.5	17.5	66	E			1		2			0	0	Slightly cl'dy	M. Ollitrault, Director.
Lorient, Naval Observatory	29.60	751.7	29.70	754.3	51.1	10.6	75	ESE			3		8		ESE	0.827	21.0	¾ covered	M. Chauvin, Director.
Lyon Obs'y, Park Station	28.80	731.5	29.83	757.7	48.9	9.4	58	S			6	8ck			S	0	0	Very cloudy	Lt. T Carré, Director.
Mans, Normal School	29.46	748.2	29.77	756.2	44.4	6.9	78	E			1		5		W	0.126	3.2	Cloudy	M. André, Director.
Marseille, Observatory	29.69	754.1	29.96	761.0	52.0	11.1	62	SE			2		10		SE	0	0		M. Piboen, Director.
Montlouis l'Instituteur	24.57	624.0	29.80	757.0	42.4	5.8	65	NW	15.0	6.7			2		W	0	0		M. Stephan, Director.
Montpellier, Normal School	29.83	757.6	29.93	760.3	47.8	8.8	100	E			3		8		SE	0.106	2.7	Raining	M. Galzin, Director.
Nancy, Normal School	29.17	740.9	29.97	761.1	35.2	1.8	67	NE			1		2s			0	0	Slightly cl'dy	M. Cave, for Dr. Fines.
Nantes, Observatory	29.54	750.3	29.70	754.4	53.2	11.8	76	NE			1		6n		SE	0.244	6.2		M. Hasse.
Nice	30.02	762.4	30.05	763.2	52.9	11.6	56	E			8		10	E	E	0	0	Covered	M. Larocque, Director.
Perpignan, Observatory	29.71	754.7	29.82	757.4	58.5	14.7	52	S	18.6	8.3			6	NW	SE	0	0		Capt. Boissière, Director.
Pic-du-Midi, Plantade	22.24	565.0			35.8	2.1							1		SW	0	0	Clear	Dr. Fines.
Privas, Normal School	28.91	734.2	29.99	761.7	45.7	7.6	64	NE			1		5n	NE	NE	0	0	Cloudy	M. Baylac, for Gen'l de Nansouty.
Puy de Dôme Obs'y, Summit	24.89	632.1			31.8	—0.1	96	S			3		8		SSW	0	0	Light fog	M. Tallieu.
Rochefort, Naval Obs'y	29.69	754.2	29.72	755.0	53.4	11.9	71	SSE			1		5		SE	0	0	½ covered	M. Alluard, Director.
Roche-sur-Yon, N. School	29.50	749.2	29.71	754.6	54.7	12.6	83	SSE			2		5		S	0	0	Cloudy	Lt. E. Decante, Director.
Rodez, Normal School	27.61	701.2	29.76	755.9	46.0	7.8	72	E			6	3ck			SW	0	0		M. Mouillot, Director.
Rouen, Normal School	29.70	754.3	29.78	756.4	40.6	4.8	62	SSE			1		5		SW	0.094	2.4	Cloudy	M. Richard, Director.
Saint Lô, Normal School	29.53	750.1	29.69	754.1	46.6	8.1	76	ESE			1		5		SE	0.20	5.	Raining	M. Platrier, Director.
Saint Maur, Observatory	29.64	752.8	29.80	757.0	42.1	5.6	62	ESE			1		10		SW	0	0		M. Delaplanche, Dir.
Toulouse, Observatory	28.98	736.1	29.69	754.2	55.4	13.0	59	SSE			6		0			0	0	Clear	M. Renou, Director.
Tours	29.55	750.6	29.75	755.6	51.1	10.6	65	ESE			2		5	Calm	W	0.008	0.2	½ covered	M. Ballland, Director.
Versailles, Observatory	29.30	744.2	29.79	756.7	39.9	4.4	62	SE			1		2			0	0	Lightly cov'd	M. de Tastes.
Sun-Scribes.																			Dr. A. Bérigny, Director
Paris, Montsouris Obs'y																			M. Marié Davy, Director

GERMAN SERIES.

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

Bamberg	29.15	740.3	30.01	762.2	29.8	—1.2	84	Calm			0		0			0	0		Prof. Dr. Hoh.
Berlin	29.93	760.3	30.11	764.9	26.1	—3.3	78	SE			1		10			0	0		Prof. Dr. Arndt.
Breslau	29.58	751.2	30.11	764.7	23.0	—5.0	90	NW			1		10			0.004	0.10	Snowy	Royal University Obs'y.
Carlsruhe	29.55	750.6	30.00	762.0	28.8	—1.8	72	E			0		0			0	0		Albert Senz.
Cassel	29.39	746.4	29.99	761.8	32.0	0.0	82	SE			2		0			0	0		Dr. H. Möhl.
Frankfort on the Main	29.73	755.2	30.12	765.0	32.4	0.2	51	E			2		2			0	0		Physical Society.
Friedrichshafen	28.54	724.9	30.07	763.7	23.0	—5.0	62	SW			2		4	SW		0	0		Chief Telegrapher Wilhelm.
Hamburg	30.03	762.8	30.10	764.6	22.3	—5.4	90	SE			3		10			0	0		Dr. R. Kleeman.
Kiel	30.08	763.9	30.09	764.3	21.2	—6.0	96	E			1		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.66	753.3	30.11	764.7	21.9	—5.6	80	ENE			1		0			0	0		Prof. Dr. Bruhns.
Magdeburg	29.85	758.2	30.09	764.3	22.5	—5.3	90	ESE			1		7ks	ESE		0	0		Dr. Assmann.
Memel	29.97	761.1	30.01	762.3	32.2	0.1	96	NE			1		10n						Reinbrecht & Issermann.
Munich	28.12	714.3	29.98	761.5	23.7	—4.6	71	N			3		0			0	0		Central Station.
Neufahrwasser	30.04	763.0	30.06	763.4	31.8	—0.1	84	NW			1		10			0.039	1.0		A Lothes.
Neustadt, Palatinate	29.44	747.8	29.97	761.2	30.9	—0.6										0	0		Dicknether.
Stuttgart	29.00	736.7	29.94	760.5	29.7	—1.3	67	N			1		0			0	0		Prof. Dr. Schoder.
Thorn	29.82	757.5	30.01	762.3	30.7	—0.7	94	NW			2		10			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	28.45	722.5	29.95	760.8	31.6	—0.2	52	E			2					0	0		Prof. Kemlein.
Wustrow	30.12	765.1	30.15	765.7	26.6	—3.0	87	Calm			0		10s			0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.57	751.0	29.97	761.3	42.3	5.7		NE			1.5		10					Covered	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.88	759.0	29.93	760.3	77.1	25.1	72	WSW	24.0	10.7			0			0	0	Blue sky	
Deesa	29.41	746.9	29.88	758.8	89.2	31.8	17	WSW	6.4	2.9			8	SW		0	0	D. clouds	
Bombay	29.91	759.8	29.95	760.8	79.1	26.2	75	W	9.0	4.0			10		NW	0.	0	Overcast	
Poona, Yarrowda	28.04	712.1	29.88	758.8	84.3	29.1	21	S	10.0	4.5			9			0	0	D. clouds	
Belgaum	27.38	695.4	29.89	759.3	81.3	27.4	22	ESE	5.0	2.2			9	SW	E	0	0	D. clouds	
Lahore	29.19	741.4	29.94	760.5	75.3	24.1	32	NW	2.2	1.0			8			0	0	D. clouds	
Roorkee	29.02	737.0	29.93	760.2	74.8	23.8	32	S	0.9	0.4			2			0	0		
Agra	29.36	745.3	29.92	760.0	84.3	29.1	15	NW	3.7	1.6			0			0	0		
Nagpur	28.95	735.3	30.00	762.0	77.2	25.1	36	NW	3.2	1.4			9		NW			Drizzling	
Jubbulpore	28.61	726.8	30.00	762.1	72.6	22.6	34	W	1.1	0.5			9		E	0	0	Overcast	
Lucknow	29.57	751.2	29.96	761.0	69.3	20.7	30	NW	0.9	0.4			0			0	0	Blue sky	
Allahabad	29.65	753.2	29.97	761.2	76.0	24.4	39	Calm	1.1	0.5			0			0	0	Blue sky	
Patna	29.82	757.5	30.01	762.3	71.6	22.0	59	W	0.5	0.2			6	W	W	0	0	D. clouds	
Hazaribagh	27.93	709.5	29.98	761.6	70.8	21.6	26	N	6.0	2.7			10			0	0	D.clouds	
Cuttack	29.89	759.2	29.97	761.3	80.0	26.7	54	SSW	0.6	0.3			7			0	0	D. clouds	
Calcutta, Alipore	29.95	760.8	29.97	761.3	74.5	23.6	45	SSW	3.0	1.3			5	SW	SW	0	0	D. clouds	
Goalpara	29.58	751.4	30.00	761.9	70.5	21.4	59	Calm	1.2	0.5			1			0	0	D. clouds	
Chittagong	29.91	759.7	30.00	762.0	73.6	23.1	61	WNW	2.7	1.2			2			0	0	Blue sky	
Sibsagar	29.68	753.9	30.03	762.6	67.0	19.4	73	SE	2.1	0.9			5	SW	SW	0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.69	754.2	30.11	764.9	38.7	3.7	44	Calm	0	0			0			0	0		Prof. Giovanni Clodig
Milan	29.59	751.5	30.12	765.1	39.7	4.3	66	S	4.3	1.9			7	W		0	0		Prof. Schiaparelli.
Padua	30.01	762.3	30.13	765.2	39.4	4.1	63	SSE	1.8	0.8			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.18	741.1	30.11	764.8	38.1	3.4	71	E	3.8	1.7			10			0	0		Prof. P. F. Denza.
Genoa	29.90	759.4	30.10	764.4	42.8	6.0	61	N	2.5	1.1			10	S		0.008	0.2		Prof. G. M. Garibaldi.
Mondovi	28.26	717.9	30.24	768.2	37.6	3.1	53	NW			2		9			0	0		Prof. D. C. Bruno.
Pesaro	30.08	764.1	30.13	765.4	42.4	5.8	58	S	4.9	2.2			0			0	0		Prof. Luigi Guidi.
Florence	29.83	757.7	30.09	764.3	42.8	6.0	49	NE			2					0	0		Cav. F. Meucci.
Leghorn	30.01	762.3	30.10	764.5	44.4	6.9	68	NE	3.8	1.7			9			0	0		Prof. P. Monte.
Rome	29.92	759.9	30.10	764.5	47.1	8.4	24	NNW	1.3	0.6			0			0	0		Prof. P. S. Ferrari.
Lecce	29.82	757.5	30.08	764.0	42.6	5.9	61	WNW	15.4	6.9			6	NW		0.067	1.7		Prof. C. de Giorgi.
Cosenza	29.18	741.1	30.09	764.3	42.8	6.0	66	NW	0.7	0.3			0			0	0		Prof. D. Conti.
Cagliari	29.78	756.5	29.98	761.5	55.2	12.9	46	SE			4		4	W		0	0		Prof. A. Pacinotti.
Palermo	29.83	757.7	30.08	764.1	52.0	11.1	45	NE	3.1	1.4			0			0	0		Prof. G. Cincciatore.
Syracuse	30.04	762.9	30.08	764.0	50.4	10.2	71	E	7.4	3.3			8	WSW		0.118	3.0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R	29.56	750.9	30.10	764.6	46.0	7.8	48	NE	0.7	0.3			0			0	0		Prof. F. Brioschi.
Stelvio	22.07	560.6			19.6	— 6.9	38	S			1		0			0	0	Clear	P. F. Denza.
Valdobbia	22.01	559.2			24.6	— 4.1	59	E			1		0			0	0	Clear	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.21	767.3	30.23	767.8	39.9	4.4	77	NNE	1.3	0.6			10s;ck		W	0	0	Covered	K. Sasaki.
Kioto	30.03	762.7	30.21	767.3	37.7	3.2	86						10s			0	0	Cloudy	
Nagasaki, I. M. Obs'y	30.02	762.5	30.24	768.1	38.6	3.7	87	N	1.5	0.7			10s			0	0	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	30.13	765.3	30.20	767.1	41.5	5.3	83	Calm	0	0			10s;ks		W	0.045	1.14	Overcast	The Staff.
Wakayama	30.14	765.5	30.19	766.8	42.5	5.8	70	NE	2.7	1.2			10s			0	0	Cloudy	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.84	757.9	30.03	762.7	79.7	26.5	59	E	15.5	6.9		0	2		E	0.57	14.5	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.45	621.0	30.26	768.6	50.0	10.0	84	N			1	4cs	0	S		0	0	Clear	Prof. M. Leal.
Mazatlan	29.78	756.3	30.04	763.0	67.5	19.7	72	NNW	0.9	0.4		0	1k			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.08	586.3	30.18	766.7	45.5	7.5	73	Calm	0	0		5ck	0			0	0	Foggy	The Staff.
Pabellon, Aguascalientes	23.94	608.2	30.04	763.0	47.8	8.8	61	Calm				3cs	0	WSW		0	0	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.44	595.4	30.39	772.0	41.9	5.5	43	Calm	0	0		0	1		SE	0	0	Clear	Prof. P. Spina.
San Luis Potosi	24.21	614.8	30.32	770.1	50.1	10.1	68	SW	0.9	0.4			10		E	0	0	Covered	G. Barroeta, M. D.
Tlacotalpam	30.07	763.9	30.09	764.2	62.6	17.0	95	S	0.9	0.4		1	6	NW	E	0	0	Covered	Prof. M. Cházaro.
Zacatecas	22.56	573.0	30.31	770.0	44.2	6.8	76	Calm	0	0		9ck	0			0	0	Very cloudy	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.87	758.8	29.87	758.8	36.1	2.3		ESE			4					0	0		
Groningen	29.92	759.9	29.97	761.3	29.8	— 1.2		ESE			3					0	0		
Helder	29.91	759.6	29.91	759.6	29.8	— 1.2		ESE			2					0	0		
Hellevoetsluis	29.88	759.0	29.88	759.0	32.9	0.5	96	SE			3					0	0		
Utrecht	29.89	759.1	29.93	760.3	33.3	0.7	96	SE			2		8			0	0	Very cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.00	761.9	30.06	763.5	33.8	1.0	75	Calm	0	0			8			0	0		
Christiania	30.08	763.9	30.24	768.0	15.3	— 9.3	59	ESE	2	1			3			0	0		
Gjæsvær	29.93	760.2	29.95	760.8	27.7	— 2.4		S			4		10						
Lodingen	30.00	761.9	30.04	763.1	31.1	— 0.5	73	WNW			2		7			0.366	9.3		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores																			Dr. J. A. Sampaio.
Campo Major	28.69	728.8	29.71	754.6	46.8	8.2	86	SSW	16.1	7.2			10			0.315	8.0	Raining	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.02	762.4	30.11	764.7	62.6	17.0	53	SSE	4.2	1.9			4			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.33	745.0	29.69	754.2	48.9	9.4	82	W	16.8	7.5			7	WNW		1.075	27.3	Raining	The Staff.
Ponta Delgada, Azores	30.24	768.1	30.31	769.9	56.1	13.4	55	N	1.8	0.8			4			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.78	731.1	29.90	759.5	30.9	— 0.6	100	Calm	0	0			10			Blank			Capt. Lasarew.
Archangel	30.52	775.1	30.54	775.6	4.6	—15.2	88	SE	4	2			2cs						Capt. Sselliwerstow.
Astrakhan	30.11	764.9	30.03	762.8	30.4	— 0.9	92	E	9	4			10cp			Blank		Heavy cl'ds	Capt. Wisganow.
Barnaul	29.44	747.8	29.98	761.4	14.4	— 9.8	60	Calm	0	0			5						Meteorological Obs'y.
Dorpat	29.87	758.6	30.13	765.2	26.8	— 2.9	94	ENE	11	5			10n					Light snow.	Obervatory.
Ekaterinburg	29.47	748.5	30.53	775.4	9.9	—12.3	62	Calm	0	0			0						Meteorological Obs'y.
Kasan	30.26	768.5	30.56	776.1	14.2	— 9.9	58	NNE	7	3			0						Observatory.
Kertch	29.63	752.5	29.65	753.0	40.3	4.6	82	ESE	2	1			9						Lagorio.
Kieff	29.28	743.6	29.94	760.5	28.6	— 1.9	66	NW	7	3		0	10cs;ks						Cand. Fatjanow.
Lugan	29.65	753.1	29.86	758.5	30.7	— 0.7	88	ENE	34	15			10			Blank			Meteorological Obs'y.
Moscow	29.63	752.7	30.22	767.5	26.2	— 3.2	80	E	13	6			10s						Meteorological Obs'y.
Nertchinsk	27.99	711.0	30.69	779.5	—22.0	—30.0	67	Calm	0	0			4					Light clouds	Meteorological Obs'y.
Nikolaiev	29.86	758.4	29.93	760.2	30.0	— 1.1	86	N	22	10			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.95	760.7	30.04	762.9	— 2.2	—19.0	64	W	4	2			10n						Lieut. Iwanow.
Nukuss	29.85	758.2	30.09	764.3	39.6	4.2	84	Calm	0	0			10n						Dr. Dobrochotow.
Pekin, China	30.33	770.3	30.47	773.9	17.1	— 8.3	41	NW	13	6			0						Physical Observatory.
St. Petersburg	30.24	768.0	30.25	768.4	24.3	— 4.3	77	E	11	5			10s;n						Central Physical Obs'y.
Tashkend, Laboratory	28.49	723.7	30.09	764.3	48.2	9	80	E	9	4			6			Blank			Teich, A. M.
Tiflis	28.42	721.9	29.86	758.4	46.6	8.1	80	E	2	1			10						Physical Observatory.
Warsaw	29.56	750.8	30.00	762.1	26.2	— 3.2	87	NW	7	3			10n					Snowing	Astronomical Obs'y.
Wilna	29.48	748.9	29.92	760.0	34.3	1.3	83	W	2	1			10					Heavy cl'ds	Berg, Assistant.
Yeniseisk	29.43	747.6	29.74	755.5	9.9	—12.3	73	SE	2	1			9					Light clouds	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.77	756.1	36.0	2.2	90	W			1		8k			0	0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.74	755.4	44	6.7	92	S			4		10			0.1	3.	Overcast	J. Youngclause.
North Unst, Shetland Isl'ds			29.84	757.9				S			7		10			Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.75	755.6	29.85	758.3	56.3	13.5	78	E	4.5	2.0			5			0	0	½ covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.63	752.6	29.69	754.0	60.8	16.0	47	S	5.8	2.6		3	2	SW		0	0	Cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.73	678.9			43.7	6.5	72	SW	9.0	4.0		0	8			0.059	1.5	Cloudy	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.51	698.8	29.77	756.2	45.7	7.6	73	S	9.8	4.4		0	9			0.102	2.6	Almost cov'd	The Staff.
Murcia, Met. Obs'y ‡	29.65	753.1	29.80	757 0	55.4	13.0	78	WNW	1.1	0.5		5	5	ESE		0.354	9.0	Raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.62	726.9	29.51	749.6	47.5	8.6	80	S	13.6	6.1			10			0.614	15.6	Covered	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.12	765.1	30.19	766.8	68.3	20.2	74	ENE	3.6	1.6		0	4k;s		ENE	Inap.	Inap.	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.95	760.7	30.00	762.0	79.2	26.2	71	SE	3.3	1.5			1s			0	0	Fair	Federico Faura, S. J
San Fernando, Naval Obs'y	29.76	755.8	29.86	758.3	57.6	14.2	59	WSW	21.3	9.5		0	7		SW	0.443	11.3		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.00	762.0	30.09	764.3	74.8	23.8	77	E	13.8	6.17		6k	6kn	E	E	0	0	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.91	759.8	30.05	763.5	73.9	23.3	81	WNW	3.1	1.4			9kn		W	0	0	Cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.29	769.4	30.33	770.4	0.3	—17.6	89	S			2		0			0	0		
Umea	30.25	768.4	30.30	769.7	23.7	— 4.6	86	Calm			0		0			0	0		
Hernosand	30.28	769.0	30.33	770.3	7.7	—13.5	71	Calm			0		3			0	0		
Stockholm	30.00	762.0	30.18	766.5	21.6	— 5.8	90	NE			2		10			0	0		
Wisby	29.97	761.2	30.03	762.7	30.9	— 0.6	88	E			2		10			0	0		
Sub-Series.																			
Upsala	30.10	764.6	30.19	766.8	19.4	— 7.0	89	N	8.0	3.6			10			0	0		Nils Ekholm.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.53	724.7	30.02	762.5	33.6	0.9	78	N			1		7			0	0	Foggy	The Observatory.
Zurich	28.33	719.5	30.07	763.8	24.8	— 4.0	75	W			1		0			0	0	Foggy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —1.6 mm.; Ther. —2°.8 cent.; Hum. +7 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.98	761.5	34.5	1.4	85	N	19	8.5			10		N	0.039	1.0		The Observatory.
Valona			29.96	760.9	47.7	8.7		NW			1		2			0	0	Slightly cld'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.92	759.9	62.1	16.7	64	SW			3		7n		SW	0.385	9.8		Prof. C. V. A. van Dyck.

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

UNITED STATES SERIES.

By authority of the Secretary of War.

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

Albany, New York	30.52	775.2	30.62	777.7	18	— 7.8	69	W	1	0.4	.....	8c	0	Calm	.....	0	0	Fair	
Alpena, Michigan	29.75	755.6	30.47	773.9	5	—15.0	75	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Atlanta, Georgia	29.19	741.4	30.42	772.7	30	— 1.1	59	E	6	2.7	.....	10c	0	Calm	.....	0	0	Cloudy	
Atlantic City, New Jersey	30.60	777.2	30.62	777.7	22	— 5.6	71	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Attou Id., Alaska	29.52	749.8	.....	.....	31	— 0.6	89	NW	31	13.9	.....	.....	10n	.....	N	0.05	1.3	Cloudy	
Augusta, Georgia	30.27	768.8	30.49	774.4	32	0.0	79	S	3	1.3	.....	0	2s	.....	Calm	0	0	Fair	
Baltimore, Maryland	30.57	776.5	30.62	777.7	28	— 2.2	66	NW	1	0.4	.....	2cs;hz	0	Calm	.....	0	0	Clear	
Barnegat, New Jersey	30.59	777.0	30.62	777.7	21	— 6.1	57	N	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Benton, Montana	27.32	693.9	.....	.....	—23	—30.6	58	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Bismarck, Dakota	28.50	723.9	30.35	770.9	—12	—24.4	100	NW	6	2.7	.....	1c	0	Calm	.....	0.05	1.3	Clear	
Boise City, Idaho	27.32	693.9	30.28	769.1	16	— 8.9	83	NW	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Boston, Massachusetts	30.38	771.6	30.55	776.0	17	— 8.3	51	W	7	3.1	.....	1cs	0	Calm	.....	0	0	Clear	
Brackettville, Texas	29.10	739.1	30.23	767.8	32	0.0	89	N	14	6.3	.....	.....	10s	.....	N	0	0	Cloudy	
Brownsville, Texas	30.03	762.7	30.07	763.8	58	14.4	100	SE	4	1.8	.....	.....	10n	.....	Calm	0.18	4.6	Light rain	
Buffalo, New York	29.76	755.9	30.54	775.7	15	— 9.4	82	SW	4	1.8	.....	10cs	0	Calm	.....	0	0	Cloudy	
Burlington, Vermont	30.23	767.8	30.55	776.0	16	— 8.9	83	S	3	1.3	.....	0	2s	.....	W	0	0	Fair	
Cairo, Illinois	29.95	760.7	30.38	771.6	28	— 2.2	77	E	1	0.4	.....	2c	0	W	.....	0	0	Fair	
Campo, California	27.36	694.9	29.93	760.2	37	2.8	63	E	1	0.4	.....	2c	0	W	.....	0	0	Fair	
Camp Thomas, Arizona	27.31	693.7	.....	.....	28	— 2.2	77	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	30.57	776.5	30.59	777.0	30	— 1.1	47	N	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Cape May, New Jersey	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Castroville, Texas	29.35	745.5	30.07	763.8	52	11.1	93	NW	4	1.8	.....	.....	10s	.....	Calm	0	0	Threatening	
Cedar Keys, Florida	30.27	768.8	30.30	769.6	43	6.1	92	NE	10	4.5	.....	1cs	0	Calm	.....	0	0	Clear	
Champaign, Illinois	29.49	749.0	30.36	771.1	21	— 6.1	57	SE	14	6.3	.....	.....	10s	.....	SE	0	0	Cloudy	
Charleston, S. Carolina	30.36	771.1	30.42	772.7	42	5.6	74	N	12	5.4	.....	0	8s	.....	N	0	0	Cloudy	
Charlotte, N. Carolina	29.60	751.8	30.48	774.2	28	— 2.2	66	NE	7	3.1	.....	2cs	Haze	Calm	Calm	0	0	Fair	
Chattanooga, Tennessee	29.59	751.6	30.46	773.7	25	— 3.9	87	E	2	0.9	.....	2cs	s'k	Calm	Calm	0	0	Fair	
Cheyenne, Wyoming	23.92	607.6	29.86	758.4	—12	—24.4	75	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Chicago, Illinois	29.66	753.4	30.40	772.1	24	— 4.4	74	SE	2	0.9	.....	8ck	0	SE	.....	Inap.	Inap.	Fair	
Chincoteague, Virginia	30.58	776.7	30.60	777.2	25	— 3.9	75	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Cincinnati, Ohio	29.77	756.1	30.48	774.2	26	— 3.3	75	E	4	1.8	.....	.....	10ks	.....	SE	0	0	Cloudy	
Cleveland, Ohio	29.73	755.1	30.53	775.4	17	— 8.3	75	SE	3	1.3	.....	5cs	0	Calm	.....	Inap.	Inap.	Fair	
Coleman City, Texas	28.59	723.9	30.32	770.1	18	— 7.8	68	N	24	10.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Columbus, Ohio	29.56	750.8	30.47	773.9	22	— 5.6	79	E	6	2.7	.....	5cs	2ks	Calm	SW	0.01	0.3	Fair	
Concho, Texas	28.37	720.6	30.21	767.3	20	— 6.7	85	N	14	6.3	.....	0	8s	.....	Calm	0	0	Cloudy	
Corsicana, Texas	29.84	757.9	30.34	770.6	31	— 0.6	100	NW	12	5.4	.....	.....	10n	.....	Calm	0.03	0.8	Light rain	
Davenport, Iowa	29.64	752.8	30.34	770.6	14	—10.0	82	E	10	4.5	.....	0	8s	.....	Calm	0.02	0.5	Fair	
Dayton, Washington T'y	28.41	721.6	30.22	767.6	13	—10.6	80	NW	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Deadwood, Dakota	25.37	644.4	.....	.....	—17	—27.2	37	SE	2	0.9	.....	0	0	.....	.....	0.02	0.5	Clear	
Decatur, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Delaware Breakwater, Del.	30.58	776.7	30.60	777.2	25	— 3.9	75	NE	11	4.9	.....	0	0	.....	.....	0	0	Clear	
Denison, Texas	29.50	749.3	30.38	771.6	20	— 6.7	85	N	16	7.2	.....	.....	10n	.....	N	0.04	1.0	Light snow	
Denver, Colorado	24.78	629.4	30.00	762.0	—18	—27.8	67	S	2	0.9	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Des Moines, Iowa	29.33	745.0	30.28	769.1	19	— 7.2	85	SE	1	0.4	.....	.....	10s	.....	Calm	0.15	3.8	Cloudy	
Detroit, Michigan	29.72	754.9	30.47	773.9	23	— 5.0	86	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Dodge City, Kansas	27.63	701.8	30.25	768.6	— 6	—21.1	61	NW	20	8.9	.....	0	0	.....	.....	0.02	0.5	Clear	
Dubuque, Iowa	29.63	752.6	30.41	772.4	14	—10.0	82	NW	1	0.4	.....	.....	10s	.....	Calm	0.06	1.5	Cloudy	
Duluth, Minnesota	29.66	753.4	30.42	772.7	7	—13.9	88	NW	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Eagle Pass, Texas	29.42	747.3	30.19	766.8	40	4.4	65	NW	18	8.0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Eagle Rock, Idaho	25.36	644.1	30.01	762.2	—16	—26.7	70	NW	10	4.5	.....	.....	10s	.....	Calm	0	0	Cloudy	
Eastport, Maine	30.32	770.1	30.39	771.9	12	—11.1	61	W	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Edinburg, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
El Paso, Texas	26.29	667.8	.....	.....	36	2.2	45	SE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Erie, Pennsylvania	29.73	755.1	30.51	774.9	19	— 7.2	85	S	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Escanaba, Michigan	29.70	754.4	30.44	773.2	4	—15.6	74	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Florence, Arizona	28.56	725.4	30.16	766.1	40	4.4	56	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Apache, New Mexico	25.04	636.0	30.48	774.2	21	— 6.1	57	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Assiniboine, Montana	27.32	693.9	.....	.....	—24	—31.1	.....	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Bennett, Dakota	28.75	730.2	.....	.....	—11	—23.9	76	Calm	0	0	.....	0	0	.....	.....	0.09	2.3	Clear	
Fort Buford, Dakota	28.27	718.0	30.43	772.9	—15	—26.1	71	Calm	0	0	.....	0	0	.....	.....	0.09	2.3	Clear	
Fort Custer, Montana	26.94	684.3	.....	.....	—29	—33.9	.....	Calm	0	0	.....	0	0	.....	.....	0.01	0.3	Clear	
Fort Davis, Texas	25.27	641.8	30.23	767.8	16	— 8.9	83	NE	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Elliott, Texas	27.48	698.0	30.11	764.8	— 1	—18.3	37	NW	20	8.9	.....	0	0	.....	.....	0.01	0.3	Clear	
Fort Gibson, Indian T'y	29.77	756.1	30.37	771.4	15	— 9.4	82	NW	22	9.8	.....	.....	10n	.....	Calm	0.06	1.5	Light snow	
Fort Grant, Arizona	25.18	639.6	29.98	761.5	35	1.7	61	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Fort Griffin, Texas	29.02	737.1	30.43	772.9	15	— 9.4	65	N	18	8.0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Keogh, Montana	27.72	704.1	.....	.....	—21	—29.4	.....	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort McKavett, Texas	27.98	710.7	30.07	763.8	22	— 5.6	72	N	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Macon, North Carolina	30.45	773.4	30.46	773.7	34	1.1	79	NE	11	4.9	.....	8k	0	NW	.....	0	0	Cloudy	
Fort St. Michaels	29.87	758.7	29.90	759.4	15	— 9.4	100	NE	39	17.4	.....	.....	10cs	.....	Calm	.....	.....	.....	
Fort Missoula, Montana	26.85	682.0	.....	.....	—10	—23.3	75	S	3	1.3	.....	5c	0	Calm	.....	0	0	Fair	
Fort Shaw, Montana	26.34	669.0	.....	.....	3	—16.1	73	W	28	12.5	.....	0	0	.....	.....	0	0	Clear	
Fort Sill, Indian Territory	29.05	737.9	30.29	769.4	10	—12.2	79	W	16	7.2	.....	.....	10s	.....	Calm	0.09	2.3	Cloudy	
Fort Stevenson, Dakota	28.45	722.6	.....	.....	—16	—26.7	100	N	4	1.8	.....	0	5ks	.....	W	0	0	Fair	
Fort Verde, Arizona	.....	.....	.....	.....	25	— 3.9	62	NW	.....	.....	1	0	0	.....	.....	0	0	Clear	
Fredericksburg, Texas	28.47	723.1	30.13	765.3	31	— 0.6	79	N	12	5.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Galveston, Texas	30.14	765.5	30.19	766.8	55	12.8	87	SE	11	4.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Grand Haven, Michigan	29.71	754.6	30.42	772.7	20	— 6.7	85	E	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Hatteras, North Carolina	30.46	773.7	30.48	774.2	37	2.8	81	NE	19	8.5	.....	0	0	.....	.....	0	0	Clear	
Helena, Montana	25.83	656.1	.....	.....	—18	—27.8	100	Calm	0	0	.....	0	8s	.....	Calm	0	0	Cloudy	
Henrietta, Texas	29.37	746.0	30.43	772.9	14	—10.0	82	N	22	9.8	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Indianapolis, Indiana	29.54	750.3	30.39	771.9	22	— 5.6	72	E	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Indianola, Texas	30.10	764.5	30.13	765.3	54	12.2	100	SE	3	1.3	.....	.....	10s	.....	S	0.03	0.8	Cloudy	
Jacksboro, Texas	29.16	740.7	30.42	772.7	15	— 9.4	65	N	21	9.4	.....	.....	10s	.....	N	0	0	Cloudy	
Jacksonville, Florida	30.31	769.9	30.36	771.1	45	7.2	76	NE	6	2.7	.....	2cs	8s	Calm	SE	0	0	Cloudy	
Keokuk, Iowa	29.57	751.1	30.27	768.8	20	— 6.7	85	E	8	3.6	.....	.....	10n	.....	Calm	0.01	0.3	Light snow	
Key West, Florida	30.20	767.1	30.23	767.8	60	15.6	71	NE	6	2.7	.....	1k	0	Calm	.....	0	0	Clear	
Kittyhawk, North Carolina	30.50	774.7	30.53	775.4	33	0.6	79	N	20	8.9	.....	0	0	.....	.....	0	0	Clear	
Knoxville, Tennessee	29.38	746.2	30.48	774.2	22	— 5.6	97	Calm	0	0	.....	5c	0	Calm	.....	0	0	Fair	
La Crosse, Wisconsin	29.56	750.8	30.38	771.6	11	—11.7	80	N	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
La Mesilla, New Mexico	26.16	664.5	30.31	769.9	28	— 2.2	43	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Laredo, Texas	29.65	753.1	29.99	761.7	57	13.9	87	N	8	3.6	.....	.....	10s	.....	E	0	0	Cloudy	
Leavenworth, Kansas	29.41	747.0	30.36	771.1	3	—16.1	73	NW	8	3.6	.....	0	1s	.....	.....	0.09	2.3	Clear	
Lewiston, Idaho	29.42	747.3	30.11	764.8	19	— 7.2	67	E	1	0.4	.....	0	0	.....	.....	0.03	0.8	Clear	
Little Rock, Arkansas	29.92	760.0	30.26	768.6	30	— 1.1	78	SE	4	1.8	.....	2ck	0	N	.....	0	0	Fair	
Los Angeles, California	29.69	754.1	30.06	763.5	47	8.3	85	NE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Louisville, Kentucky	29.78	756.4	30.38	771.6	27	— 2.8	76	E	5	2.2	.....	0	8s;ks	.....	C;SW	Inap.	Inap.	Fair	
Lynchburg, Virginia	29.85	758.4	30.61	777.5	23	— 5.0	73	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Madison, Wisconsin	29.29	744.0	30.38	771.6	11	—11.7	80	E	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Marquette, Michigan	29.64	752.8	30.42	772.7	9	—12.8	57	NW	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Mason, Texas	28.58	725.9	30.49	774.4	22	— 5.6	72	N	14	6.3	.....	.....	10s	.....	Calm	0	0	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.96	761.0	30.32	770.1	30	— 1.1	78	E	1	0.4	.....	0	2s	.....	Calm	0	0	Fair	
Milwaukee, Wisconsin	29.61	752.1	30.41	772.4	19	— 7.2	85	W	4	1.8	.....	5ck	2s	Calm	Calm	0	0	Fair	
Mobile, Alabama	30.27	768.8	30.35	770.9	38	3.3	72	E	4	1.8	.....	5ck	2s	W	Calm	0	0	Fair	
Montgomery, Alabama	30.17	766.3	30.42	772.7	33	0.6	79	E	3	1.3	.....	10cs	0	Calm	.....	0	0	Cloudy	
Moorhead, Minnesota	29.37	746.0	30.46	773.7	0	—17.8	85	Calm	0	0	.....	.....	10s	.....	NW	0.02	0.5	Cloudy	
Morgantown, W. Virginia	29.43	747.5	30.51	774.9	21	— 6.1	86	Calm	0	0	.....	0	8ks	.....	W	0	0	Fair	
Mt. Washington, N. H.	23.54	597.9	29.90	759.4	—12	—24.4	50	NW	90	40.2	.....	0	5s	.....	NW	0	0	Clear	
Nashville, Tennessee	29.81	757.2	30.39	771.9	26	— 3.3	63	E	1	0.4	.....	2cs	s'k	Calm	Calm	0	0	Fair	
New Haven, Connecticut	30.48	774.2	30.01	777.5	16	— 8.9	66	Calm	0	0	.....	1cs	0	Calm	.....	0	0	Clear	
New London, Connecticut	30.55	776.0	30.60	777.2	18	— 7.8	68	NW	3	1.3	.....	4ck	0	W	.....	0	0	Fair	
New Orleans, Louisiana	30.23	767.8	30.29	769.4	44	6.7	76	NE	4	1.8	.....	10cs	0	SW	.....	0	0	Cloudy	
Newport, Rhode Island	30.50	774.7	30.56	776.2	20	— 6.7	70	W	9	4.0	.....	4ck	0	W	.....	0	0	Fair	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	30.57	776.5	30.60	777.2	22	— 5.6	58	N	11	4.9	.....	0	0	.....	.....	0	0	Clear	
New York, New York	30.42	772.7	30.62	777.7	21	— 6.1	86	NW	2	0.9	.....	0	2s; fg	.....	Calm	0	0	Fair	
Norfolk, Virginia	30.51	774.9	30.57	776.5	28	— 2.2	66	S	4	1.8	.....	2cs	Fog	Calm	Calm	0	0	Fair	
North Platte, Nebraska	27.32	693.9	30.37	771.4	—20	—28.9	64	NW	14	6.3	.....	0	0	.....	.....	0	0	Clear	
Olympia, Washington T'y	29.95	760.7	29.99	761.7	32.5	0.3	65	N	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Omaha, Nebraska	29.08	738.6	30.32	770.1	4	—15.6	87	NW	11	4.9	.....	.....	10s	.....	Calm	0.32	8.1	Cloudy	
Oswego, New York	30.19	766.8	30.54	775.7	21	— 6.1	71	SW	8	3.6	.....	.....	10s	.....	NW	0	0	Cloudy	
Pensacola, Florida	30.34	770.6	30.37	771.4	41	5.0	74	NE	7	3.1	.....	Haze	9ks	Calm	W	0	0	Cloudy	
Philadelphia, Pa	30.55	776.0	30.01	777.5	22	— 5.6	86	NE	6	2.7	.....	1ck	Fog	Calm	Calm	0	0	Clear	
Phœnix, Arizona	29.06	738.1	30.97	786.6	38	3.3	72	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.23	437.6	29.44	747.8	—15	—26.1	42	SW	40	17.9	.....	0	0	.....	.....	0.09	2.3	Clear	
Pilot Point, Texas	29.54	750.3	30.46	773.7	20	— 6.7	100	N	10	4.5	.....	.....	10n	.....	Calm	Inap.	Inap.	Light snow	
Pioche, Nevada	24.01	609.8	29.78	756.4	16	— 8.9	41	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	29.63	752.6	30.52	775.2	20	— 6.7	70	E	3	1.3	.....	8ck	0	SW	.....	0.01	0.3	Fair	
Port Huron, Michigan	29.76	755.9	30.48	774.2	18	— 7.8	68	S	6	2.7	.....	8cs	0	Calm	.....	0	0	Fair	
Portland, Maine	30.41	772.4	30.47	773.9	18	— 7.8	68	NW	5	2.2	.....	2cs	0	NW	.....	0	0	Clear	
Portland, Oregon	29.96	761.0	30.03	762.7	28	— 2.2	88	E	7	3.1	.....	.....	10s	.....	S	0	0	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	38	3.3	63	NW	24	10.7	.....	2c	0	Calm	.....	0	0	Clear	
Prescott, Arizona	24.78	629.4	30.14	765.5	26	— 3.3	52	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	30.23	767.8	30.24	768.1	50	10.0	79	N	11	4.9	.....	1ck	0	E	.....	0	0	Clear	
Red Bluff, California	29.65	753.1	30.00	762.0	48.0	8.9	81	S	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Rio Grande City, Texas	29.92	760.0	30.14	765.5	57	13.9	87	E	9	4.0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Rochester, New York	29.87	758.7	30.55	776.0	17	— 8.3	83	W	3	1.3	.....	1c	1s	Calm	Calm	0	0	Clear	
Roseburg, Oregon	29.35	745.5	29.93	760.2	38.5	3.6	86	E	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Sacramento, California	29.95	760.7	30.03	762.7	47	8.3	85	SE	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
St. Louis, Missouri	29.70	754.4	30.32	770.1	23	— 5.0	73	SE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
St. Paul, Minnesota	29.44	747.8	30.35	770.9	12	—11.1	80	NW	2	0.9	.....	.....	10n	.....	NW	0.06	1.5	Light snow	
Salt Lake City, Utah	25.74	653.8	30.07	763.8	17	— 8.3	51	Calm	0	0	.....	7k	0	W	.....	Inap.	Inap.	Fair	
San Antonio, Texas	29.47	748.5	30.18	766.6	52	11.1	100	NW	2	0.9	.....	.....	10n	.....	Calm	0.02	0.5	Light rain	
San Diego, California	30.00	762.0	30.07	763.8	53	11.7	93	N	3	1.3	.....	.....	10s	.....	N	0	0	Cloudy	
Sandusky, Ohio	29.76	755.9	30.49	774.4	22	— 5.6	72	NW	4	1.8	.....	0	s'k	Calm	Calm	0	0	Clear	
Sandy Hook, New Jersey	30.57	776.5	30.61	777.5	21	— 6.1	57	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
San Francisco, California	29.94	760.5	30.01	762.2	51	10.6	86	SW	2	0.9	.....	.....	9s	.....	SW	0	0	Cloudy	
Santa Fé, New Mexico	23.23	590.0	29.77	756.1	10	—12.2	79	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	30.32	770.1	30.43	772.9	37	2.8	71	N	7	3.1	.....	2ck	5ks	W	W	0	0	Fair	
Shreveport, Louisiana	30.00	762.0	30.20	768.6	41	5.0	57	Calm	0	0	.....	0	5s	.....	Calm	0	0	Fair	
Silver City, New Mexico	24.28	616.7	30.75	781.0	26	— 3.3	40	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Smithville, North Carolina	30.44	773.2	30.47	773.9	37	2.8	81	N	13	5.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Socorro, New Mexico	25.45	646.4	29.51	749.5	32	0.0	59	NE	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.60	751.8	30.33	770.4	24	— 4.4	74	SE	6	2.7	.....	.....	10s	.....	.....	0	0	Cloudy	
Springfield, Massachusetts	30.44	773.2	30.58	776.7	12	—11.1	61	W	1	0.4	.....	2c	0	Calm	.....	0	0	Clear	
Stockton, Texas	27.22	691.4	30.22	767.6	18	— 7.8	68	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.47	748.5	30.39	771.9	—10	—23.3	100	S	2	0.9	.....	2cs	0	Calm	.....	0	0	Clear	
Thatcher's Island, Mass	30.50	774.7	30.56	776.2	19	— 7.2	69	W	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Toledo, Ohio	29.71	754.6	30.46	773.7	20	— 6.7	86	Calm	0	0	.....	10cs	0	Calm	.....	0	0	Cloudy	
Tucson, Arizona	27.59	700.8	30.14	765.5	38	3.3	45	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.92	760.0	30.47	773.9	14.5	9.7	91	SE	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Uvalde, Texas	29.18	741.2	30.02	762.5	54	12.2	80	N	2	0.9	.....	.....	10s	.....	Calm	0.04	1.0	Cloudy	
Vicksburg, Mississippi	30.04	763.0	30.32	770.1	34	1.1	79	E	12	5.4	.....	10c	0	Calm	.....	0	0	Cloudy	
Visalia, California	29.65	753.1	30.03	762.7	43	6.1	87	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	30.47	773.9	30.60	777.2	23	— 5.0	86	Calm	0	0	.....	0	Fog	.....	Calm	0	0	Clear	
Wickenburg, Arizona	.....	.....	.....	.....	30	— 1.1	47	NW	.....	.....	1	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	30.42	772.7	30.49	774.4	33	0.6	70	NE	4	1.8	.....	5ck	5s	Calm	Calm	0	0	Cloudy	
Winnemucca, Nevada	25.60	650.2	29.90	761.0	27	— 2.8	76	N	10	4.5	.....	.....	10ks	.....	W	0	0	Cloudy	
Wood's Holl, Mass	30.50	774.7	30.55	776.0	20	— 6.7	70	NW	10	4.5	.....	5ck	0	W	.....	0	0	Fair	
Yankton, Dakota	28.98	736.1	30.47	773.9	— 3	—19.4	66	N	16	7.2	.....	.....	10s	.....	Calm	0.26	6.6	Cloudy	
Yuma, Arizona	29.91	759.7	30.00	763.5	52	11.1	29	NE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.05	560.1	.....	.....	50.5	10.3	70	Calm	0	0	.....	2cs	0	.....	.....	.....	.....	Fair	Thomas Herran.
Buff Bay Town, Jamaica.‡	29.89	759.2	30.10	764.5	69	20.6	84	SW	.....	.....	.....	.....	10	.....	.....	0	0	.....	
Havana, Cuba, W. I.	30.14	765.5	30.19	766.8	70	21.1	71	Calm	0	0	.....	.....	10n	.....	E	0	0	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	28.84	732.6	28.90	734.1	12.9	—10.6	.....	S	.....	.....	2	.....	7	.....	.....	0	0	.....	K. V. Müller.
Kingston, Jamaica, W. I.	30.06	763.5	30.07	763.8	69.4	20.8	79	Calm	0	0	.....	0	2s	.....	E	0	0	Fair	Robert Johnstone.
Navassa, W. I.	29.97	761.2	30.05	763.3	75	24.4	71	NE	16	7.2	.....	2k	5s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	29.98	761.5	29.98	761.5	80	26.7	82	NE	.....	.....	2	6ck	6ks	E	.....	0.700	17.78	½ Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.42	747.3	29.97	761.2	78	25.6	89	Calm	.....	.....	0	2ck	2s	N	Calm	0	0	Smoky	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	71.6	22	.....	E	.....	.....	4	0	9ks	.....	E	0.020	0.5	.....	Earl Flint.
Santiago de Cuba, W. I.	30.08	764.0	30.11	764.8	74	23.3	75	NNE	6	2.7	.....	0	1s	.....	NE	0	0	Clear	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	28.86	733.1	28.93	734.7	3.2	—16	.....	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	K. Elberg.
York Factory, B. A.	29.95	760.7	30.00	762.0	3.0	—16.1	86	NW	8	3.6	.....	2c	0	N	.....	0.13	3.3	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.09	764.3	55.2	12.9	67	NE			1		2							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 18′, E. 51° 32′	30.01	762.2	73	22.8	67	NE			1		0							Blue sky	Comm. G. Haud.
H. M. S. Bittern, Constantinople, Turkey			36	2.2		NNE			1-3		10					1	N	Snowing	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	30.00	762.0	74	23.3	57	S			1-2		7					6	SE	D. clouds	Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Nagasaki, Japan	30.22	767.6	41	5.0	91	NNE			1	0	10	Calm	SSW					Overcast	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, Syracuse, Sicily	30.07	763.8	57	13.9		E			1		3	NE						D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa, Shanghai, China	30.17	766.3	49	9.4	85	Calm			0		10							Overcast	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.29	769.4	62	16.7	66	NW			1-2		1	N						Blue sky	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 34′ E. 81° 14′	29.82	757.4	83	28.3		NE			1		5	NE				2	NNE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, Singapore, Malay Peninsula	29.74	755.4	81	27.2		ENE			1		2	NE				1	NE	D. clouds	Capt. W. H. Maxwell.
H. M. S. Emerald																			Comm. C. Johnstone.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.89	759.2	80	26.7	74	NW			3-4		6	N						D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Bridgetown, Barbadoes	30.05	763.3	76	24.4		ENE			1		6	ENE				Sm'h		D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo, N. 29° 46′, W. 61° 45′	30.27	768.8	70	21.1	70	NNE			3-4		1					2	NE	Blue sky	Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Panama, Panama	29.91	759.7	75	23.9	77	NW			2		1							Blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.74	755.4				S			2									Showery	Capt. L. F. Jones.
H. M. S. Griffon, N. 28° 27′, W. 64° 13′	30.21	767.3	69	20.6	95	NE			3		7	NNE				3	NNE	D. clouds	
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris, Cape Malea, Greece	29.93	760.2	51	10.6	86	W			1-2		5	W				1	SE	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 149° 57′	30.10	764.5	65	18.3	84	ENE			1		10	NE						D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Coinm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Africa	29.82	757.4	85	29.4	76	E			1		6	E						Showery	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 42′, E. 121° 34′	30.26	768.6	43.8	6.6	88	E			1		10					1	E	Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 42° 00′, W. 10° 28′	29.52	749.8	56	13.3	81	NW			3-6		5	NW				4	NW	Squally	Capt. J. F. G. Grant.
H. M. S. Minotaur, Vigo, Spain	29.53	750.0	52.5	11.4	83	S			5		10	S						Showery	Capt. H. Rawson.
H. M. S. Modeste, N. 2° 11′, E. 102° 15′	29.91	759.7	83	28.3	79	SSE			1-2		3					Sm'h		D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Ayas Bay, Turkey, Asia	29.79	756.7	60	15.6	76	WSW			5		9	SE				Sm'h		Raining	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 14° 12′, W. 68° 08′	30.00	762.0	77	25.0	82	NE			3		4	NE				1	NE	D. clouds.	Capt. E. Drummond.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, S. 1° 10′, W. 7° 44′	29.87	758.7	81	27.2	91	SSE			2		4	SSE				2	SSE	D. clouds.	Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.92	760.0	84	28.9	83	NE			1		9							D. clouds.	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	29.67	753.6	52	11.1	86	NW			3-5		10							Raining.	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.55	750.6	80	26.7	87	ESE			1		0							Blue sky.	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	29.95	760.7	70	21.1	90	SSE			1		6	ENE				2	SW	D. clouds.	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos, N. 6° 49′, W. 58° 11′	30.00	762.0	80	26.7	78	NE			2		6							D. clouds.	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, N. 37° 03′, E. 15° 18′	30.10	764.5	63.5	17.5	72	E			2		1					2		Blue sky.	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo Bay, Chili, S.A.	29.98	761.5	61.5	16.4	88	Ca'm			0		10							Misty.	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 26° 08′, E. 34° 55′	29.95	760.7	75	23.9		NNW			2		4					Sm'h		D. clouds.	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.05	763.3	73	22.8		Calm			0		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, Palestine	29.96	761.0	69.5	20.8	52	S			2		10							Overcast.	Capt. F. Negham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Bulama, Senegambia	29.89	759.2	77.5	25.3	92	NW			1		0							Blue sky	S. C. da Silva Costa, Cond't.
Sado. St. Paul de Loando, Africa	29.84	758.0	81.5	27.5	74	N			3		7					1		D' clouds	G. A de Brito Capello, Cond't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.44	773.2	50	10.0	86	N	1	0.4			10		SE	0	0			Cloudy	
N. Yard, Portsmouth, N. H.	30.46	773.7	15	— 9.4	82	NW	8	3.6		2c		NW		0	0			Clear	
Naval Hospital, Yokohama, Japan	30.01	762.2	44	6.7	76	Calm			0		10		SW	0	0			Cloudy	
Adams, N. 7° 20′, W. 80° 07′	29.93	760.2	77	25 0	91	NNW			3		2		NNW			Mod.		Fair	
Alert, Hong-Kong, China *.	29.96	761.0	67	19.4	79	ENE			2		10		W			Sm'h		Cloudy	
Alliance, New Orleans, La	30.30	769.6	48	8.9	70	E			1		10			0	0	Sm'h		Cloudy.	
Ashuelot, Tientsin, China	30.38	771.6	20	— 6.7	100	NNW			4		0							Clear.	
Colorado, New York, N. Y	30.60	777.2	20	— 6.7		NNW	1	0.4			0			0	0			Misty	
Constitution, N. Yard, League I'd., Pa			22	— 5.6		N	1	0.4			2		NW					Hazy	
Franklin, Norfolk, Va	30.47	773.9	30	— 1.1		NNE	5	2.2			0			0	0			Clear	
Galena, Naples, Italy	30.07	763.8	47	8.3	55	NW			3		5							Fair	
Independence, N. Yard, Mare I'd, Cal	30.01	762.2	48	8.9	92	SW	6.0	2.7			10		SW	0	0			Overcast	
Jamestown, Sitka, Alaska *.	30.01	762.2	30	— 1.1		ENE			1		10			0	0			Overcast	
Kearsarge, Warrington, Florida	30.34	770.6	44	6.7	84	NE			3		10							Cloudy	
Lackawanna, Callao, Peru †.	30.07	763.8	71	21.7	95	SE			2		5		SE	0	0			Fair	
Marion, Sandy P't, Terra del Fuego	29.77	756.1	50	10.0	79	NNE			3		10		WSW	Lig	ht	Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	30.48	774.2	18	— 7.8		NW	2	0.9			10		W					Cloudy	
Minnesota, New York, N. Y	30.62	777.7	22	— 5.6		N			0–1		2							Hazy	
Monocacy, Shanghai, China	30.24	768.1	43	6.1	92	SE			1		10		Calm					Cloudy	
New Hampshire, Port Royal, S. C	30.35	770.9	43	6.1	75	NNE	18	8.0			2		SSE	0	0			Clear	
Nipsic, Barcelona, Spain	29.88	758.9	60	15.6	71	E			2		8		E			Sm'h		D. clouds	
Onward, Callao, Peru †.	29.91	759.7	70	21.1	90	SSE			2		8		NW			Long	W	Fair	
Palos, Shanghai, China	30.27	768.8	48	8 9	78	SSE			1		10							Overcast	
Passaic, Washington, D. C	30.65	778.5	26	— 3.3	88	NNE			1		8		NNE					Cloudy	
Pensacola, Panama, Panama	29.94	760.5	78	25.6	76	WNW			2–3		2			0	0	Sm'h		Clear	
Portsmouth, Washington, D. C	30.62	777.7	21	— 6.1	100	Calm			0		8							Misty	
Powhatan, New York, N. Y	30.62	777.7	22	— 5.6	100	N			1		2		N					Hazy	
Quinnebaug, Villafranca, France	30.04	763.0	53	11.7	61	ESE			2		10		SE			Long	SSW	Cloudy	
Richmond, Hong-Kong, China	30.11	764.8	65	18.3	89	ENE			2		10		ENE	0	0			Cloudy	
Saratoga, Baltimore, Md	30.54	775.7	24	— 4.4	100	NE			1		2		NE	0	0			Clear	
Shenandoah, Montevideo, Uruguay *	29.99	761.7	73	22.8	55	SE			4		0					Mod.	SE	Clear	
St. Louis, League Island, Pa	30.54	775.7	21	— 6.1	86	NNE	1	0.4			2			0	0			Misty	
Swatara, Nagasaki, Japan †.	30.14	765.5	45	7.2	76	NNW			1		10					Sm'h		Overcast	
Tennessee, New Orleans, La	30.32	770.1	45	7.2	76	ENE	4	1.8			8		WSW	0	0			Cloudy	
Ticonderoga, N. Yard, Mare Id., Cal.	30.03	762.7	50	10.0	93	NE			1		1		Calm	0	0			Foggy	
Trenton, Toulon, France *.	29.97	761.2	53	11.7	67	E			3		10			2 h'rs	light	Sm'h		Cloudy	
Vandalia, N. 12° 05′, W. 61° 44′	30.03	762.7	78	25.6	82	NE			1		9		Calm					Cloudy	
Wabash, Boston, Massachusetts	30.57	776.5	15	— 9.4	82	W	8	3.6			2		W					Hazy	
Wachusetts, Panama, Panama *.	29.67	753.6	75	23.9	86	NW			2		2		N			Sm'h		Clear	
Wyoming, Villafranca, France	30.04	763.0	52	11.1	60	E			1		10		Calm			Sm'h		Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
S. 1° 45′, W. 25° 10′	29.93	760.2	85.2	29.6	76	ESE			4		6							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 17° 57′, W. 47° 21′	30.11	764.8	70.5	21.4	100	NNW			3		10							Raining	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang, ‡																			
N. 9° 54′, W. 49° 00′	29.98	761.5	79.2	26.2	78	ENE			3		10							Overcast	Capt. H. Youlden.
S. S. Cipero,																			
N. 14° 25′, W. 56° 20′	30.05	763.5	77	25.0		NE			4		9					2	NNE	Overcast	W. N. Lailey.
City of Agra, ‡																			
S. 14° 04′, W. 30° 06′	29.99	761.7	84.3	29.1	75	ENE			4		4							D. clouds	Capt. T. Young.
Barque Commewyne, ‡																			
N. 37° 55′, W. 51° 22′	30.18	766.6	61.5	16.4	76	NW			5		7							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 7° 20′, W. 15° 20′	29.92	760.0	86	30.0	61	SE			4		5							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart, ‡																			
N. 3° 10′, E. 89° 47′	29.91	759.7	83.0	28.3	71	S			1		0							Blue sky	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡																			
N. 54° 46′, W. 11° 53′	29.71	754.6	47	8.3	100	SSE			3		6					3	WNW	D. clouds	Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope, ‡																			
S. 5° 05′, W. 35° 16′	29.97	761.2	81.5	27.5	91	ENE			3		5							D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamports																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N. R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 18° 21′, W. 56° 37′	30.07	763.8	76.3	24.6	94	NE			5		8							D. clouds	Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee ‡																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven																			Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡																			
N. 19° 07′, E. 39° 15′	30.01	762.2	78	25.6	82	ENE			1		6							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire,																			
N. 32° 25′, W. 19° 10′	30.12	765.0	60	15.6	71	NW			5		10					5	NW	Overcast	
ALLAN LINE.																			
A. Schumacher & Co.																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian ‡																			Capt. Wm. Richardson.
CUNARD LINE.																			
Ch. G. Francklyn.																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE.																			
Ismay, Imrie & Co.																			
S. S. Adriatic ‡																			Capt. J. W. Jennings.
S. S. Baltic, ‡																			
N. 44° 41′, W. 44° 28′	29.82	757.4	42	5.6	74	W			4		5		SW;NW			Light	SW	D. clouds	Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic,																			
N. 46° 21′, W. 43° 18′ †	29.70	754.4	38	3.3		W			6		10		W	Sh'rs	light	Mod.	WNW	Overcast	Capt. Benj. Gleadell.
S. S. Germanic, ‡																			
New York, N. Y. †	30.61	777.5	25	— 3.9		NW			2		8?		NW	Snow Showers				Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen.																			
A. Schumacher & Co.																			
S. S. Braunschweig																			Capt. C. Undütsch.
S. S. Hermann																			Capt. H. Maur.
S. S. Köln,																			
N. 48° 03′, W. 40° 45′	29.60	751.8	40.1	4.5		WSW			4-6		10		WSW	Heavy rain, sn	squalls, hail & ow	H'vy	wsw	Cloudy	
S. S. Leipzig ‡																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolph Fredholm ‡																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötterbrand

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
							Miles p. h'r	Mtrs p. sec		Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.			o—10	o—10	o—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. ‡ Liverpool, England....*†	29.65	753.1	46	7.8	92	W	.....	.....	2	.....	10	.....	W	.....	.....	.....	.....	Foggy.....	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 40° 02′, W. 71° 25′.....†	30.38	771.6	31	— 0.6	68	WNW	.....	.....	3	.....	2	.....	NW	0	0	Sm'h	.....	Fine.....	Capt. R. W. Sargent.
S. S. Ohio, N. 44° 00′, W. 50° 45′...†*	30.04	763.0	24	— 4.4	100	NNW	.....	.....	5	.....	10	.....	NNW	0	0	Mod.	NNW	Cloudy.....	Wm. Shakford, 1st Off'r
S. S. Pennsylvania, Philadelphia, Pa.....†	30.53	775.4	31	— 0.6	89	W	.....	.....	2	.....	2	.....	W	0	0	.....	.....	Fair.....	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 27° 26′, W. 110° 52′...†	30.00	762.0	63	17.2	78	N	.....	.....	1	.....	2	.....	N	0	0	Sm'll	NW	Clear.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 37° 24′, E. 164° 26′.....†	29.65	753.1	54	12.2	67	ESE	.....	.....	5	.....	10	.....	.....	Ra	in	Con. Mod.	NW;E	Overcast.....	Capt. H. Davison.
S. S. Gaelic, N. 28° 48′, E. 125° 33′..†*	30.22	767.6	60	15.6	76	NE	.....	.....	5	.....	10	.....	NE	.....	.....	Mod.	NE	Raining.....	Capt. W. H. Kidley.
S. S. Oceanic, N. 32° 33′, W. 154° 51′.....	30.17	766.3	64	17.8	94	S	.....	.....	5	.....	8?	.....	S	0	0	Mod.	SW	Clear?.....	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon.....†	29.91	759.7	28.0	— 2.2	46	ENE	.....	.....	2	.....	2	.....	WNW	.....	.....	.....	.....	Fair	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal.....†	29.96	761.0	50	10.0	86	Calm	.....	.....	0	.....	Haze	.....	.....	.....	.....	.....	.....	Hazy.....	Capt. J. N. Ingalls.
S. S. Idaho, ‡ San Francisco, Cal.....†	30.00	762.0	49	9.4	93	SW	.....	.....	1	.....	10	.....	SW	.....	.....	.....	.....	Cloudy.....	C. E. Lyons, 1st Officer.
S. S. Orizaba.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Senator, N. 32° 40′, W. 117° 18′...†	30.04	763.0	54	12.2	93	ESE	.....	.....	1	.....	8	.....	.....	.....	.....	Sm'h	.....	Misty.....	Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	30.02	762.5	48	8.9	?	SE	.....	.....	1	.....	8	.....	SE	0	0	.....	.....	Cloudy	Capt. G. Debney.
S. S. Victoria, Victoria, Vancouvers Id..†	30.00	762.0	32	0.0	79	Var.	.....	.....	2	.....	2	.....	SE	.....	.....	Sm'h	.....	Fair.....	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, Honolulu, Sandwich I'ds...	30.05	763.3	77	25.0	100	NE	.....	.....	2	.....	5	.....	NE	.....	.....	.....	.....	Clear.....	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.....†	30.35	770.9	72	22.2	90	E	.....	.....	2	.....	8	.....	E	0	0	.....	.....	Fair	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 14° 12′, W. 91° 29′..... ..†	30.07	763.8	72	22.2	80	N	.....	.....	2	.....	2	.....	N	0	0	Sm'h	W	Clear.....	Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China.....†	30.09	764.3	64	17.8	83	NE	.....	.....	2	.....	8	.....	SE	0	0	Sm'h	.....	Cloudy.....	Capt. G. G. Berry. Capt. H. C. Dearborn.
S. S. City of Sidney.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Ritchie, 2d Officer.
S. S. City of Tokio.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Colima, N. 14° 13′, W. 91° 46′.....†	29.97	761.2	73	22.8	81	NNE	.....	.....	3	.....	2	.....	Calm	0	0	Mod.	SE	Fair.....	Capt. R. R. Searle. Capt. D. E. Griffiths.
S. S. Dakota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Granada.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Zealandia, Sydney, N. S. Wales.....	30.16	766.1	71	21.7	71	N	.....	.....	6	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland, ‡ N. 47° 41′, W. 37° 16′.....†	29.50	749 3	52	11.1	79	W	.....	.....	7	.....	8	.....	W	.....	.....	Cross	W	Showery	Capt. Sam'l Jackson. Capt. S. Stokes.
S. S. Nederland..... ‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Rhynland, ‡ N. 49° 58′, W. 15° 30′.....	29.85	758.2	49	9.4	.....	NW	.....	.....	6	.....	5	.....	NW	0	0	Long	NW	Fair.....	Capt. W. Geo. Randle.
S. S. Vaderland, N. 42° 23′, W. 62° 38′.....	30.55	776.0	.....	.....	.....	NNW	.....	.....	5	.....	5	.....	NW	0	0	Mod.	NW	Fair.....	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, ‡ Jacksonville, Florida...†	30.24	768.1	60	15.6	.....	SE	.....	.....	2	.....	7	.....	SE	0	0	.....	.....	Threatening	Capt. A. Mehuffey.
Sch'r Addie Fuller, Newport News, Va.....	30.50	774.7	28	— 2.2	88	NNE	2	0.9	.....	.....	0	.....	.....	.....	0	0	.....	.....	Clear..... Capt J. Jorgensen.
Sch'r Annie R. Lewis, Martinique, W. I..... ..†	29.99	761.7	80	26.7	.....	ENE	.....	.....	5	.....	2	.....	ENE	0	0	Mod.	NE	Clear.....	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 36° 03′, W. 6° 07′.....†*	30.02	762.5	62	16.7	.....	WNW	.....	.....	6	.....	2	.....	NW	.....	.....	R'gh	.....	Squally.....	Capt. B. F. Woodbury.
Brigantine George, ‡ N. 31° 10′, W. 72° 05′.....†	30.53	775.4	66	18.9	.....	NE	.....	.....	5	.....	10	.....	NE	0	0	R'gh	NNW	Cloudy.....	Capt. W H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va.†	30.39	771.9	31	— 0.6	.....	N	1	0.4	.....	2c	2c	.....	.....	0	0	.....	.....	Clear	Capt. James S. Gawin.
Ship Jumna.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bark Sunbeam, ‡ N. 25° 59′, W. 30° 27′.. ..†	30.22	767.6	74	23.3	90	NNE	.....	.....	6	.....	5	.....	NE	0	0	Mod.	ENE	Fair.....	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 16, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.00	762.0	65.1	18.4	73	NE			1		3			0	0	Pretty fair..	Dr. Ollive.
Nemours			29.78	756.4	65.5	18.6	81	SW			5		3			Inap.	Inap.	Pretty fair..	Raynard.
Algiers			29.87	758.8	62.8	17.0	46	SSE			1		9			0	0	Covered	Nicolas.
La Calle			29.95	760.6	62.2	16.8	48	SSW			1		4			0	0	Cloudy	Fonfrède.
Tunis			30.01	762.3															Jacques.
Sfax			30.11	764.8															Gau.
Saida			29.90	759.5	56.7	13.7	35	S			2		8			0	0	Very cloudy	Dumas.
Tebessa			30.05	763.3	68.4	20.2	20	SW			2		3			0	0	Pretty fair..	Watrin.
Geriville																			Louchamp.
Laghouat			30.00	762.1	63.3	17.4	37	SE			3		4			0	0	Cloudy	Herbin.
Biskra																			Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.06	763.5	30.15	765.8	63.0	17.2	78	SW	14	6.3			3			00	0	Very fine	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania																			Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.63	752.5	30.21	767.3	32.7	0.4	89	NW			2		9			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.42	747.3	30.24	768.0	25.2 —	3.2	89	W	0.7	0.3			2			0	0		Dr. Wiersbicki.
Eperies	29.28	743.8	30.21	767.3	32.2	0.1	73	S			2		7ns		N	0	0		Julius Mikolik.
Gratz‡	28.87	733.4	30.19	766.8	32.9	0.5	80	SW			1		8			0	0		Andreas Rospini.
Hermannstadt	28.72	729.5	30.25	768.3	27.9 —	2.3	92	ESE			2		2			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28 71	729.3	30.15	765.7	24.4 —	4.2	89	Calm			0		9			0	0		The Staff.
Lemberg	29.13	740.0	30.18	766.5	30.6 —	0.8	81	NW			1		10			0.016	0.4		Dr. T. Stanecki.
Pola	30.07	763.8	30.19	766.7	47.1	8.4	65	E			1		10			0	0		I. R. HydrographicOffice
Szathmar	29.78	756.4	30.24	768.0	30.2 —	1.0	90	SW			2		10			0.004	0.1		Beicht Peter, S. J.
Szegedin	29.95	760.6	30.24	768.2	32.0	0.0	81	S			1		4			0	0		Karl Stancel.
Trieste	30.11	764.8	30.21	767.4	42.3	5.7	63	Calm			0		10			0	0	Cloudy	P. Busin.
Vienna	29.44	747.8	30.20	767.1	30.2 —	1.0	73	SE			2		10			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.72	755.0	29.93	760.2	43.7	6.5	73	ESE			1		0			0	0	Light fog	Royal Observatory.
Furnes	29.88	759.0	29.91	759.6	47.3	8.5	67	S			1		1			0	0		M. E. de Cae.
Maeseyck	29.82	757.5	29.95	760.7	41.3	5 3	84	E			2					0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 17, 1882.

BRITISH SERIES.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Aberdeen	29.78	756.4	29.88	758.9	38.4	3.6	87	S	8	3.6			9			0.020	0.51	Misty	W. Boswell.
Armagh, Observatory	29.61	752.1	29.85	758.2	41.6	5.3	88	S	12	5.4			10					Overcast	S. Call.
Bidston, Liverpool Obs'y			29.91	759.7	42.1	5.6	92	ESE	9	4.0			10					Misty	John Hartnup.
Bolton, Sharples	29.36	745.7	29.91	759.7	38.2	3.4	99	NW					10					Overcast	Thomas Mackereth.
Bradford, Yorkshire	29.51	749.5	29.90	759.4	39.8	4.3	86	SE			1		10			0	0	Overcast	J McLandsborough, F.R.S
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	80	26.7	70	NE			2		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			29.93	760.2	44.4	6.9	97	E			0.2		10					Foggy	John McLaren.
Chatham, School M. E.	29.82	757.4	29.95	760.7	44.1	6.7	86	Calm			0		4					D. clouds	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.66	753.4	29.89	759.2	45.1	7.3	93	ESE			1		10					Foggy	The Staff.
Fort Napier, Natal	27.51	698.7	29.72	754.9	75.4	24.1	56	NE			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.88	758.9	85	29.4	87	W			2		3					D. clouds	C. E. Keane.
Galway, Queen's College			29.74	755.4				SE			2		10					Overcast	J. O'Donaghadue.
Gibraltar, Mediterranean	29.88	758.9	29.93	760.2	60.6	15.9	86	NW			3		8					D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.66	753.4	29.87	758.7	38.9	3.8	83	SSW			2		10					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.76	755.9	29.93	760.2	42.2	5.7	94	NE			1		8					Foggy	The Staff.
Guernsey	29.62	752.3	29.84	757.9	48.5	9.2	82	ESE			2		3					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.90	759.4	29.94	760.5	38.2	3.4	96	SE	1	0.4								Foggy	The Met'g'l Office.
Leicester, Museum	29.72	754.9	29.98	761.5	45.6	7.6	81	SE			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	30.07	763.8	30.14	765.5	61.2	16.2	67	SE			2		3					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas			30.24	768.1	72.5	22.5	85	NE			1		7					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.41	747.0	29.95	760.7	42.4	5.8	94	ENE			1		10					Misty	Robert Pate.
Oxford, Radcliffe Obs'y	29.69	754.1	29.95	760.7	44.5	6.9	90	Calm			0		10					Foggy	The Staff.
Plymouth	29.79	756.7	29.87	758.7	48.5	9.2	85	ESE			2		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			29.78	756.4	41	5.0	96	S	19	8.5			5					D. clouds	Rev. C. Clouston, L.L.D.
Scutari Cemetery, Turkey	30.09	764.3	30.16	766.1	37.8	3.2	66	N			1		8					D. clouds	Serg't W. H. Lyne.
Sheffield	29.65	753.1	29.94	760.5	42.4	5.8	89	SE			1		10			0	0	Overcast	W. F. Cooper.
Silloth Rectory	29.87	758.7	29.90	759.4	38.4	3.6	91	Calm			0		10			0	0	Overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.94	760.5	38.8	3.8	93	NE	3	1.3			10					Misty	Rev. S. J. Perry.
Strathfield Turgiss	29.73	755.1	29.95	760.7	39.1	3.9	96	SE			1		10					Foggy	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	29.81	757.2	29.87	758.7	52	11.1	79	E			4		5					D. clouds	W. Newcombe.
Valencia, Observatory	29.78	756.4	29.80	756.9	48.6	9.2	87	SSE	15	6.7			10			Blank		Misty	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.41	772.4	30.46	773.7	14	—10.0	95	SW	6	2.7		5c	2s			0	0	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.35	770.9	30.42	772.7	3.6	—15.8	92	Calm	0	0			10s			0	0	Cloudy	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	30.24	768.1	30.26	768.6	14	—10.0	75	SW	8	3.6			10n			0	0	Threatening	J. McWilliams.
Fort Garry, Manitoba*	29.37	746.0	30.36	771.1	—24	—31.1	100	W	1	0.4		0	0			0	0	Clear	James Stewart.
Fredericton, N. B																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.38	771.6	30.52	775.2	20	— 6.7	86	S	4	1.8		0	2s			0	0	Fair	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.69	754.1	30.04	763.0	26	— 3.3	98	S	11	4.9			10n			0.02	0.5	Light snow	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	29.89	759.2	30.11	764.8	19	— 7.2	89	E	4	1.8			10n			0.03	0.8	Light snow	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	29.28	743.7	30.03	762.7	13	—10.6	81	S	1	0.4		2k	5ks	S		Inap.	Inap.	Fair	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.32	744.7	30.05	763.3	28	— 2.2	100	SW	6	2.7			10n			0.10	2.5	Light snow	H. Morgan.
Port Stanley, Ontario	29.37	746.0	30.05	763.3	27	— 2.8	94	W	8	3.6			10n		W	0.10	2.5	Light snow	M. Payne.
Quebec, Quebec*	29.88	758.9	30.23	767.8	14	—10.0	100	NE			1		10n			0.01	0.3	Light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.54	750.3	30.03	762.7	19	— 7.2	86	E	8	3.6			10n			0.10	2.5	Light snow	K. Stewart.
Saugeen, Ontario*	29.26	743.2	30.04	763.0	11	—11.7	92	SE	2	0.9			10ks			0	0	Cloudy	W. H. McIntyre.
St. Andrews	30.29	769.4	30.35	770.9	27	— 2.8	79	S	3	1.3			10n			0	0	Cloudy	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.47	773.9	30.51	774.9	6	—14.4	98	Calm	0	0		10cs	0			0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.64	752.8	30.05	763.3	24	— 4.4	89	SW	1	0.4		2ck	8n	SW	SW	0.02	0.5	Cloudy	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.33	770.4	30.39	771.9	25	— 3.9	77	E	6	2.7		8ck	2s	W		0	0	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	30.32	770.1	30.60	777.2	14	—10.0		SW	1	0.4		2k	2s			0	0	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't

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

CAPE COLONY SERIES.

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

Beaufort West, Cape Colony																			
Cape St. Francis Lt. House	29.75	755.6			64.0	17.8	92	W	17.2	7.7			2ks			0	0	Hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.92	760 0	29.96	761.0	68.8	20.4	88	NW	8.2	3.7		0	4ks			0	0		The Staff, for D. Gill.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.36	771.2	30.39	771.9	32.9	0.5	90	NNE	2.1	0.9			0			0	0	Clear	M. Marc Dechevrens, S. J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.27	667.2	29.99	751.7	59.9	15.5	84	SE			3	2d		NE		0	0	Clear	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.14	765.5	30.19	756.7	30.9	—0.6	85	SE	9	4		10							Oversergent Fischer.
Fanöe	30.08	764.0	30.10	764.5	28.8	—1.8	88	ESE			4	10							Overloerer Lauridsen.
Godthaab, Greenland	29.15	740.3	29.19	741.4	7.9	—13.4	88	NNE			2	9							S. Kleinschmidt.
Stykkisholm, Iceland	28.95	735.2	28.99	736.3	32.7	0.4	89	SW			2	8							A. O. Thorlacius.
Thorshavn	29.52	749.7	29.55	750.6	44.2	6.8	93	S	25	11		10						Raining	Overloerer Bergh.
Vestervig	30.04	763.0	30.13	765.4	29.1	—1.6		ESE			4	10							Locarer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.14	740.2	29.80	756.8	50.0	10	86	ENE			1				NW	0	0		M. Labroue, Director.
Alençon	29.35	745.6	29.91	759.6	41.7	5.4	97	NE			1		2s		NE	0	0	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.65	753.2	29.91	759.8	46.2	7.9	87	SE					0					Clear	M. Klein, Commandant.
Avignon, Normal School	29.92	760.0	30.00	762.0	55.4	13	57	SE			3		10			0	0	Covered	M. Giraud, Director.
Bar-sur-Seine	29.37	746.0	29.93	760.3	48.9	9.4	64	SSE			1		5			0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.65	753.1	29.92	760.0	41.5	5.3	82	E			1		2			0	0	Slightly cl'dy	M. Frère Eugene Marie.
Besançon, Normal School	29.10	739.2	30.01	762.3	49.1	9.5	64	S			2	c			SSE	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.53	750.0	29.79	756.7	50.7	10.4	73	SE			1		10		S	0.008	0.2	Covered	M. Rayet, Director.
Bourges, Normal School	29.33	744.9	29.89	759.1	46.4	8	75	NNE			1		ckn			0	0		M. Postel, Director.
Brest, Naval Observatory	29.61	752.2	29.86	758.4	61.5	16.4	79	SSW			1		5		SW	0	0		M. de Rermaree, Dir.
Caen, Normal School	29.73	755.1	29.81	757.1	46.6	8.1	100	S			1		5			0	0	Cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.64	752.8	29.96	761.0	46.0	7.8	80	S			1		5			0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.43	747.4	29.98	761.6	47.8	8.8	61	SSE			1		0			0	0	Clear	M. Grimard.
Clermont-Ferrand Obs'y	28.52	724.4	29.88	759.0	50.7	10.4	53	S			2		10		S	0	0	Covered	M. Alluard, Director.
Cluny, Normal School	29.12	739.7	29.97	761.2	48.6	9.2	88	S			2		5	S	S	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.09	738.8	29.98	761.6	45.1	7.3	75	S			1	ck		S	S	0	0		Dr. Coulet, Director.
Gap, Normal School	27.44	697.0	30.02	762.5	44.6	7	44	SE			1		2			0.04	1.	¼ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.91	734.2	30.05	763.2	53.4	11.9	57	SE			4		8		SE	0	0	¾ covered	M. Kina, Director.
Grenoble, Normal School	29.22	742.2	30.01	762.2	43.5	6.4	82	ENE			1		cs			0	0		M. Ablard, Director.
Guéret, Normal School	28.28	718.2	29.89	759.3	44.6	7	85	SE			1		5		NW	0.31	8.	Cloudy	M. Rivoir, Director.
Lamballe, Normal School	29.61	752.0	29.88	758.9	49.3	9.6	80	S			1		Fg		S	0	0	Light fog	M. Ollitrault, Director.
Lescar, Normal School	28.03	712.0	29.89	759.1	52.7	11.5	83	NE			1					0.087	2.2		M. Chauvin, Director.
Lorient, Naval Observatory	29.75	755.7	29.85	758.3	53.6	12.0	74	SE			2		8		NW	0	0	¾ covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.89	733.8	29.92	760.0	50.0	10.0	62	S			2		10		S	0	0	Covered	M. André, Director.
Mans, Normal School	29.61	752.0	29.92	760.0	46.9	8.3	84	E			1		2		S	0	0	Slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.71	754.5	29.98	761.4	57.4	14.1	50	ESE			3		8		SW	0	0		M. Stephan, Director.
Montlouis Pinstituteur	24.62	625.3	29.85	758.3	35.6	2.0	60	SW	9.4	4.2			1		W	0.413	10.5		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.89	759.2	30.00	762.0	51.4	10.8	85	ESE			4		8		SE	0.094	2.4	Very cloudy	M. Galzin, Director.
Nancy, Normal School	29.17	741.0	29.95	760.6	48.6	9.2	48	S			1		2cs			0	0	Slightly cl'dy	M. Hasse.
Nantes, Observatory	29.73	755.2	29.89	759.3	48.6	9.2	81	NE			1		10					Rainy	M. Larocque, Director.
Nice	30.05	763.3	30.08	764.1	53.6	12.0	67	E			8		10	E	E	0	0	Covered	Capt. Boissière, Director.
Perpignan, Observatory	29.75	755.7	29.86	758.4	52.7	11.5	61	S	20.6	9.2			9		SE	0.299	7.6		Dr. Fines.
Pic-du-Midi, Plantade	22.24	565.0			27.5	—2.5							10		SW	0.311	7.9	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.93	734.8	30.00	761.9	55.4	13	55	S			1		10n	S	S	0	0	Covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.96	633.9			32.0	0.0	95	SE			4		10			0.012	0.3	Foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.80	756.8	29.83	757.6	52.5	11.4	80	SE			1		10			0	0	Covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.69	754.2	29.91	759.6	51.1	10.6	80	E			2		10			0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	27.72	704.1	29.90	759.4	44.6	7.0	80	E			6		9kn		SW	0	0		M. Richard, Director.
Rouen, Normal School	29.82	757.4	29.90	759.5	43.2	6.2	79	SSE			2		2		SE	0	0	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	29.74	755.4	29.90	759.4	51.4	10.8	75	E			1		2		E	0	0	Slightly cl'dy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.75	755.6	29.91	759.8	45.5	7.5	79	NW			1		8		SE	0	0		M. Renou, Director.
Toulouse, Observatory	29.10	739.2	29.82	757.5	52.7	11.5	92	SSE			2		10			0	0	Covered	M. Baillard, Director.
Tours	29.68	753.8	29.87	758.8	51.8	11.0	71	E			1		10		E	0	0	Covered	M. de Tastes.
Versailles, Observatory	29.42	747.2	29.91	759.7	46.8	8.2	75	SE			1		0			0	0	Clear	Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.17	741.0	30.04	762.9	36.3	2.4	62	W			2		5k	W		0	0		Prof. Dr. Hoh.
Berlin	29.94	760.5	30.12	765.1	33.4	0.8	79	E			1		10			0	0		Prof. Dr. Arndt.
Breslau	29.64	752.9	30.18	766.5	29.8	—1.2	73	SSE			2		8			0	0		Royal University Obs'y.
Carlsruhe	29.56	750.7	29.99	761.8	41.0	5.0	57	S			0		0			0	0		Albert Senz.
Cassel	29.37	746.1	29.98	761.5	38.1	3.4	59	SE			2		7	S		0	0		Dr. H. Möhl.
Frankfort on the Main	29.71	754.6	30.09	764.2	39.9	4.4	52	NE			1		2			0	0		Physical Society.
Friedrichshafen	28.55	725.2	30.04	763.1	34.5	1.4	82	SW			5		0			0	0		Chief Telegrapher Wilhelm.
Hamburg	29.99	761.8	30.07	763.6	30.0	—1.1	76	SE			2		6			0	0		Dr. R. Kleeman.
Kiel	30.07	763.7	30.08	764.1	30.2	—1.0	88	ESE			5		6			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.63	752.5	30.07	763.7	31.3	—0.4	85	E			1		10			0	0	Light fog	Prof. Dr. Bruhns.
Magdeburg	29.83	757.6	30.07	763.6	30.4	—0.9	74	E			1		9cs	W		0	0		Dr. Assmann.
Memel	30.18	766.5	30.23	767.7	32.9	0.5	92	SSW			2		10n						Reinbrecht & Issermann.
Munich	28.17	715.6	30.04	762.9	34.5	1.4	53	NE			1		1			0	0		Central Station.
Neufahrwasser	30.24	768.0	30.25	768.4	33.3	0.7	90	NW			1		10			0	0		A Lothes.
Neustadt, Palatinate	29.43	747.5	29.96	760.9	40.3	4.6	67	NE			2		7			0	0	Light fog	Dicknether.
Stuttgart	29.01	736.8	29.92	760.0	43.2	6.2	60	N			1		0			0	0		Prof. Dr. Schoder.
Thorn	30.01	762.2	30.20	767.0	30.6	—0.8	90	Calm			0		10			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	28.48	723.3	30.00	761.9	39.9	4.4	52	S			2		2			0	0		Prof. Kemlein.
Wustrow	30.11	764.8	30.14	765.5	31.5	—0.3	94	SE			2		10s			0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.80	757.0	30.21	767.2	51.1	10.6		NW			0.5		0					Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.91	759.7	29.96	761.0	76.9	24.4	75	SW	25.0	11.2			0			0	0	Blue sky	
Deesa	29.44	747.8	29.91	759.7	89.2	31.8	23	W	6.8	3.0			0			0	0	Blue sky	
Bombay	29.92	759.8	29.95	760.8	80.3	26.8	78	WNW	16.0	7.2			10	SSW		0	0	Overcast	
Poona, Yarrowda	28.07	713.0	29.91	759.7	85.3	29.6	20	ESE	7.0	3.1			8		S	0	0	D. clouds	
Belgaum	27.40	695.9	29.92	760.0	80.5	26.9	18	ESE	7.0	3.1			9	SW		0	0	D. clouds	
Lahore	29.22	742.1	29.97	761.2	76.9	24.9	31	W	1.2	0.5			4			0	0	D. clouds	
Roorkee	29.02	737.1	29.92	760.1	77.8	25.4	30	W	0.7	0.3			0			0	0		
Agra	29.34	745.1	29.90	759.3	85.3	29.6	27	W	3.9	1.7			3		W	0	0		
Nagpur	28.90	734.1	29.94	760.4	85.9	29.9	26	SW	3.1	1.4			8	W		0	0	D. clouds	
Jubbulpore	28.59	726.1	29.96	760.8	80.8	27.1	30	Calm	2.0	0.9			6			0	0	D. clouds	
Lucknow	29.60	751.7	29.97	761.3	80.2	26.8	33	N	0.9	0.4			0			0	0	Blue sky	
Allahabad	29.59	751.7	29.91	759.6	80.7	27.1	42	Calm	2.3	1.0			0			0	0	Blue sky	
Patna	29.82	757.5	30.01	762.3	72.2	22.3	57	NW	0.6	0.3			4	NW	W	0	0	D. clouds	
Hazaribagh	27.92	709.1	29.96	760.8	73.0	22.8	26	NW	5.6	2.5			7			0	0	D. clouds	
Cuttack	29.88	758.8	29.96	761.0	80.1	26.7	43	Calm	0.4	0.2			4			0	0	D. clouds	
Calcutta, Alipore	29.93	760.1	29.95	760.7	75.5	24.2	41	Calm	0	0			7	SW		0	0	D. clouds	
Goalpara	29.53	750.1	29.94	760.6	70.4	21.3	57	NW	2.0	0.9			4		W	0	0	D. clouds	
Chittagong	29.99	761.7	30.08	764.0	74.8	23.8	63	SW	2.5	1.1			2			0	0	Blue sky	
Sibsagar	29.67	753.6	30.01	762.3	67.0	19.4	74	NE	3.2	1.4			10	W	W	0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.80	756.8	30.22	767.5	38.8	3.8	57	Calm	0	0			10			0	0		Prof. Giovanni Clodig
Milan	29.66	753.3	30.19	766.9	40.1	4.5	69	WSW	1.3	0.6			10			0	0		Prof. Schiaparelli.
Padua	30.10	764.6	30.22	767.5	40.6	4.8	64	NNE	3.1	1.4			10	NE		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.25	743.0	30.19	766.7	39.0	3.9	70	E	2.5	1.1			10			0	0		Prof. P. F. Denza.
Genoa	29.97	761.3	30.17	766.3	48.2	9.0	58	N	1.3	0.6			10	SE		0.016	0.4		Prof. G. M. Garibaldi.
Mondovi	28.22	716.8	30.20	767.1	38.8	3.8	66	E			2		9			0	0		Prof. D. C. Bruno.
Pesaro	30.17	766.2	30.22	767.5	41.0	5.0	75	NW	9.4	4.2			8	SW		0	0		Prof. Luigi Guidi.
Florence	29.92	759.9	30.18	766.5	49.1	9.5	52	NE			2		10			0	0		Cav. F. Meucci.
Leghorn	30.09	764.2	30.17	766.4	43.9	6.6	71	ENE	7.4	3.3			10			0	0		Prof. P. Monte.
Rome	30.00	761.9	30.18	766.5	51.4	10.8	44	NNW	4.9	2.2			7			0	0		Prof. P. S. Ferrari.
Lecce	29.97	761.2	30.22	767.7	51.1	10.6	51	E	4.9	2.2			3	E		0	0		Prof. C. de Giorgi.
Cosenza	29.31	744.4	30.22	767.6	47.5	8.6	70	NNE	1.3	0.6			1	NE		0	0		Prof. D. Conti.
Cagliari	29.80	757.0	30.00	762.0	60.1	15.6	74	ESE			4		10			0	0		Prof. A. Pacinotti.
Palermo	29.89	759.3	30.15	765.7	58.8	14.9	47	SW	0.7	0.3			10			0	0		Prof. G. Ciaccintore.
Syracuse	30.15	765.7	30.19	766.8	53.2	11.8	68	SE	8.7	3.9			10	SW		0	0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R	29.67	753.7	30.21	767.4	48.6	9.2	58	W	0	0			0			0	0		Prof. F. Brioschi.
Stelvio	22.12	561.8			23.9	— 4.5	60	SSW			1		0			0	0	Misty	P. F. Denza.
Valdobbia	22.12	561.7			25.5	— 3.6	65	SE			2	2c	0	W		0	0	Misty	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	29.97	761.2	29.99	761.7	43.1	6.2	63	WNW	11.5	5.1		2ck			W	0	0	Clear	K. Sasaki.
Kioto	29.73	755.1	29.91	759.7	34.5	1.4	96					3s;ck				0.045	1.14	Fair	
Nagasaki, I. M. Obs'y	29.95	760.7	30.16	766.0	42.8	6.0	68	NW	10.6	4.7		10s				0	0	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.79	756.6	29.85	758.4	36.7	2.6	73	Calm	0	0		10s				0.15	0.38	Cloudy	The Staff.
Wakayama	29.89	759.2	29.94	760.5	37.0	2.8	83	E	4.6	2.1			0			0	0	Clear	S. Iwahashi.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.81	757.2	30.00	762.0	80.1	26.7	67	E	19.5	8.7		0	4			0.38	9.6	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.56	623.5	30.41	772.3	48.0	8.9	84	NW			1	4c	0	NW		0	0	Hazy	Prof. M. Leal.
Mazatlan	29.81	757.1	30.07	763.8	63.5	17.5	89	ENE	0.9	0.4		0	1ks			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.17	588.6	30.32	770.2	43.3	6.3	75	Calm	0	0		0	0			0	0	Foggy	The Staff.
Pabellon, Aguascalientes	24.02	610.0	30.14	765.5	47.8	8.8	79	Calm				4c	0	SW		0	0	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.44	595.3	30.38	771.5	42.6	5.9	25	Calm	0	0		0	0			0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.37	619.0	30.41	772.3	50.9	10.5	66	SE	0.9	0.4			10		SW	0	0	Covered	G. Barroeta, M. D.
Tlacotalpam	30.20	767.1	30.21	767.4	66.4	19.1	92	Calm	0	0		3	5	W	N	0	0	Cloudy	Prof. M. Cházaro.
Zacatecas	22.62	574.4	30.42	772.6	41.2	5.1	77	Calm	0	0		0	2cs			0	0	Clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.95	760.6	29.95	760.6	43.7	6.5		SSE			2					0	0		
Groningen	29.94	760.5	30.00	761.9	33.8	1.0		E			2					0	0		
Helder	29.97	761.1	29.97	761.1	34.2	1.2		E			1					0	0		
Hellevoetsluis	29.94	760.5	29.94	760.5	42.4	5.8	85	SE			0					0	0		
Utrecht	29.92	759.9	29.97	761.1	42.8	0.0	84	ESE			1		2			0	0	Lightly cl'dy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.01	762.2	30.07	763.8	33.8	1.0	81	Calm	0	0			8			0	0		
Christiania	30.12	765.0	30.28	769.0	21.4	— 5.9	87	SE	7	3			10			0	0	Light fog...	
Gjæsvær	30.02	762.6	30.05	763.2	25.3	— 3.7		Calm			0		10					Light snow..	
Lodingen	30.05	763.2	30.10	764.4	33.1	0.6	82	Calm			0		8			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores																			Dr. J. A. Sampaio.
Campo Major	28.68	728.5	29.70	754.3	48.6	9.2	89	WSW	6.3	2.8			10			0.673	17.1		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.05	763.3	30.14	765.6	64.8	18.2	52	SSW	1.8	0.8			3			.0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.42	747.2	29.82	757.3	54.9	12.7	82	WNW	25.5	11.4			5			0.350	8.9		The Staff.
Ponta Delgada, Azores	30.13	765.3	30.20	767.1	57.6	14.2	65	W	5.6	2.5			10			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.17	740.9	30.37	771.4	4.1	—15.5	81	NE	40	18			10						Capt. Lasarew.
Archangel	30.31	769.9	30.33	770.4	15.6	— 9.1	91	SSW	9	4			10						Capt. Sselliwerstow.
Astrakhan	30.17	766.3	30.09	764.2	24.3	— 4.3	84	ENE	9	4			10cp					Heavy cl'd's	Capt. Wisganow.
Barnaul	29.92	760.0	30.50	774.6	— 8.1	—22.3	68	Calm	0	0			0						Meteorological Obs'y.
Dorpat	30.06	763.5	30.32	770.0	33.3	0.7	94	E	4	2			10n						Obervatory.
Ekaterinburg	29.57	751.0	30.62	777.8	15.3	— 9.3	47	WSW	4	2			1cs						Meteorological Obs'y.
Kasan	30.41	772.3	30.71	780.0	8.4	—13.1	57	NE	2	1			0						Observatory.
Kertch	29.82	757.3	29.84	757.8	39.4	4.1	92	SE	2	1			9						Lagorio.
Kieff	29.40	746.8	30.08	763.9	25.3	— 3.7	93	NE	9	4			10ks;n					Snowing	Cand. Fatjanow.
Lugan	29.87	758.8	30.09	764.3	25.0	— 3.9	84	ENE	34	15			10						Meteorological Obs'y.
Moscow	29.84	757.9	30.44	773.1	18.1	— 7.7	66	SE	7.8	3.5			8						Meteorological Obs'y.
Nertchinsk	27.82	706.5	30.56	776.1	—31.0	—35.0	79	Calm	0	0			0						Meteorological Obs'y.
Nikolaiev	29.88	758.9	29.95	760.7	33.8	1.0	98	N	13	6			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.43	747.6	29.48	748.8	10.4	—12.0	93	W	4	2			10n					Heavy cl'ds	Lieut. Iwanow.
Nukuss	29.76	756.0	30.00	762.0	48.6	9.2	68	N	3.4	1.5			4k						Dr. Dobrochotow.
Pekin, China	30.06	763.6	30.21	767.2	25.5	— 3.6	30	SW	11	5			0						Physical Observatory.
St. Petersburg	30.33	770.4	30.35	770.8	30.7	— 0.7	83	Calm	0	0			10s;n						Central Physical Obs'y.
Tashkend, Laboratory	28.42	721.8	29.97	761.2	60.1	15.6	50						4c						Teich, A. M.
Tiflis	28.36	720.3	29.74	755.4	64.0	17.8	35	Calm	0	0			7cs						Physical Observatory.
Warsaw	29.80	756.8	30.24	768.1	29.8	— 1.2	86	WNW	4	2			10ks						Astronomical Obs'y
Wilna	29.81	757.2	30.25	768.4	32.7	0.4	87	NE	4	2			10					Heavy cl'ds	Berg, Assistant.
Yeniseisk	29.96	761.0	30.29	769.3	— 9.4	—23.0	67	W	2	1			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.90	759.4	40.8	4.9	92	S			1		10s			0	0	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides			29.66	753.4	45	7.2	92	S			4k		10			0	0	Overcast....	J. Youngclause.
North Unst, Shetland Isl'ds			29.90	759.4				SSE			7		10			Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.81	757.2	29.92	759.9	56.1	13.4	72	SE	3.6	1.6			1			0.385	9.77	Clouds	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.73	755.2	29.79	756.6	61.5	16.4	50	S	4.7	2.1		3	2	SE		0	0	Cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.78	680.1			44.1	6.7	74	SE	5.6	2.5		0	7			0	0	Cloudy	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.54	699.4	29.81	757.1	44.1	6.7	86	S	7.6	3.4			10			0.114	2.9	Raining	The Staff.
Murcia, Met. Obs'y ‡	29.71	754.6	29.86	758.5	59.0	15.0	67	SW	3.6	1.6		2	4	NE		0.185	4.7	Raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.80	731.6	29.70	754.4	51.8	11.0	72	NNE	16.8	7.5			6			0.669	17.0	Cloudy..	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.17	766.2	30.23	767.9	71.6	22.0	79	NNE	9.4	4.2		0	5k		NE	0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.94	760.6	30.00	761.9	80.1	26.7	82	SE	3.3	1.5						0	0	Fair	Federico Faura, S. J
San Fernando, Naval Obs'y	29.75	755.7	29.85	758.2	58.6	14.8	82	W	14.0	6.3			10		W	0.147	1.1		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.06	763.5	30.15	765.8	71.6	22.0	97	E	4.7	2.10		2c	5kn	E	E	0.187	4.75	Raining	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.92	759.9	30.07	763.6	72.3	22.4	86	NW	4.2	1.9		3ck		W		0	0	Clear	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.25	768.3	30.29	769.3	7.2	—13.8	100	Calm			0		10			0	0	Foggy	
Umea	30.27	768.8	30.32	770.1	16.9	— 8.4	76	Calm			0		10			0	0		
Hernosand	30.25	768.4	30.30	769.7	21.0	— 6.1	77	Calm			0		8			0	0		
Stockholm	30.12	765.0	30.30	769.5	24.6	— 4.1	84	ENE			2		10			0	0		
Wisby	30.13	765.2	30.19	766.7	31.6	— 0.2	96	ENE			2		10			0	0		
Sub-Series.																			
Upsala	30.20	767.0	30.28	769.2	21.2	— 6.0	93	NNW	4.3	1.9			10			0	0		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.59	726.1	30.06	763.6	37.8	3.2	71	N			1		9			0	0	Foggy	The Observatory.
Zurich	28.35	720.2	30.05	763.3	36.7	2.6	63	W			2		2			0	0	Clear	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —0.1 mm.; Ther. —0°.6 cent.; Hum. 0 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.20	767.0	36.5	2.5	63	N	4	2.0			10		N	0	0		The Observatory.
Valona			30.14	765.5	50.5	10.3		NW			1		0			0	0	Clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.80	757.0	53.1	11.7	75	WSW			3		10n		SW	1.910	48.51		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.10	764.5	30.19	766.8	32	0.0	79	S	6	2.7	.....	5k	2s	S	Calm	0	0	Fair	
Alpena, Michigan	29.37	746.0	30.06	763.5	15	— 9.4	82	SW	4	1.8	.....	.....	1on	.....	Calm	0.10	2.5	Light snow.	
Atlanta, Georgia	29.15	740.4	30.35	770 9	39	3.9	72	W	7	3.1	.....	2k	Sk	W	Calm	0	0	Fair	
Atlantic City, New Jersey	30.17	766.3	30.19	766.8	35	1.7	100	N	2	0.9	.....	.....	10s;fg	.....	W;Calm	0.38	9.7	Cloudy	
Attou Id., Alaska	29.25	742.9	.....	.....	32	0.0	89	NW	23	10.3	.....	.....	1on	.....	N	0.16	4.1	Cloudy	
Augusta, Georgia	30.17	766.3	30.38	771.6	40	4.4	91	W	2	0.9	.....	2cs	Fg	SW	.....	0	0	Fair	
Baltimore, Maryland	30.16	766.1	30.21	767.3	35	1.7	80	SW	4	1.8	.....	5cs;ck	2s	SW	Calm	0	0	Fair	
Barnegat, New Jersey	30.14	765.5	30.16	766.1	33	0.6	100	N	5	2.2	.....	.....	1on	.....	Calm	0.33	8.4	Light rain	
Benton, Montana	27.43	696.7	.....	.....	—14	—25.6	73	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Bismarck. Dakota	28.38	720.8	30.23	767.8	—17	—27.2	100	NW	6	2.7	.....	.....	0	.....	.....	0	0	Clear	
Boise City, Idaho	27.09	688.1	30.05	763.3	27	— 2.8	94	E	1	0.4	.....	.....	1on	.....	Calm	0.40	10.2	Light snow.	
Boston, Massachusetts	30.05	763.3	30.22	767.6	30	— 1.1	100	E	7	3.1	.....	.....	1on	.....	Calm	0.04	1.0	Light snow.	
Brackettville, Texas	29.10	739.1	30.21	767.3	41	5.0	74	SE	9	4.0	.....	.....	10s	.....	SE	0.01	0.3	Light rain	
Brownsville, Texas	30.27	768.8	30.32	770.1	44	6.7	100	N	8	3.6	.....	.....	10s	.....	Calm	0.34	8.6	Cloudy	
Buffalo, New York	29.30	744.2	30.03	762.7	28	— 2.2	88	SW	6	2.7	.....	.....	1on	.....	Calm	0.04	1.0	Light snow.	
Burlington, Vermont	29.83	757.7	30.14	765.5	27	— 2.8	76	S	11	4.9	.....	.....	10s	.....	S	0	0	Cloudy	
Cairo, Illinois	30.17	766.3	30.60	777.2	20	— 6.7	70	NW	6	2.7	.....	0	0	.....	.....	0.01	0.3	Clear	
Campo, California	27.38	695.4	29.95	760.7	39	3.9	82	W	2	0.9	.....	.....	10s	.....	W	0	0	Cloudy	
Camp Thomas, Arizona	27.27	692.6	.....	.....	27	— 2.8	76	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	30.23	767.8	30.25	768.3	37	2.8	90	W	8	3.6	.....	.....	10s	.....	Calm	0.27	6.9	Cloudy	
Cape May, New Jersey	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Castroville, Texas	29.52	749.8	30.28	769.1	37	2.8	90	E	6	2.7	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Cedar Keys, Florida	30.27	768.8	30.30	769.6	53	11.7	86	N	7	3.1	.....	8c	0	Calm	.....	0	0	Fair	
Champaign, Illinois	29.52	749.8	30.42	772.7	6	—14.4	52	SW	17	7.6	.....	0	0	.....	.....	0	0	Clear	
Charleston, S. Carolina	30.29	769.4	30.35	770.9	47	8.3	85	NW	5	2.2	.....	0	8s	.....	NW	0.15	3.8	Cloudy	
Charlotte, N. Carolina	29.40	746.7	30.26	768.6	34	1.1	79	SW	4	1.8	.....	0	Fg	.....	Calm	0	0	Clear	
Chattanooga, Tennessee	29.56	750.8	30.40	772.1	40	4.4	65	NW	5	2.2	.....	10ck	Sk	SW	Calm	0	0	Cloudy	
Cheyenne, Wyoming	23.94	608.1	29.88	758.9	22	— 5.6	58	SW	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Chicago, Illinois	29.48	748.8	30.24	768.1	10	—12.2	58	SW	16	7.2	.....	.....	10s	.....	Calm	0.01	0 3	Cloudy	
Chincoteague, Virginia	30.22	767.6	30.24	768.1	37	2.8	100	W	8	3.6	.....	.....	1on	.....	Calm	0.33	8.4	Light rain	
Cincinnati, Ohio	29.64	752.8	30.33	770.4	29	— 1.7	67	W	16	7.2	.....	0	1s	.....	Calm	Inap.	Inap.	Clear	
Cleveland, Ohio	29.30	744.2	30.05	763.3	30.5	— 0.8	89	SW	8	3.6	.....	.....	1on	.....	Calm	0.05	1.3	Light snow.	
Coleman City, Texas	28.51	724.1	30.33	770.4	21	— 6.1	57	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Columbus, Ohio	29.28	743.7	30.16	766.1	31	— 0.6	69	W	17	7.6	.....	.....	10ks	.....	W	0.07	1.8	Cloudy	
Concho, Texas	28.34	719.8	30.17	766.3	22	— 5.6	86	NE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Corsicana, Texas	29.98	761.5	30.49	774.4	29	— 1.7	78	N	4	1.8	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Davenport, Iowa	29.71	754.6	30.45	773.4	— 5	—20.6	82	W	11	4.9	.....	0	0	.....	.....	0.07	1.8	Clear	
Dayton, Washington T'y	28.34	719.8	30.13	765.3	17	— 8.3	83	SW	3	1.3	.....	.....	1on	.....	Calm	Inap.	Inap.	Light snow.	
Deadwood, Dakota	25.40	645.1	.....	.....	— 4	—20.0	65	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Decatur, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Delaware Breakwater, Del.	30.17	766.3	30.19	766.8	31	— 0.6	89	NW	2	0.9	.....	.....	10ks	.....	NW	0.25	6.3	Cloudy	
Denison, Texas	29.62	752.3	30.50	774.7	16	— 8.9	83	N	4	1.8	.....	0	2s	.....	Calm	0	0	Clear	
Denver, Colorado	24.72	627.9	29.94	760.5	5	—15.0	75	SW	3	1.3	.....	8ck	0	W	.....	0	0	Fair	
Des Moines, Iowa	29.56	750.8	30.58	776.7	— 5	—20.6	63	NW	4	1.8	.....	0	0	.....	.....	0.05	1.3	Clear	
Detroit, Michigan	29.30	744.2	30.02	762.5	29	— 1.7	89	SW	16	7.2	.....	.....	10s	.....	Calm	0.03	0.8	Threatening.	
Dodge City, Kansas	27.58	700.5	30.14	765.5	4	—15.6	74	SE	10	4.5	.....	2k	0	Calm	.....	0	0	Clear	
Dubuque, Iowa	29.58	751.3	30.38	771.6	— 1	—18.3	68	W	8	3.6	.....	0	Fg	.....	Calm	0.22	5.6	Clear	
Duluth, Minnesota	29.52	749.8	30.28	769.1	4	—15.6	87	SW	4	1.8	.....	0	0	.....	.....	0.03	0.8	Clear	
Eagle Pass, Texas	29.54	750.3	30.31	769.9	42	5.6	74	SE	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Eagle Rock, Idaho	25.18	639.6	29.83	757.7	19	— 7.2	85	Calm	0	0	.....	.....	1on	.....	Calm	0.68	17.3	Light snow.	
Eastport, Maine	30.28	769.1	30.35	770.9	29	— 1.7	67	S	16	7.2	.....	.....	10s	.....	S	0	0	Cloudy	
Edinburg, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
El Paso, Texas	29.26	743.2	.....	.....	29	— 1.7	67	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Erie, Pennsylvania	29.29	744.0	30.03	762.7	31	— 0.6	89	S	9	4.0	.....	.....	1on	.....	Calm	0.09	2.3	Light snow.	
Escanaba, Michigan	29.39	746.5	30.10	764.5	14	—10.0	91	N	5	2.2	.....	.....	1on	.....	Calm	0.08	2.0	Light snow.	
Florence, Arizona	28.47	723.1	30.07	763.8	44	6.7	52	SW	1	0.4	.....	2c	0	S	.....	0	0	Fair	
Fort Apache, New Mexico	24.97	634.2	30.42	772.7	25	— 3.9	50	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Assinniboine, Montana	27.38	695.4	.....	.....	—14	—25.6	45	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Bennett, Dakota	28.67	728.2	.....	.....	—26	—32.2	100	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Buford, Dakota	28.21	716.5	30.38	771.6	—20	—28.9	64	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Custer, Montana	27.01	686.0	.....	.....	—17	—27.2	.....	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Davis, Texas	25.23	640.8	30.19	766.8	39	3.9	31	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Fort Elliott, Texas	27.45	697.2	29.91	759.7	5	—15.0	25	SE	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Fort Gibson, Indian T'y	29.92	760.0	30.53	775.4	11	—11.7	80	Calm	0	0	.....	0	0	.....	.....	0.02	0.5	Clear	
Fort Grant, Arizona	25.16	639.0	29.99	761.0	46	7.8	28	E	8	3.6	.....	5cs	0	Calm	.....	0	0	Fair	
Fort Griffin, Texas	28.99	736.3	30.39	771.9	18	— 7.8	53	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Keogh, Montana	27.73	704.3	.....	.....	—20	—28.9	.....	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Fort McKavett, Texas	27.98	710.7	30.04	763.0	28	— 2.2	77	NE	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Macon, North Carolina	30.25	768.3	30.26	768.6	46	7.8	100	NW	4	1.8	.....	.....	Fg	.....	Calm	0.02	0.5	Dense fog	
Fort St. Michaels	29.84	757.9	29.88	758.9	6	—14.4	100	NE	12	5.4	.....	0	0	.....	.....	0	0	Cloudy	
Fort Missoula, Montana	26.78	680.2	.....	.....	1	—17.2	100	SE	1	0.4	.....	5k	5ks	Calm	Calm	0	0	Clear	
Fort Shaw, Montana	26.52	673.6	.....	.....	—11.5	—24.2	75	NW	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Fort Sill, Indian Territory	29.11	739.4	30.32	770.1	19	— 7.2	69	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Fort Stevenson, Dakota	28.32	719.3	.....	.....	—20	—28.9	100	W	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Verde, Arizona	.....	.....	.....	.....	28	— 2.2	54	W	.....	.....	1	2cs	0	W	.....	0	0	Fair	
Fredericksburg, Texas	28.54	724.9	30.20	767.1	35	1.7	70	E	4	1.8	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Galveston, Texas	30.29	769.4	30.33	770.4	48	8.9	85	NE	7	3.1	.....	.....	10s	.....	NE	0.16	4.1	Cloudy	
Grand Haven, Michigan	29.36	745.7	30.04	763.0	26	— 3.3	88	W	31	13.9	.....	.....	1on	.....	Calm	0.31	7.9	Light snow.	
Hatteras, North Carolina	30.20	767.1	30.22	767.6	45	7.2	92	NW	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
Helena, Montana	25.85	656.6	.....	.....	— 6	—21.1	100	N	3	1.3	.....	5k	0	.....	Calm	0	0	Fair	
Henrietta, Texas	29.40	746.7	30.45	773.4	16	— 8.9	66	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Indianapolis, Indiana	29.51	749.5	30.37	771.4	14	—10.0	82	W	10	4.5	.....	0	4ks	.....	W	Inap.	Inap.	Fair	
Indianola, Texas	30.29	769.4	30.32	770.1	39	3.9	100	N	15	6.7	.....	.....	10s	.....	Calm	0.25	6.3	Cloudy	
Jacksboro, Texas	29.21	741.9	30.47	773.9	18	— 7.8	68	Calm	0	0	.....	5cs	0	Calm	.....	0	0	Fair	
Jacksonville, Florida	30.29	769.4	30.34	770.6	51	10.6	86	N	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Keokuk, Iowa	29.77	756.1	30.52	775.2	0	—17.8	7	W	0	2.7	.....	0	0	.....	.....	0.15	3.8	Clear	
Key West, Florida	30.22	767.6	30.26	768.6	66	18.9	84	NE	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Kittyhawk, North Carolina	30.24	768.1	30.26	768.6	40	4.4	100	NW	2	0.9	.....	.....	10n	.....	Calm	0.04	1.0	Light rain	
Knoxville, Tennessee	29.31	744.5	30.36	771.1	37	2.8	63	SW	6	2.7	.....	0	5s	.....	SW	0	0	Fair	
La Crosse, Wisconsin	29.54	750.3	30.36	771.1	5	—15.0	75	W	8	3.6	.....	0	0	.....	.....	0.11	2.8	Clear	
La Mesilla, New Mexico	26.13	663.7	30.28	769.1	29	— 1.7	67	Calm	0	0	.....	1c	0	Calm	.....	0	0	Clear	
Laredo, Texas	29.88	758.9	30.24	768.1	41	5.0	91	NE	4	1.8	.....	.....	10s	.....	Calm	0.04	1.0	Cloudy	
Leavenworth, Kansas	29.58	751.3	30.56	776.2	— 3	—19.4	66	NW	2	0.9	.....	0	1s	.....	.....	0	0	Clear	
Lewiston, Idaho	29.27	743.4	29.96	761.0	25	— 3.9	100	W	3	1.3	.....	.....	1on	.....	Calm	0.01	0.3	Light snow.	
Little Rock, Arkansas	30.20	767.1	30.55	776.0	23	— 5.0	86	N	8	3.6	.....	0	0	.....	.....	0.03	0.8	Clear	
Los Angeles, California	29.65	753.1	30.01	762.2	52	11.1	86	Calm	0	0	.....	.....	1on	.....	Calm	0.09	2.3	Light rain	
Louisville, Kentucky	29.80	756.9	30.41	772.4	24	— 4.4	61	W	17	7.6	.....	0	0	.....	.....	Inap	Inap	Clear	
Lynchburg, Virginia	29.54	750.3	30.26	768.6	31	— 0.6	89	Calm	0	0	.....	.....	0	Fg	.....	Calm	0	0	Clear
Madison, Wisconsin	29.14	740.1	30.22	767.6	11	—11.7	80	W	15	6.7	.....	0	1s	.....	W	0.19	4.8	Clear	
Marquette, Michigan	29.35	745.5	30.12	765.0	13	—10.6	81	NW	12	5.4	.....	.....	1on	.....	Calm	0.03	0.8	Light snow.	
Mason, Texas	28.66	728.0	30.54	775.7	33	0.6	70	E	6	2 7	.....	.....	10s	.....	Calm	0	0	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	30.17	766.3	30.54	775.7	23	— 5.0	87	NW	7	3.1	.....	0	0	.....	.....	Inap.	Inap.	Clear.	
Milwaukee, Wisconsin	29.35	745.5	30.14	765.5	16	— 8.9	83	W	18	8.0	.....	1ck	5s	Calm	W	0.08	2.0	Fair.	
Mobile, Alabama	30.31	769.9	30.39	771.9	43	6.1	83	NW	4	1.8	.....	1cs	5s	Calm	Calm	0	0	Fair.	
Montgomery, Alabama	30.18	766.6	30.43	772.9	39	3.9	91	SE	1	0.4	.....	0	Fg	.....	Calm	0	0	Clear.	
Moorhead, Minnesota	29.26	743.2	30.39	771.9	—17	—27.2	68	SW	5	2.2	.....	0	0	.....	.....	0	0	Clear.	
Morgantown, W. Virginia	29.10	739.1	30.11	764.8	44	6.7	52	SW	16	7.2	.....	.....	10s	.....	SW	0	0	Cloudy.	
Mt. Washington, N. H.	23.58	598.9	29.94	760.5	9	—12.8	100	W	60	26.8	.....	.....	Fg	.....	W	0	0	Dense fog.	
Nashville, Tennessee	29.89	759.2	30.46	773.7	34	1.1	70	W	8	3.6	.....	0	1ks;ak	.....	W;C	Inap.	Inap.	Fair	
New Haven, Connecticut	30.05	763.3	30.18	766.6	25	— 3.9	87	NE	9	4.0	.....	.....	10n	.....	Calm	0.20	5.1	Heavy rain.	
New London, Connecticut	30.15	765.8	30.20	767.1	35	1.7	100	NW	5	2.2	.....	.....	10n	.....	NW	0.15	3.8	Light rain.	
New Orleans, Louisiana	30.31	769.9	30.38	771.6	50	10.0	79	E	5	2.2	.....	10c	0	NW	.....	0	0	Cloudy.	
Newport, Rhode Island	30.11	764.8	30.16	766.1	34	1.1	100	E	11	4.9	.....	.....	10n	.....	Calm	0.31	7.9	Heavy rain.	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	30.11	764.8	30.14	765.5	39	3.9	100	N	6	2.7	.....	.....	10n	.....	N	0.41	10.4	Light rain.	
New York, New York	30.00	762.0	30.19	766.8	30	— 1.1	89	N	6	2.7	.....	.....	10s	.....	Calm	0.15	3.8	Cloudy.	
Norfolk, Virginia	30.21	767.3	30.28	769.1	40	4.4	82	NW	5	2.2	.....	.....	Fg	.....	.....	0.02	0.5	Foggy.	
North Platte, Nebraska	27.23	691.6	30.20	767.1	—12	—24.4	75	Calm	0	0	.....	10cs	0	Calm	.....	0	0	Cloudy.	
Olympia, Washington T'y	29.94	760.5	29.98	761.5	34.0	1.1	79	N	3	1.3	.....	10ck	0	Calm	.....	0	0	Cloudy.	
Omaha, Nebraska	29.24	742.7	30.54	775.7	—12	—24.4	75	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Oswego, New York	29.73	755.1	30.07	763.8	29	— 1.7	94	S	8	3.6	.....	.....	10n	.....	Calm	0.09	2.3	Light snow.	
Pensacola, Florida	30.38	771.6	30.42	772.7	44	6.7	84	NE	4	1.8	.....	4cs	Hz	SW	Calm	0	0	Fair	
Philadelphia, Pa	30.12	765.0	30.17	766.3	33	0.6	89	N	4	1.8	.....	10cs	Fg	Calm	Calm	0.14	3.6	Cloudy.	
Phœnix, Arizona	28.85	732.8	30.72	780.3	41	5.0	74	E	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Pike's Peak, Colorado	17.48	444.0	29.69	754.1	1	—17.2	42	SW	52	23.2	.....	2cs	0	Calm	.....	0	0	Clear.	
Pilot Point, Texas	29.64	752.8	30.58	776.7	18	— 7.8	84	NW	6	2.7	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy.	
Ploche, Nevada	23.83	605.3	29.60	751.8	33	0.6	37	SE	10	4.5	.....	.....	10ks	.....	Calm	0	0	Cloudy.	
Pittsburg, Pennsylvania	29.26	743.2	30.10	764.5	36	2.2	71	SW	10	4.5	.....	.....	10n	.....	SW	0.01	0.3	Light snow.	
Port Huron, Michigan	29.30	744.2	30.00	762.0	24	— 4.4	87	SW	8	3.6	.....	.....	10n	.....	Calm	0.08	2.0	Light snow.	
Portland, Maine	30.21	767.3	30.26	768.6	31	— 0.6	69	NW	2	0.9	.....	.....	10n	.....	Calm	Inap.	Inap.	Light snow.	
Portland, Oregon	29.95	760.7	30.02	762.5	27.5	— 2.5	82	E	6	2.7	.....	.....	10n	.....	Calm	0.08	2.0	Light snow.	
Portsmouth, N. Carolina	.....	.....	.....	.....	41	5.0	100	W	5	2.2	.....	.....	Fg	.....	Calm	0.02	0.5	Dense fog.	
Prescott, Arizona	24.68	626.9	30.04	763.0	37	2.8	38	S	2	0.9	.....	5c	0	W	.....	0	0	Fair	
Punta Rassa, Florida	30.25	768.3	30.27	768.8	59	15.0	82	N	10	4.5	.....	2c	0	SW	.....	0	0	Fair.	
Red Bluff, California	29.55	750.6	29.90	759.4	46.0	7.8	84	S	8	3.6	.....	.....	10s	.....	Calm	0.54	13.7	Cloudy.	
Rio Grande City, Texas	30.10	766.1	30.39	771.9	44	6.7	100	N	5	2.2	.....	.....	10n	.....	Calm	Inap.	Inap.	Light rain.	
Rochester, New York	29.40	746.7	30.04	763.0	30	— 1.1	89	SW	3	1.3	.....	1cs	4s	SW	Calm	0.02	0.5	Fair.	
Roseburg, Oregon	29.29	744.0	29.87	758.7	36	2.2	90	NW	3	1.3	.....	.....	10s	.....	Calm	0.29	7.4	Cloudy.	
Sacramento, California	29.84	757.9	29.92	760.0	47	8.3	92	SE	12	5.4	.....	.....	10n	.....	Calm	0.80	20.3	Light rain.	
St. Louis, Missouri	29.91	759.7	30.57	776.5	5	—15.0	75	W	11	4.9	.....	Hz	0	.....	.....	0.03	0.8	Clear.	
St. Paul, Minnesota	29.40	746.7	30.35	770.9	— 4	—20.0	64	SW	10	4.5	.....	0	0	.....	.....	0.12	3.0	Clear.	
Salt Lake City, Utah	25.46	646.7	29.80	756.9	34	1.1	43	E	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy.	
San Antonio, Texas	29.65	753.1	30.40	772.1	36	2.2	100	NE	6	2.7	.....	.....	10n	.....	Calm	0.09	2.3	Light rain.	
San Diego, California	29.98	761.5	30.05	763.3	53	11.7	86	NE	4	1.8	.....	.....	10n	.....	Calm	0.10	2.5	Light rain.	
Sandusky, Ohio	29.37	746.0	30.07	763.8	32	0.0	89	SW	17	7.6	.....	.....	10s	.....	W	0.01	0.3	Cloudy.	
Sandy Hook, New Jersey	30.13	765.3	30.17	766.3	30	— 1.1	100	N	7	3.1	.....	.....	10n	.....	Calm	0.01	0.3	Light snow.	
San Francisco, California	29.83	757.7	29.90	759.4	52	11.1	89	SE	6	2.7	.....	.....	10n	.....	S	0.05	1.3	Light rain.	
Santa Fé, New Mexico	23.22	589.8	29.76	755.9	29	— 1.7	78	E	4	1.8	.....	8c	0	.....	.....	0	0	Fair.	
Savannah, Georgia	30.27	768.8	30.36	771.1	48	8.9	85	NW	5	2.2	.....	.....	10ks	.....	SW	0	0	Cloudy.	
Shreveport, Louisiana	30.21	767.3	30.47	773.9	37	2.8	100	E	4	1.8	.....	.....	10n	.....	Calm	0.27	6.9	Light rain.	
Silver City, New Mexico	24.27	616.4	30.74	780.8	25	— 3.9	50	N	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Smithville, North Carolina	30.28	769.1	30.32	770.1	44	6.7	100	NW	3	1.3	.....	.....	Fg	.....	.....	0.14	3.6	Dense fog.	
Socorro, New Mexico	25.46	646.7	29.52	749.8	25	— 3.9	87	N	7	3.1	.....	.....	10s	.....	N	0	0	Cloudy.	
Springfield, Illinois	29.75	755.6	30.51	774.9	6	—14.4	70	W	12	5.4	.....	0	0	.....	.....	0.02	0.5	Clear.	
Springfield, Massachusetts	30.07	763.8	30.21	767.3	24	— 4.4	74	N	5	2.2	.....	.....	10n	.....	Calm	0.10	2.5	Light snow.	
Stockton, Texas	27.08	687.8	30.08	764.0	22	— 5.6	86	S	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
St. Vincent, Minnesota	29.31	744.5	30.26	768.6	— 24	—31.1	100	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Thatcher's Island, Mass	30.18	766.6	30.23	767.8	37	2.8	90	SE	9	4.0	.....	.....	10n	.....	Calm	0.02	0.5	Light snow.	
Toledo, Ohio	29.39	746.5	30 11	764.8	28	— 2.2	83	W	18	8.0	.....	5k	0	SW	.....	0.01	0.3	Clearing.	
Tucson, Arizona	27.50	698.5	30.05	763.3	41	5.0	41	S	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Umatilla, Oregon	29.86	758.4	30.40	772.1	19.5	— 6.9	93	SW	3	1.3	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
Uvalde, Texas	29.33	745.0	30.20	767.1	42	5.6	66	SE	3	1.3	.....	.....	10s	.....	Calm	0.08	2.0	Cloudy.	
Vicksburg, Mississippi	30.19	766.8	30.47	773.9	38	3.3	81	NW	7	3.1	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy.	
Visalia, California	29.57	751.1	29.94	760.5	47	8.3	85	SE	3	1.3	.....	0	9ks	.....	SE	0.04	1.0	Cloudy.	
Washington, D. C.	30.08	764.0	30.20	767.1	32	0.0	79	E	2	0.9	.....	0	2s	.....	Calm	0	0	Fair.	
Wickenburg, Arizona	.....	.....	.....	.....	31	— 0.6	79	W	.....	.....	1	5ck	0	Calm	.....	0	0	Fair.	
Wilmington, N. Carolina	30.25	768.3	30.31	769.9	46	7.8	92	NW	5	2.2	.....	.....	Fg	.....	Calm	0.20	5.1	Dense fog.	
Winnemucca, Nevada	25.41	646.2	29.80	756.9	28	— 2.2	77	S	4	1.8	.....	5ck	0	SW	.....	0	0	Fair.	
Wood's Holl, Mass	30.12	765.0	30.16	766.1	35	1.7	90	SE	9	4.0	.....	.....	10n	.....	SE	0.09	2.3	Light rain.	
Yankton, Dakota	29.04	737.6	30.58	776.7	—20	—28.9	64	N	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Yuma, Arizona	29.77	756.1	29.92	760.0	49	9.4	37	NE	4	1.8	.....	1c	0	Calm	.....	0	0	Clear.	
Sub-Series.																			
Bogota, U. S. Columbia	22.68	560.8	.....	.....	48.5	9.2	75	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	Thomas Herran.
Buff Bay Town, Jam ica	29.92	760.0	30.24	768.1	68	20.0	90	SE	.....	.....	.....	2k	5k	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	30.18	766.6	30.23	767.8	72	22.2	81	NE	3.6	1.6	.....	0	4ks	.....	.....	0	0	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	29.22	742.1	29.28	743.6	1.4	—17	.....	S	.....	.....	6	.....	10	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I.	30.12	765.0	30.13	765.3	68.9	20.5	78	Calm	0	0	.....	0	1	.....	E	0	0	.....	Robert Johnstone.
Navassa, W. I.	29.95	760.7	30.03	762.7	75.2	24.0	73	NE	12	5.4	.....	2k	5s	E	NE	0	0	Fair.	F. M. Everett.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	80	26.7	82	NE	.....	.....	2	5ck	5k	.....	.....	0	0	½ cloudy.	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.42	747.3	29.98	761.5	81	27.2	80	Calm	.....	.....	0	0	2s	.....	Calm	0	0	Hazy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	71.6	22	.....	E	.....	.....	3	0	0	.....	.....	0.68	2.	.....	Earl Flint.
Santiago de Cuba, W. I.	30.12	765.0	30.14	765 5	71	21.7	75	NNE	0	2.7	.....	0	0	.....	.....	0	0	Clear.	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	28.92	734.6	28.58	736.2	6.6	—14.1	.....	SE	.....	.....	2	.....	0	.....	.....	0	0	.....	K. Elberg.
York Factory, B. A.	29.90	759.4	29.96	761.0	— 7.0	—21.7	83	N	6	2.7	.....	1c	0	NW	.....	0	0	Fair.	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.19	766.8	58	14.4	70	SSE			1		6	SSE						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 36° 20′, E 50° 32′	29.92	760.0	71	21.7	85	ESE			3		2	SSE				1	SE	D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			36	2.2		Calm			0		5	NNW						D. clouds	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.85	758.2	74.5	23.6	69	SSE			1–2		0					4	SE	Blue sky	Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser, N. 37° 01′, E. 15° 17′	30.11	764.8	60	15.6		S			1		4	S				2	E	D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa, Shanghai, China	30.17	766.3	49	9.4	44	SE			1		5							D. clouds	Comm. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.37	771.4	64	17.8	78	NE			1–2		3	NE						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 34′, E. 81° 14′	29.87	758.7	80.5	26.9		NNE			2		10	NE				3	NNE	Overcast	Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St. J. Garforth.
H. M. S. Egeria, Singapore, Malay Peninsula	29.80	756.9	80	26.7		N			1		5	N				1	NE	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.89	759.2	80	26.7	74	NW			2–3		4							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Bridgetown Barbadoes	30.12	765.0	77	25.0		ENE			1		9	ENE				Sm'h		D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, N. 28° 09′, W. 63° 19′	30.42	772.7	68	20.0	75	NE			3–4		7	NE				3	NE	D. clouds	Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Panama, Panama	29.94	760.5	75	23.9	81	NW			4		1							Blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.50	749.3				NNW			4									Showery	Capt. L. F. Jones.
H. M. S. Griffon, N. 30° 34′, W. 64° 27′	30.33	770.4	66.5	19.2	94	ENE			3		3	ENE				3	ENE	D. clouds	
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, N. 36° 10′, E. 19° 56′	30.23	767.8	55	12.8	87	NW			2–3		5					3	NW	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 21° 14′, E. 114° 25′	30.05	763.3	70	21.1	90	E			4		10	E				4	E	D. clouds	Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Zanzibar, Africa	29.88	758.9	81	27.2	91	SSE			1–2		2	SE		Blank		1	S	D. clouds	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 36′ E. 122° 03′	30.36	771.1	40.3	4.6	69	N			3		5					1	NW	Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 45° 25′, W. 8° 45′	29.79	756.7	51	10.6	72	NE			4–5		5	NE				4	NW	Showery	Capt. J. F. G. Grant.
H. M. S. Minatour, Vigo, Spain	29.68	753.9	54.5	12.5	77	NE			2		3	NE						D. clouds	Capt. H. Rawson.
H. M. S. Modeste, N. 1° 09′, E. 103° 45′	29.97	761.2	83	28.3	83	WSW			1–2		3					Sm'h		D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Ayas Bay, Turkey, Asia	29.73	755.1	49	9.4	85	NNE			2		10	NNE				Sm'h		Raining	Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 15° 39′, W. 70° 49′	30.06	763.5	77	25.0	86	NE			6		5	NE				2	NE	D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, N. 0° 05′, W. 6° 25′	29.91	759.7	82	27.8	87	S			2		8	SSE				1	S	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.90	759.4	82	27.8	91	NNE			1		5							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Spain	29.57	751.1	57	13.9	94	NW			5–6		6	NW						Squally	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.62	752.3	80	26.7	82	E			1		0					1	SSE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	29.94	760.5	70.5	21.4	92	S			1		6	S				2	SW	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 7° 08′, W. 58° 11′	30.01	762.2	77	25.0	86	NNE			2		9					1	NNE	Showery	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, N. 37° 03′, E. 15° 18′	30.23	767.8				ESE			2		7					2		D. clouds	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo Bay, Chili, S.A.	30.00	762.0	61.5	16.4	94	WNW			1		10							Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne, N. 22° 54′, E. 37° 15′	29.97	761.2	78	25.6		NNW			3		2					1	NNW	D. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.12	765.0	73	22.8		Calm			0		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Basrah, Palestine	29.81	757.2	67.5	19.7	79	SE			2–3		6	SW						Showery	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard

GERMAN NAVAL SERIES.

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

PORTUGUESE NAVAL SERIES.

Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Rio Lima, Bissao, Guinea, Africa	29.96	761.0	78.4	25.8	92	NNW			1		0					1		Blue sky	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando, Africa	29.87	758.6	85.6	29.8	74	NNW			3		3					1	NW	D. clouds	G. A. de Brito Capello, Comd't
Tamega																			

SWEDISH NAVAL SERIES.

Furnished by the co-operation of E. Mahmberg, Director of the Nautical Meteorological Bureau at Stockholm.

H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

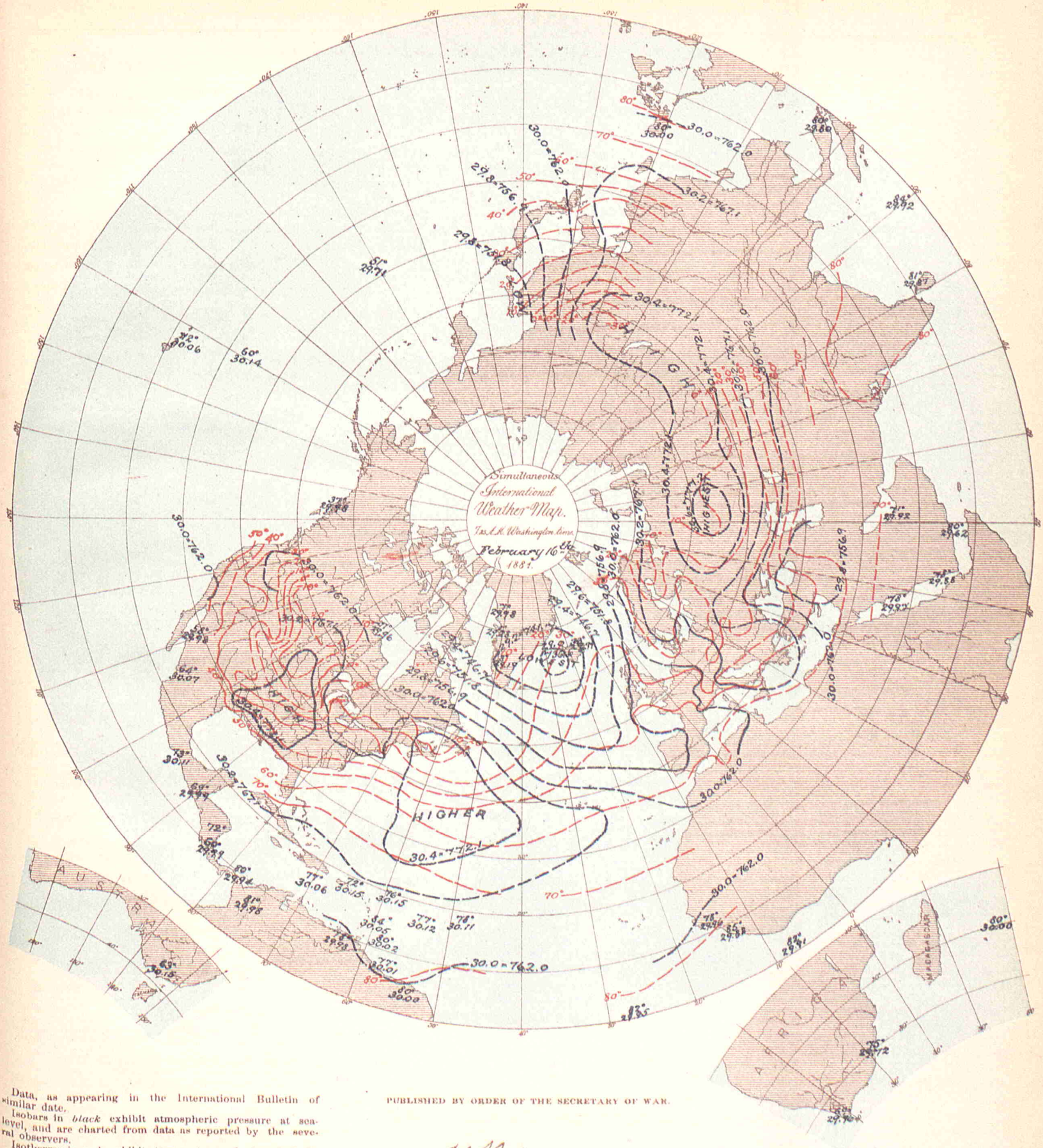
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.43	772.9	54	12.2	80	NW	1	0.4			0			0	0			Clear.	
N. Yard, Portsmouth, N. H.	30.22	767.6	25	— 3.9	62	Calm	0	0		10c?		Calm						Snowing?	
Naval Hospital, Yokohama, Japan	29.76	755.9	37.5	3.1	95	N			1		10		N	Slight				Misty	
Adams, N. 8° 10′, W. 78° 30′	29.95	760.7	75	23.9	100	NE			2		5		NE			Sm'h	NE	Fair.	
Alaska, N. Yard, Mare I'd, Cal.	29.84	757.9	51	10.6	86	S			2		8		S	0.05	1.3			Cloudy	
Alert, Hong-Kong, China *.	29.98	761.5	68	20.0	74	E			1		10		SE	0	0	Sm'h		Cloudy	
Alliance, New Orleans, La	30.33	770.4	51	10.6	79	E			1		8			0	0	Sm'h		Cloudy	
Ashuelot, Tientsin, China	30.29	769.4	21	— 6.1	100	SSW			1		0							Clear.	
Colorado, New York, N. Y.	30.23	767.8	28	— 2.2	100	NNE	2	0.9			10		Calm	Snow				Snowing	
Constitution, N. Yard, League I'd., Pa			33	0.6		N	1	0.4			10							Foggy	
Franklin, Norfolk, Va	30.23	767.8	40	4.4	91	NW	8.4	3.8			10			0.27	6.9			Rainy	
Galena, Naples, Italy	30.20	767.1	51	10.6	65	SE			1		2		SE					Fair.	
Independence, N. Yard, Mare I'd, Cal	29.87	758.7	49	9.4	?	S	3.6	1.6			8		S	0.06	1.5			Cloudy	
Jamestown, Sitka, Alaska *	29.98	761.5	37	2.8	90	ENE			1		10			0.51	13.0			Rainy	
Kearsarge, Warrington, Florida	30.39	771.9	49	9.4	78	NE			1		5					Sm'h		Fair.	
Lackawanna, Callao, Peru †.	30.08	764.0	71	21.7	95	S			1		5		S	0	0			Fair.	
Marion, Sandy P't, Terra del Fuego	30.43	772.9	47	8.3	70	WSW			5-8		5		WSW			R'gh	wsw	Squally	
Michigan, Erie, Pennsylvania	30.00	762.0	31	— 0.6		SW	2	0.9			10		SW					Snowing	
Minnesota, New York, N. Y.	30.19	766.8	33	0.6	80	NE			2		10			Snow				Threatening	
Monocacy, Shanghai, China	30.36	771.1	36	2.2	80	N			2		2							Clear	
New Hampshire, Port Royal, S. C.	30.31	769.9	52	11.1	86	NNW	5	2.2			10		WSW	0	0			Cloudy	
Nipsic, Barcelona, Spain	29.93	760.2	59	15.0	70	SSE			3		2		SSE			Sm'h		D. clouds	
Onward, Callao, Peru †.	29.92	760.0	71	21.7	90	SSE			3		8					Long	N:W	Cloudy.	
Palos, Shanghai, China	30.36	771.1	36	2.2	80	NNE			1		0							Clear	
Passaic, Washington, D. C.	30.30	769.6	34	1.1	90	SW			1		2		Calm					Fair.	
Pensacola, Panama, Panama	29.94	760.5	80	26.7	70	NNW			2-3		2			0	0	Sm'h		Clear	
Powhatan, New York, N. Y.	30.20	767.1	30	— 1.1	89	NNE			1		10							Light snow.	
Quinnebaug, Villafranca, France	30.09	764.3	54	12.2	80	ESE			3		10		E			Light	SSW	Cloudy	
Richmond, Hong-Kong, China	30.13	765.3	66	18.9	89	ENE			1		10		ENE	0	0			Misty	
Saratoga, Baltimore, Md	30.20	767.1	31	— 0.6	100	WSW			1		8		W	0	0			Cloudy.	
Shenandoah, Montevideo, Uruguay *	30.23	767.8	67	19.4	50	E			3		0					Mod.	E	Clear.	
St. Louis, League Island, Pa	30.24	768.1	33	0.6	89	Calm	0	0			10			0.15	3.8			Cloudy.	
Swatara, Nagasaki, Japan †	30.06	763.5	47	8.3	70	NNW			2		10		NW			Sm'h		Raining	
Tennessee, New Orleans, La.	30.45	773.4	48	8.9	85	ENE	4	1.8			8		NW	0	0	Sm'h		Cloudy	
Ticonderoga, N. Yard, Mare Id., Cal.	29.93	760.2	51	10.6	100	S			1		1		S	0.2	5.			D. clouds	
Trenton, Toulon, France *.	30.00	762.0	62	16.7	56	ESE			3-4		8			0	0	Sm'h		Fair.	
Vandalia. N. 13° 58′, W. 61° 05′	29.98	761.5	78	25.6	91	NE			2		8		Calm					Fair.	
Wabash, Boston, Massachusetts	30.27	768.8	32	0.0	100	E	2	0.9			10		Calm					Snowing	
Wachusetts, Panama, Panama *.	29.58	751.3	76	24.4	86	NW			3		2		N			Sm'h		Fair	
Wyoming, Villafranca, France	30.10	764.5	53	11.7	67	ESE			3		10		SW			Sm'h	SSW	Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.	Force	Amount and kind.		Direction.							
									Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																		
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																		
S. S. Algeria																		Capt. W. Gill.
Barque Astarte																		Capt. G. F. Parson.
Ship Baroda, ‡																		
S. 0° 30′, W. 26° 00′	29.83	757.7	86.8	30.4	70	ESE			3		2						Blue sky	Capt. C. J Russell.
S. S. Bateshire																		Capt. John Arbuckle
Barque Belleisle,																		
N. 17° 50′, W. 48° 45′	30.11	764.8	78.0	25.6	80	ENE			4		5						D. clouds	Capt. A. J. Brown.
British Merchant. ‡																		Capt. E. J. Molony.
Chin Yang, ‡																		
N. 9° 18, W. 50° 30′	30.00	762.0	79.5	26.4	74	ENE			3		5						D. clouds	Capt. H. Youlden.
S. S. Oipero,																		
N. 16° 45′, W. 54° 30′ †	30.12	765.0	77	25.0		NE			4		4				2	NE	D. clouds	Capt W. N. Lailey.
City of Agra, ‡																		
S. 12° 30′, W. 30° 35′	30.03	762.7	79.5	26.4	84	ENE			3		10						Misty	Capt. T. Young.
Barque Commewyne, ‡																		
N. 38° 45′, W. 47° 48′	30.52	775.2	52	11.1	69	N			4		7						D. clouds	Capt. W. Scott.
Barque Coppename																		Capt. A. Buchan.
Denbigshire																		Capt. H. Y. Murdock.
Barque Dochra, ‡																		
S. 6° 22′, W. 16° 35′	29.96	761.0	87.5	30.8	66	SE			2		10						Showery	Capt. H. Spalding.
Ship Ellen Stuart,																		
N. 2° 47′, E. 89° 38′	29.92	760.0	83.5	28.6	75	N			2		4						D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																		Capt. A. Watson.
S. S. Ethiopia ‡																		Capt. A. Campbell.
S. S. Fleurs Castle																		Capt J. Kidder.
Barque Gem																		Capt. H. Park.
S. S. Gordon Castle																		Capt. W. Waring.
Barque Harvest Home																		Capt. H. H. Williams.
Barquentine Hope, ‡																		
S. 5° 40′, W. 34° 57′	29.97	761.2	81.5	27.5	91	ENE			2	3ck;cs		SSE			3	E	D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																		Capt. W. Randall.
S. S. Kangaroo																		Capt. A. Kellett.
Kryolith																		Capt. Alex. Wilson.
S. S. Lamperts																		Capt. G. H. Jones.
Laomene																		Capt. W. P. Hughes.
Ship Lochee ‡																		Capt. J. Raeburn, R.N.R.
S. S. Lusitania																		Capt. C. A. F. Powell.
Majestic																		Capt. W. Ellery.
Barque Markland, ‡																		
N. 19° 40′, W. 60° 00′	30.15	765.8	76.1	24.5	85	NE			5		3						D. clouds	Capt. H. W. Dyke.
Barque Meriola																		Capt. E. W. Turner.
Nairnshire																		Capt. W. Niven.
S. S. Nizam																		Capt. G. W. Brady.
Queen of Cambria																		Capt. M. Parry.
S. S. Richmond																		Capt. W. H. Stuart.
Barque Shun Lee, ‡																		
N. 10° 11′, W. 26° 41′	29.95	760.7	81.5	27.5	91	Calm			0		4				Sm'h		D. clouds	Capt. John M. Gray.
S. S. Seine																		Capt. H. Manning.
S. S. Strathleven ‡																		Capt. C. W. Pearson.
Sch'r. Traveller																		Capt. A. Simpson.
S. S. Wyberton,																		
N. 15° 45′, E. 41° 36′	29.88	758.9	78	25.6	85	SE			4		3						D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire,																		
N. 33° 15′, W. 23° 05′	30.17	756 3	58	14.4	82	NNW			3		7				5	NW	D. clouds	
ALLAN LINE.																		
A. Schumacher & Co.																		
S. S. Hibernian																		Capt. F. Archer.
S. S. Nova Scotian																		Capt. Wm. Richardson.
CUNARD LINE.																		
Ch. G. Francklyn.																		
S. S. Algeria																		Capt. W. Watson.
S. S. Bothnia																		
S. S. Scythia																		Capt. W. H. P. Hains.
WHITE STAR LINE.																		
Ismay, Imrie & Co.																		
S. S. Adriatic,																		
Off Ballycotton, Ireland †	29.80	756.9	46	7.8		S			3		10		S		Sm'h		Misty	Capt. J. W. Jennings.
S. S. Baltic,																		
N. 46° 44′, W. 36° 36′ †	29.84	757.9	45	7.2	68	WNW; NW			5-6		6		NW		High	WNW; NW	Rain & snow	Capt. H. Parsell.
S. S. Britanic																		Capt. H. Perry.
S. S. Celtic,																		
N. 44° 39′, W. 48° 17′ †	30.33	770.4	26	— 3.3		W			6		10		W	0	0	Mod.	WNW	Overcast	Capt. Benj. Gleadell.
S. S. Germanic,																		
New York, N. Y †	30.17	756.3	32	0.0		NW			2		10?		NW	0	0			Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																		Capt. B. L. Irving.
GERMAN MERCHANT-MARINE SERIES.																		
NORTH GERMAN LLOYD—Of Bremen.																		
A. Schumacher & Co.																		
S. S. Hermann																		Capt. H. Baur.
S. S. Köln, ‡																		
N. 47° 15′, W 43° 39′	30.10	764.5	23.9	— 4.5		W			6-8		9		W	Heavy Hails	squalls; snow	H'vy	W	Cloudy
S. S. Leipzig																		Capt. F. Pfeiffer.
S. S. Ohio																		Capt. G. Meyer.
SWEDISH MERCHANT-MARINE SERIES.																		
Barque Adolf Fredholm, ‡																		Capt. Albert Fredholm.
Ship Peru ‡																		Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England. ...†	29.79	756.7	49	9.4	93	SE	.....	.....	2	.....	10	.....	SE	.....	.....	.....	.....	Cloudy..	Capt. J. W. Shackford.
S. S. Indiana, ‡ Philadelphia, Pa.....§†	30.38	771.6	34	1.1	79	SE	.....	.....	3	.....	2	.....	S	o	o	Sm'h	.....	Clear.....	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 46° 24′, W. 43° 23′...*†	30.14	765.5	29	— 1.7	94	WNW	.....	.....	7	.....	8	.....	NNW	Hea Snow	vy squalls	L'ge	NW	Cloudy..... ..	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, Philadelphia, Pa.....†	30.11	764.8	34	1.1	?	W	.....	.....	3	.....	10	.....	W	o	o	.....	.....	Fair.....	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, Guaymas, Mexico.....†	29.98	761.5	58	14.4	64	E	.....	.....	2	.....	0	.....	.....	o	o	.....	.....	Clear.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 37° 47′, E. 170° 47′....†	29.71	754.6	51	10.6	65	NNW	.....	.....	6	.....	8	.....	NW	o	o	High	NW	Cloudy.....	Capt. H. Davison.
S. S. Gaelic, N. 25° 11′, E. 122° 27′..*†	30.33	770.4	62	16.7	66	NNE	.....	.....	4	.....	10	.....	NNE	.....	.....	Mod.	NE	Overcast.....	Capt. W. H. Kidley.
S. S. Oceanic, N. 32° 26′, W. 159° 50′.....	30.14	765.5	60	15.6	88	W	.....	.....	3	.....	2	.....	W	0.03	0.8	Sl't	SW; NNW	Fine.....	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 40° 56′, W. 124° 36′....†	29.85	758.2	50.5	10.3	93	Calm	.....	.....	0	.....	10	.....	N	.....	.....	Sm'h	NNW	Rainy...	Capt. Fred. Bolles
S. S. Oregon, Portland, Oregon.....†	29.89	759.2	29.0	— 1.7	100	N	.....	.....	1	.....	10	.....	WNW	.....	.....	.....	.....	Snowing.....	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal.....†	29.84	757.9	51	10.6	93	S	.....	.....	3	.....	10	.....	SE	.....	.....	.....	.....	Rainy	Capt. J. N. Ingalls.
S. S. Idaho, San Francisco, Cal..... †	29.82	757.4	51	10.6	93	SW	.....	.....	2	.....	8	.....	SW	.....	.....	.....	.....	Light rain...	C. E. Lyons, 1st Officer.
S. S. Orizaba..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Senator, San Pedro, California..†	30.00	762.0	55	12.8	93	N	.....	.....	1	.....	8	.....	NE	.....	.....	Sm'h	.....	Fair.....	Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	29.91	759.7	51	10.6	93	S	.....	.....	3	.....	10	.....	SW	Ra	in	.....	.....	Raining.....	Capt. G. Debney.
S. S. Victoria.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia. N. 21° 45′, W. 157° 00′.....	30.06	763.5	72	22.2	100	E	.....	.....	4	.....	5?	.....	E	.....	.....	Long	E	Clear?.....	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.....†	30.29	769.4	74	23.3	90	N	.....	.....	2	.....	0	.....	.....	o	o	.....	.....	Clear.....	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 15° 14′, W. 95° 18′.....†	30.11	764.8	73	22.8	81	N	.....	.....	3	.....	2	.....	NE	o	o	Sm'll	NW	Clear.....	Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China.....†	30.03	762.7	65	18.3	84	ENE	.....	.....	2	.....	2	.....	SSE	o	o	Sm'h	.....	Fair...	Capt. G. G. Berry.
S. S. City of Sidney, N. 36° 56′, W. 124° 44′.....†	29.92	760.0	54	12.2	74	WSW	.....	.....	5	8c	.....	WNW	.....	o	o	Mod.	NW	Cloudy.....	Capt. H. C. Dearborn.
S. S. City of Tokio.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ San José, Guatemala...†	29.99	761.7	69	20.6	90	NNE	.....	.....	3	.....	0	.....	.....	o	o	Mod.	SE	Clear, ...	Capt. R. R. Searle.
S. S. Dakota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. D. E. Griffiths
S. S. Granada.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Zealandia, Sydney, N. S. W.....	30.12	765.0	76	24.4	73	N	.....	.....	3	.....	2	.....	N	.....	.....	.....	.....	Fine.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland.....‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Sam'l Jackson.
S. S. Nederland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. S. Stokes.
S. S. Rhynland, ‡ N. 50° 13′, W. 21° 53′.....	29.48	748.8	47	8.3	.....	W	.....	.....	6	.....	5	.....	W	o	o	Long	W	Fair.....	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 43° 39′, W. 57° 13′.....	30.70	779.8	.....	.....	.....	ENE	.....	.....	2	.....	2	.....	E	o	o	Sm'h	NW	Fair.....	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Jacksonville, Florida...†	30.24	768.1	60	15.6	.....	NNW	.....	.....	2	.....	10	.....	N	o	o	.....	.....	Threatening	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va	30.23	767.8	40	4.4	91	WNW	4	1.8	.....	.....	Fog	.....	.....	0.22	5.6	.....	.....	Foggy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, Martinique, W. I.....	30.05	763.3	84	28.9	.....	NE	.....	.....	3	.....	2	.....	ENE	Sho	wers	Mod.	NE	Clear.....	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 36° 23′, W. 6° 53′.....†*	30.00	762.0	61	16.1	.....	W	.....	.....	4	.....	2	.....	W	.....	.....	Long	W	Threatening	Capt B. F. Woodbury.
Brigantine George, ‡ N. 33° 10′, W. 72° 25′.....†	30.53	775.4	66	18.9	.....	S	.....	.....	5	.....	2	.....	.....	o	o	Mod.	ENE	Fine.....	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va†	30.29	769.4	41	5.0	82	NW	1	0.4	.....	.....	ion	.....	.....	.....	.....	.....	.....	Drizzling	.....
Ship Jumna.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 24° 50′, W. 32° 48′.....†	30.12	765.0	69	20.6	?	ENE	.....	.....	6	.....	10	.....	ENE	Hea	vy	R'gh	NE	Rainy...	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 17, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.04	763.1	64.8	18.2	73	NE			4		4			0	0	Cloudy	Dr. Ollive.
Nemours			29.82	757.3	56.8	13.8	92	SW			5		9			0.630	16.0	Covered	Raynard.
Algiers			29.90	759.5	58.6	14.8	74	W			2		10			Inap.	Inap.	Covered	Nicolas.
La Calle			29.92	760.0	64.4	18.0	69	S			4		3			0	0	Pretty fair	Fonfrède.
Tunis			29.99	761.8															Jacques.
Sfax			30.06	763.5															Gau.
Saida			29.92	760.0	46.4	8.0	91	W			6		10			0.394	10.0	Covered	Dumas.
Tebessa			29.97	761.1	64.8	18.2	24	SSE			5		7			Inap.	Inap.	Very cloudy	Watrin.
Geriville																			Loncharap.
Laghouat			30.05	763.3	59.4	15.2	52	W			2		3			Inap.	Inap.	Pretty fair.	Herbin.
Biskra																			Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.98	761.5	30.07	763.8	61.0	16.1	75	S	4	1.8			2			0	0	Very fine	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania																			Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.57	751.0	30.14	765.6	38.5	3.6	73	Calm			0		10			0.008	0.2		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.43	747.5	30.24	768.2	27.3	— 2.6	94	W	8.7	3.9			0			0	0		Dr. Wiersbicki.
Eperies	29.29	743.9	30.22	767.7	28.0	— 2.2	82	Calm			0		2cs			0	0		Julius Mikolik.
Gratz ‡	28.85	732.7	30.15	765.9	35.6	2.0	82	SW			2		0			0	0		Andreas Rospini.
Hermannstadt	28.71	729.2	30.24	768.0	26.4	— 3.1	96	SE			2		3			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.69	728.8	30.10	764.6	30.6	— 0.8	88	Calm			0		4			0	0		The Staff.
Lemberg	29.21	741.8	30.25	768.3	30.2	— 1.0	74	NE			1		10			0.028	0.7		Dr. T. Stanecki.
Pola	30.00	762.1	30.12	765.0	47.1	8.4	78	Calm			0		10			0.059	1.50		I. R. HydrographicOffice
Szathmar	29.76	755.8	30.21	767.4	28.9	— 1.7	84	E			2		4			0	0		Beicht Petér, S. J.
Szegedin																			Karl Stancel.
Trieste	30.06	763.4	30.16	766.0	44.1	6.7	83	Calm			0		10			0	0	Cloudy	P. Busin.
Vienna	29.45	748.0	30.21	767.3	30.0	— 1.1	86	SE			2		10			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory
Furnes	29.74	755 5	29.95	760.7	48.7	9.3	74	Calm			0	8		E		0	0		M. E. de Cae.
Maeseyck	29.89	759 2	29.91	759.8	47.8	8.8	77	E			1		5			0	0	Foggy	M. Pierrot.
	29.52	757.5	29.95	760.7	43.9	6.6	80	E			1		10			0	0	Foggy	

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 18, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.87	758.7	29.97	761.2	39.5	4.2	94	S	16	7.2			10					Drizzling	W. Boswell.
Armagh, Observatory	29.62	752.3	29.87	758.7	45.2	7.3	84	SSE	14	6.3			10					Overcast	S. Call.
Bidston, Liverpool Obs'y			29.92	760.0	43.8	6.6	81	SE	19	8.5			2					Blue sky	John Hartnup.
Bolton, Sharples	29.39	746.5	29.94	760.5	39.9	4.4	92	SE					10					Overcast	Thomas Mackereth.
Bradford, Yorkshire	29.53	750.0	29.92	760.0	41.2	5.1	89	SE			1		10			0	0	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.97	761.2	30.00	762.0	81	27.2	70				3		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			29.94	760.5	45.4	7.4	97	NE			0.2		10					Foggy	John McLaren.
Chatham, School M. E.	29.82	757.4	29.86	758.4	39.1	3.9	93	Calm			0		10					Foggy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.65	753.1	29.88	758.9	48.2	9.0	89	SSE			3		10					Overcast	The Staff.
Fort Napier, Natal	27.28	692.9	29.50	749.3	78.2	25.7	96	NE			0		3					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	86	30.0	88	W			1		5					D. clouds	C. E. Keane.
Galway, Queen's College			29.71	754.6				S			2		10					Overcast	J. O'Donaghadue.
Gibraltar, Mediterranean	29.97	761.2	30.03	762.7	60.9	16.1	90	WNW			2		0					Blue sky	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.70	754.4	29.90	759.4	43.1	6.2	85	SSW			3		10					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.75	755.9	29.94	760.5	37.3	2.9	100	NE			1		10					Foggy	The Staff.
Guernsey	29.66	753 4	29.88	758.9	47	8.3	92	ESE			1		10					Foggy	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.91	759.7	29.95	760.7	37.8	3.2	92	ENE		.4	1.8		10					Foggy	The Met'g'l Office.
Leicester, Museum	29.67	753.6	29.92	760.0	47.2	8.4	75	S			1		0					Blue sky	J. E. Carryer.
Malta, Mediterranean	29.89	759 2	29.97	761.2	61	16.1	82	SE			3		8					Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas	30.20	767.1	30.24	768.1	73.0	22.8	81	E			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.42	747.3	29.95	760.7	46.6	8.1	71	ENE			1		2					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	29.70	754.4	29.95	761.0	40.2	4.6	88	E			1		10					Overcast	The Staff.
Plymouth	29.80	756.9	29.88	758.9	44.8	7.1	96	SE			2		10					Drizzling	John Merrifield.
Sandwick Manse, Orkneys			29.87	758.7	40	4.4	99	S	20	8.9			10					Misty	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.11	764.8	30.17	766.3	39.6	4.2	69	N			1		8			Bla	nk	D. clouds	Serg't W. H. Lyne.
Sheffield	29.70	754.4	29.98	761.5	43.1	6.2	77	ESE			1		6			0	0	D. clouds	W. F. Cooper.
Silloth Rectory	29.88	758.9	29.91	759.7	45.8	7.7	81	E			.2		10			0	0	Overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.95	760.7	40.1	4.5	88	ESE	8	3.6			10					Misty	Rev. S. J. Perry.
Strathfield Turgiss	29.71	754.6	29.94	760.5	38.8	3.8	96	S			1		10					Foggy	Rev. C. H. Griffith, F. M. S.
Truro, Royal Institution	29.81	757.2	29.87	758.7	50	10.0	86	SW			4		10					Raining	W. Newcombe.
Valencia, Observatory	29.73	755.1	29.75	755.6	47.7	8.7	91	SSE	24	10.7			10			Bla	nk	Misty	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.77	756.1	29.82	757.4	21	— 6.1	100	NW	10	4.5			10n			0.526	13.36	Light snow	H. J. Cundall, C. E.
Chatham, N. B.*	29.81	757.2	29.88	758.9	15.3	— 9.3	84	NW	4	1.8		10ck	0	NW		0.18	4.6	Fair	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	29.94	760.5	29.96	761.0	19	— 7.2	94	SW	2	0.9			10n			0.12	3.0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.35	745.5	30.33	770.4	—24	—31.1	100	SW	4	1.8			Hz			0	0	Hazy	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.74	755.4	29.88	758.9	26	— 3.3	89	NW	14	6.3			10ks		NW	0.550	13.97	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.98	761.5	30.34	770.6	17	— 8.3	95	SW	7	3.1			0			0.02	0.5	Clear	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	30.02	762.5	30.23	767.8	18	— 7.8	79	W	16	7.2		8ck	2s	NW		0.11	2.8	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	29.59	751.6	30.35	770.9	15	— 9.4	82	SW	2	0.9			10n		W	Inap.	Inap.	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.71	754.6	30.46	773.7	16	— 8.9	81	SW	11	4.9		10k	0	SW		0	0	Cloudy	H. Morgan.
Port Stanley, Ontario	29.75	755.6	30.46	773.7	14	—10.0	82	W	4	1.8			10n		N	0.12	3.0	Cloudy	M. Payne.
Quebec, Quebec*	29.76	755.9	30.11	764.8	13	—10.6	81	W			5	0	5s		W	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.76	755.9	30.26	768.6	16	— 8.9	83	W	5	2.2			8s		W	0	0	Cloudy	K. Stewart.
Saugeen, Ontario*	29.61	752.1	30.38	771.6	20	— 6.7	97	SW	12	5.4			10ks			0.01	0.3	Cloudy	W. H. McIntyre.
St. Andrews	29.92	760.0	29.97	761.2	19	— 7.2	80	NW	4	1.8		0	0			0.55	14.0	Clear	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.54	750.3	29.59	751.6	24	— 4.4	81	NW	18	8.0		0	8s		NW	0.52	13.2	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	30.01	752.2	30.43	772.9	22	— 5.6	85	W	3	1.3			10s		W	0	0	Cloudy	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.94	760.5	30.01	762.2	28	— 2.2	80	NW	15	6.7		5k	0	NW		0.46	11.7	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	30.16	766.1	30.41	772.4	31	— 0.6	100	SE	3	1.3			10n					Stormy	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape St. Francis Lt. House	29.79	756.7			67.0	19.4	80	W	20.3	9.1			2k			0	0	Fine	John Duthie.
Cape Town, C. G. H. Obs'y	29.96	761.0	29.99	761.7	77.8	25.4	50	SSW	3.3	1.5			10n			0.06	1.5	Raining	The Staff, for D. Gill.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.21	767.3	30.23	767.9	34.2	1.2	74	ESE	5.8	2.6			7			0	0	Very cloudy	M. Marc Dechevrens, S. J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.24	666.5	29.96	761.0	61.2	16.2	84	SE			2					0	0	Misty	Federico Maison.

DANISH SERIES.

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

Copenhagen	30.24	768.2	30.29	769.4	33.3	0.7	80	SE	18	8			10						Oversergent Fischer.
Faröe	30.17	766.4	30.19	766.9	29.7	—1.3	88	ESE			6		10						Overloerer Lauridsen.
Godthaab, Greenland	29.17	740.9	29.21	742.0	7.5	—13.6	75	W			6		9						S. Kleinschmidt.
Stykkisholm, Iceland	29.18	741.2	29.22	742.3	21.6	—5.8	95	E			4		8						A. O. Thorlacius.
Thorshavn,	29.69	754.2	29.73	755.1	46.4	8.0	82	S	13	6			10						Overloerer Bergh.
Vestervig	30.16	766.1	30.26	768.5	28.9	—1.7		E			4		10						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.30	744.1	29.95	760.8	53.6	12	76	SSE			1	nk		SE	0.091	2.3			M. Labroue, Director.
Alençon	29.44	747.8	29.99	761.8	45.0	7.2	97	S			1	10		S	0	0	Covered		M. Nicot, Director.
Arras, Engineer School	29.68	753.8	29.94	760.4	49.1	9.5	85	SSW				k							M. Klein, Commandant.
Avignon, Normal School	29.92	760.0	30.28	769.0	54.3	12.4	81	E			1	8		SSE	0.362	9.2	Rainy		M. Giraud, Director.
Bar-sur-Seine	29.41	747.1	29.97	761.3	52.7	11.5	61	SSE			1	5			0	0	Cloudy		M. Saillard, Director.
Beauvais, Normal School	29.67	753.7	29.94	760.5	49.3	9.6	79	SSE			1	2		S	0	0	Slightly cl'dy		M. Frère Eugene Marie.
Besançon, Normal School	29.14	740.2	30.05	763.3	50.0	10	72	SSW			1	km			0.12	3.			M. Gobin, Director.
Bordeaux, Observatory	29.67	753.5	29.93	760.2	49.5	9.7	86	SSE			1	8		SW	0	0	Very cloudy		M. Rayet, Director.
Bourges, Normal School	29.36	745.8	29.92	759.9	51.4	10.8	65	SSE			1	c		SSE	0.047	1.2			M. Postel, Director.
Brest, Naval Observatory	29.65	753.0	29.89	759.1	50.4	10.2	95	SSE			1	10		S			Raining		M. de Rermaree, Dir.
Caen, Normal School	29.72	755.0	29.80	757.0	51.1	10.6	100	S			1	10			0.08	2.	Covered		M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.67	753.6	29.99	761.8	53.6	12.0	65	Calm			0	5			0	0	Cloudy		M. Jadot, Director.
Charleville, Normal School	29.45	747.9	29.98	761.6	47.8	8.8	63	SE			1	2			0	0	¼ covered		M. Grimard.
Clermont-Ferrand Obs'y	28.58	725.9	29.93	760.3	54.5	12.5	52	SE			1	5			0.008	0.2	½ covered		M. Alluard, Director.
Cluny, Normal School	29.13	740.0	29.99	761.7	54.7	12.6	80	SE			4	1		SE	0	0			M. de Villemontée, Dir.
Commercy, Normal School	29.13	739.9	30.02	762.5	45.8	7.5	80	SE			1	km		SE	SE	0	0		Dr. Coulet, Director.
Gap, Normal School	27.55	699.8	30.15	765.8	42.8	6	85	S			1	8			0	0	¾ covered		M. Jeangirard, Director.
Grénsque, du. Rhone	28.91	734.3	30.05	763.3	50.5	10.3	84	E			1	10		SE	0.185	4.7	Covered		M. Kina, Director.
Grenoble, Normal School	29.26	743.1	30.04	763.1	45.1	7.3	80	ENE			1	ck			0.055	1.40			M. Ablard, Director.
Guéret, Normal School	28.31	719.1	29.90	759.4	47.8	8.8	65	SE			1	c		NW	0.138	3.5			M. Rivoir, Director.
Lamballe, Normal School	29.68	753.8	29.95	760.7	52.2	11.2	83	SSE			1		Fg	SSE	0.063	1.6	Light fog		M. Ollitrault, Director.
Lescar, Normal School	29.34	745.2	30.00	762.1	58.1	14.5	84	NE			1	0			0	0	Clear		M. Chauvin, Director.
Lorient, Naval Observatory	29.83	757.6	29.93	760.2	46.4	8.0	97	ESE			1	Mist		Calm	SE	0.098	2.5	Misty		Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.95	735.2	29.98	761.5	48.7	9.3	81	E			1	10			SE	0.004	0.1	Covered		M. André, Director.
Mans, Normal School	29.67	753.7	29.98	761.6	47.3	8.5	87	S			3	5			SSW	0.087	2.2	Cloudy		M. Piboen, Director.
Marseille, Observatory	29.71	754.6	29.98	761.5	56.8	13.8	71	E			2	10			SE	0.039	1.00			M. Stephan, Director.
Montlouis l'Instituteur	24.65	625.0	29.88	759.0	36.5	2.5	88	WSW	20.6	9.2		7			NW	0.150	3.8			M. Cave, for Dr. Fines.
Montpellier, Normal School	29.87	758.6	29.98	761.4	51.8	11	93	Calm			0	8			SE	0.08	2.	Very cloudy		M. Galzin, Director.
Nancy, Normal School	29.23	742.4	30.00	762.0	45.0	7.2	80	SW			1	10n			0	0	Foggy		M. Hasse.
Nantes, Observatory	29.82	757.3	29.98	761.4	51.4	10.8	90	E			1	3k		SW	0.035	0.9			M. Larocque, Director.
Nice	29.98	761.5	30.01	762.3	55.0	12.8	81	E			1	10	E	E	0.102	2.6	Light rain		Capt. Boissière, Director.
Perpignan, Observatory	29.81	757.1	29.91	759.8	55.8	13.2	78	SE	9.4	4.2		7	SW	SE	0	0			Dr. Fines.
Pic-du-Midi, Plantade	22.33	567.2			31.6	—0.2						1		SW	0	0	Clear		M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.99	736.3	30.07	763.8	47.5	8.6	78	S			1	10n	S	S	0	0	Covered		M. Tallieu.
Puy de Dôme Obs'y, Summit	25.04	636.1			35.1	1.7	93	SSE			2	5k		S	0.043	1.1	Foggy		M. Alluard, Director.
Rochefort, Naval Obs'y	29.88	758.9	29.91	759.7	50.0	10.0	87	SSE			1	0			0	0	Clear		Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.73	755.2	29.95	760.8	51.8	11	86	E			1	5		S	0.063	1.6	Cloudy		M. Mouillot, Director.
Rodez, Normal School	27.76	705.1	29.91	759.8	49.6	9.8	66	E			2	6kn		S	0	0			M. Richard, Director.
Rouen, Normal School	29.85	758.2	29.94	760.4	47.1	8.4	83	SSE			1	5		SE	0.063	1.6	Foggy		M. Platrier, Director.
Saint Lô, Normal School	29.88	759.0	30.01	763.0	47.5	8.6	97	E			1	2		ESE	0.08	2.	Slightly cl'dy		M. Delaplanche, Dir.
Saint Maur, Observatory	29.80	757.0	29.97	761.2	46.2	7.9	90	S			2	10		SE	0	0			M. Renou, Director.
Toulouse, Observatory	29.19	741.5	29.91	759.8	53.8	12.1	74	SSE			3	8			0	0	Very cloudy		M. Baillaud, Director.
Tours	29.76	755.8	29.95	760.8	49.3	9.6	81	E			1	5		E	0.091	2.3	½ covered		M. de Tastes.
Versailles, Observatory	29.47	748.4	29.96	760.9	45.0	7.2	94	SW			2				0	0			Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

GERMAN SERIES.

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

Bamberg	29.17	740.8	30.03	762.7	40.6	4.8	60	Calm			0	4k	W		0	0			Prof. Dr. Holl.
Berlin	29.98	761.4	30.16	766.0	33.4	0.8	85	NE			1	9			0	0			Prof. Dr. Arndt.
Breslau	29.68	753.9	30.22	767.5	32.2	0.1	71	ESE			3	3			0	0			Royal University Obs'y.
Carlsruhe	29.60	751.8	30.04	763.0	39.6	4.2	71	SW			0	10	SW		0.146	3.7	Raining		Albert Senz.
Cassel	29.39	746.4	30.00	762.0	42.4	5.8	61	S			2	0			0				Dr. H. Möhl.
Frankfort on the Main	29.73	755.1	30.11	764.7	39.6	4.2	61	E			1	3			0	0			Physical Society.
Friedrichshafen	28.88	725.8	30.05	763.3	41.0	5.0	60	SW			2	8	ENE		0	0			Chief Telegrapher Wilhelm.
Hamburg	30.07	763.7	30.14	765.5	33.1	0.6	76	ESE			4	0			0	0			Dr. R. Kleeman.
Kiel	30.15	765.8	30.17	766.2	29.3	—1.5	85	E			2	1			0	0			Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.65	753.2	30.09	764.3	34.7	1.5	76	NE			2	9			0	0			Prof. Dr. Bruhns.
Magdeburg	29.88	758.9	30.11	764.9	31.6	—0.2	87	E			2	10ks					Snowy		Dr. Assmann.
Memel	30.33	770.4	30.38	771.6	32.9	0.5	90	SSE			3	10n							Reinbrecht & Issermann.
Munich	28.18	715.7	30.04	763.0	36.9	2.7	61	N			1	3	NE		0	0			Central Station.
Neufahrwasser	30.34	770.7	30.36	771.1	34.0	1.1	79	NNE			1	8			0	0			A Lothes.
Neustadt, Palatinate	29.47	748.5	30.00	761.9	39.2	4.0	80	SW			2	10			0	0			Dicknether.
Stuttgart	29.04	737.6	29.96	760.9	41.9	5.5	83	N			1	10			0.287	7.3			Prof. Dr. Schoder.
Thorn	30.08	764.0	30.37	768.8	33.3	0.7	87	NE			2	10			0	0			Dr. O. Cunerth.
Weissenburg, Bavaria	28.49	723.7	30.01	762.3	40.5	4.7	61	Calm			0	7	W		0	0			Prof. Kemlein.
Wustrow	30.22	767.6	30.25	768.3	27.9	—2.3	98	E			3	3s			0	0			Profs. Brandes & Reimer.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

GREEK SERIES.

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

Athens	29.78	756.3	30.17	766.4	53.2	11.8	.....	W	.....	.....	1.0	.....	0	.....	.....	.....	.....	Clear.	Schmidt & Wourlisch.

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	29.90	759.4	29.95	760.7	76.9	24.9	72	SW	29.0	13.0	.....	.....	0	.....	.....	0	0	Blue sky	
Deesa	29.43	747.4	29.90	759.4	87.3	30.7	28	W	5.8	2.6	.....	.....	0	.....	.....	0	0	Misty	
Bombay	29.90	759.3	29.93	760.3	81.2	27.3	68	NW	15.0	6.7	.....	.....	0	.....	.....	0	0	Blue sky	
Poona, Yarrowda	28.05	712.5	29.88	759.0	87.3	30.7	17	SE	11.0	4.9	.....	.....	4	.....	ESE	0	0	D. clouds	
Belgaum	27.39	695.7	29.91	759.6	82.2	27.9	25	ESE	2.0	0.9	.....	.....	9	SW	E	0	0	D. clouds	
Lahore	29.15	740.4	29.90	759.3	78.7	25.9	27	W	2.7	1.2	.....	.....	0	.....	.....	0	0	Blue sky	
Roorkee	28.96	735.5	29.86	758.5	76.8	24.9	38	W	2.4	1.1	.....	.....	0	.....	.....	0	0	.....	
Agra	29.33	744.9	29.89	759.2	84.3	29.1	22	W	3.0	1.3	.....	.....	2	.....	W	0	0	.....	
Nagpur	28.86	733.1	29.89	759.2	89.0	31.7	21	Calm	2.7	1.2	.....	.....	8	NW	.....	0	0	D. clouds	
Jubbulpore	28.54	725.0	29.92	759.9	78.2	25.7	37	NW	4.5	2.0	.....	.....	4	.....	.....	0	0	D. clouds	
Lucknow	29.50	749.4	29.88	758.9	81.2	27.3	34	NNE	2.5	1.1	.....	.....	0	.....	.....	0	0	Blue sky	
Allahabad	29.56	750.9	29.88	758.9	79.8	26.6	44	Calm	1.8	0.8	.....	.....	1	.....	.....	0	0	D. clouds	
Patna	29.80	757.0	29.99	761.7	74.2	23.4	60	W	0.6	0.3	.....	.....	0	.....	.....	0	0	Blue sky	
Hazaribagh	27.86	707.7	29.88	759.0	75.6	24.2	32	NNW	9.5	4.2	.....	.....	1	.....	.....	0	0	D. clouds	
Cuttack	29.82	757.4	29.90	759.5	85.7	29.8	39	Calm	0.5	0.2	.....	.....	2	.....	.....	0	0	D. clouds	
Calcutta, Alipore	29.86	758.3	29.90	759.4	78.7	25.9	45	S	4.0	1.8	.....	.....	7	W	.....	0	0	D. clouds	
Goalpara	29.48	748.8	29.90	759.3	69.0	20.6	63	ENE	4.6	2.1	.....	.....	0	.....	.....	0	0	Blue sky	
Chittagong	29.86	758.4	29.95	760.8	74.3	23.5	84	SW	2.9	1.3	.....	.....	4	.....	.....	0	0	Blue sky	
Sibsagar	29.65	753.0	30.00	761.9	62.3	16.8	88	NE	3.1	1.4	.....	.....	8	SW	SW	0.09	2.3	D. clouds	

ITALIAN SERIES.

By authority of the MINISTER OF AGRICULTURE, INDUSTRY AND COMMERCE.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.71	754.7	30.13	765.4	44.6	7.0	62	Calm	0	0	.....	.....	8	.....	.....	0	0	.....	Prof. Giovanni Clodig
Milan	29.60	751.9	30.14	765.5	41.4	5.2	78	SSW	1.8	0.8	.....	.....	10	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	30.05	763.2	30.16	766.1	40.5	4.7	68	N	0.7	0.3	.....	.....	10	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.20	741.7	30.13	765.4	39.6	4.2	79	E	0.7	0.3	.....	.....	10	.....	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.89	759.3	30.09	764.3	43.9	6.6	88	N	6.9	3.1	.....	.....	10	SE	.....	0.268	6.8	.....	Prof. G. M. Garibaldi.
Mondovi	28.16	715.3	30.14	765.6	41.0	5.0	75	N	.....	.....	2	.....	9	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	30.10	764.5	30.15	765.8	42.4	5.8	70	NW	9.8	4.4	.....	.....	10	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.82	757.5	30.08	764.1	50.5	10.3	71	NE	.....	.....	2	.....	10	.....	.....	0	0	.....	Cav. F. Meucci.
Leghorn	29.95	760.6	30.03	762.8	49.5	9.7	83	ENE	11.2	5.0	.....	.....	10	.....	.....	0	0	.....	Prof. Prof. Monte.
Rome	29.91	759.6	30.09	764.2	54.3	12.4	50	NNE	1.8	0.8	.....	.....	10	.....	.....	0	0	.....	Prof. P. S. Ferrari.
Lecce	29.87	758.8	30.13	765.3	51.4	10.8	62	S	3.1	1.4	.....	.....	6	.....	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.23	742.5	30.15	765.7	48.2	9.0	71	NE	0.7	0.3	.....	.....	10	NNE	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.69	754.1	29.89	759.1	61.5	16.4	74	SE	.....	.....	2	.....	9	SE	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.76	756.0	30.02	762.4	59.9	15.5	73	NE	6.9	3.1	.....	.....	2	.....	.....	0	0	.....	Prof. G. Clacciatore.
Syracuse	30.02	762.4	30.06	763.5	57.9	14.4	68	SE	13.7	6.1	.....	.....	10	SSE	.....	0	0	.....	Prof. Vincenzo Guiliano
SUB-SERIES.																			
Naples, S. R	29.54	750.3	30.07	763.7	54.1	12.3	54	N	0	0	.....	.....	10	.....	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.13	562.0	.....	.....	23.5	— 4.7	86	WSW	.....	.....	6	.....	4	.....	.....	0	0	Misty	P. F. Denza.
Valdobbia	22.10	561.3	.....	.....	27.1	— 2.7	85	N	.....	.....	2	.....	10kn	.....	W	0	0	Misty	

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	30.30	769.6	30.31	769.9	29.7	— 1.3	55	NNE	2.6	1.2	.....	.....	0	.....	.....	0	0	Clear	K. Sasaki.
Kioto	30.06	763.5	30.24	768.1	34.0	1.1	67	.....	.....	.....	.....	.....	10S;ks	.....	.....	0	0	Cloudy	.....
Nagasaki, I. M. Obs'y	30.10	764.5	30.32	770.1	31.6	— 0.2	77	Calm	0	0	.....	.....	0	.....	.....	0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.92	759.9	29.99	761.7	33.2	0.7	46	N	7.7	3.4	.....	0	0	.....	.....	0	0	Very clear	The Staff.
Wakayama	30.19	766.8	30.25	768.3	33.2	0.7	66	NW	1.8	0.8	.....	.....	0	.....	.....	0	0	Clear	S. Iwahashi.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.82	757.4	30.00	762.1	81.2	27.3	74	E	18.0	8.0	.....	0	6	.....	E	0	0	Squally	A. N. Figon.

MEXICAN SERIES.

By authority of the SECRETARY OF PUBLIC WORKS.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Leon	24.51	622.4	30.29	769.3	52.9	11.6	84	N	.....	.....	1	7c	0	S	.....	0	0	Hazy	Prof. M. Leal.
Mazatlan	29.80	757.0	30.07	763.7	64.5	18.1	86	N	1.6	0.8	.....	9cs	0	WSW	.....	0	0	Very cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.12	587.2	30.30	769.7	45.5	7.5	77	Calm	0	0	.....	0	0	.....	.....	0	0	Foggy	The Staff.
Pabellon, Aguascalientes	23.97	608.8	30.07	763.8	48.9	9.4	72	Calm	.....	.....	.....	2c	0	SW	.....	0	0	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.44	595.3	30.25	771.4	43.0	6.1	50	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.24	615.7	30.27	768.9	50.0	10.0	60	ESE	0.9	0.4	.....	.....	10	.....	SW	0	0	Covered	G. Barroeta, M. D.
Tlacotalpam	30.13	765.4	30.15	765.7	66.9	19.4	97	NW	0.9	0.4	.....	.....	10	.....	E	0	0	Covered	Prof. M. Cházaro.
Zacatecas	22.59	573.8	30.34	770.5	46.4	8.0	68	Calm	0	0	.....	0	2cs	.....	SSW	0	0	Clear	J. A. Bonilla, M. E.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	29.96	761.0	29.96	761.0	40.1	4.5	.....	E	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Groningen	29.98	761.4	30.03	762.8	33.3	0.7	.....	E	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Helder	30.01	762.2	30.01	762.2	32.4	0.2	.....	E	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	29.96	761.0	29.96	761.0	42.4	5.8	84	ENE	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Utrecht	29.95	760.7	30.00	761.9	42.1	5.6	74	E	.....	.....	1	.....	5	.....	.....	0	0	Cloudy	H. van der Brink.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.15	765.9	30.22	767.5	35.6	2.0	78	Calm	0	0			9			0	0		
Christiania	30.27	768.9	30.43	772.9	27.0	— 2.8	83	E	4	2			10			0	0	Light fog....	
Gjæsvær	30.10	764.4	30.12	765.0	29.1	— 1.6		SSE			4–5		0						
Lodingen	30.16	766.0	30.21	767.2	26.1	— 3.3	71	SE			2		0			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores																			Dr. J. A. Sampaio.
Campo Major	28.97	735.8	29.98	761.6	51.8	11.0	83	WNW	6.7	3.0			3						Dr. A. M. R. dos Santos.
Funchal, Madeira	30.04	763.0	30.13	765.2	64.0	17.8	57	W	4.9	2.2			4			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.67	753.7	30.04	762.9	55.2	12.9	78	SSW	10.5	4.7			8			0.020	0.5		The Staff.
Ponta Delgada, Azores	30.15	765.8	30.22	764.6	52.9	11.6	73	N	17.4	7.8			3	ESE		0.213	5.4	Light rain..	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.00	736.5	30.21	767.3	— 1.5	—18.6	77	NE	18	8			5						Capt. Lasarew.
Archangel	30.54	775.7	30.56	776.2	19.8	— 6.8	92	WNW	9	4			10						Capt. Sseliwerstow.
Astrakhan	30.21	767.2	30.12	765.1	23.0	— 5.0	90	NE	10	7			10cp			Bla	nk		Capt. Wisganow.
Barnaul	29.76	755.8	30.32	770.2	— 6.0	—21.1	63	Calm	0	0			0						Meteorological Obs'y.
Dorpat	30.27	768.9	30.53	775.5	27.3	— 2.6	94	ESE	11	5			10n						Obervatory.
Ekaterinburg	29.22	742.3	30.27	768.9	15.1	— 9.4	40	W	9	4			10						Meteorological Obs'y.
Kasan	30.29	769.4	30.60	777.1	6.3	—14.3	60	WSW	2	1			3						Observatory.
Kertch	30.10	764.4	30.11	764.9	27.3	— 2.6	96	NNE	7	3			10					Heavy cl'ds.	Lagorio.
Kieff	29.65	753.2	30.35	770.8	18.3	— 7.6	75	E	7	3		c	10ks;n					Light snow..	Cand. Fatjanow.
Lugan	30.05	763.3	30.28	769.0	12.9	—10.6	73	ENE	34	15			10			Bla	nk		Meteorological Obs'y.
Moscow	30.02	762.5	30.63	778.0	11.8	—11.2	61	Calm	0	0			0						Meteorological Obs'y.
Nertchinsk	27.87	707.9	30.60	777.3	—29.2	—34.0	79	Calm	0	0			0						Meteorological Obs'y.
Nikolaiev	30.16	766.0	30.23	767.8	24.8	— 4.0	95	ENE	18	8			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.73	755.2	29.82	757.4	5.0	—15.0	82	Calm	0	0			10n						Lieut. Iwanow.
Nukuss	29.76	756.0	30.00	762.1	43.9	6.6	83	NNE	5.6	2.5			9k						Dr. Dobrochotow.
Pekin, China	29.83	757.6	29.97	761.2	26.8	— 2.9	38	Calm	0	0			0						Physical Observatory.
St. Petersburg	30.57	776.4	30.58	776.8	28.6	— 1.9	84	ESE	2	1			10n						Central Physical Obs'y.
Tashkend, Laboratory	28.27	718.0	29.81	757.2	59.9	15.5	51						9						Teich, A. M.
Tiflis	28.38	720.9	29.83	757.7	40.3	4.6	72	N	13	6			10					Light rain...	Physical Observatory.
Warsaw	29.85	758.2	30.30	769.6	32.0	0.0	76	NNE	4	2			10ks						Astronomical Obs'y.
Wilna	29.98	761.6	30.43	772.9	31.8	— 0.1	79	SE	2	1			10					Heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.80	756.8	30.12	765.0	— 8.0	—22.2	75	S	2	1			10						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.95	760.7	42.0	5.6	91	S			2		10s			0	0	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides			29.77	756.1	45	7.2	92	SSE			4		10			0.3	8.	Overcast	J. Youngclause.
North Unst, Shetland Isl'ds			29.96	761.0				S			7		10			Bla	nk		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.82	757.4	29.93	760.1	57.7	14.3	73	E	3.8	1.7			9			0	0	Covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.90	759.4	29.95	760.8	59.7	15.4	65	SE	1.6	0.7		2	0	S		0.063	1.6	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.95	684.4			46.4	8.0	75	N	4.9	2.2		0	7			0	0	Cloudy	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.66	702.6	29.90	759.4	53.4	11.9	65	SE	3.6	1.6		0	3			0.205	5.2	Cloudy	The Staff.
Murcia, Met. Obs'y	29.69	754.2	29.85	758.1	58.8	14.9	64	NW	3.4	1.5		5	5	SE		0.035	0.9	Raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.99	736.4	29.89	759.2	53.2	11.8	80	SW	5.6	2.5			8			0.051	1.3	Almost cov'd	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.15	765.8	30.22	767.5	66.3	19.1	88	Calm	0	0		0	18			0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.97	761.2	30.02	762.5	79.2	26.2	67	ESE	4.4	2.0						0	0	Fair	Federico Faura, S. J
San Fernando, Naval Obs'y	29.95	760.7	30.05	763.3	57.2	14.0	78	WNW	13.8	6.2		0	5		W	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.02	762.5	30.11	764.8	71.2	21.8	92	SW	0	0		2c	3k	E	E	0	0	Clear	Enrique Gadea, Chief Engineer.
Tugnegarao, Philippine Ids	29.96	760.9	30.11	764.6	71.0	21.7	89	W	0.5	0.3			0ks		W	0.01	0.2	Partly cov'd	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.47	773.8	30.50	774.8	23.0	— 5.0	100	S			2		10			0	0		
Umea	30.49	774.4	30.54	775.7	29.5	— 1.4	92	SW			2		10			0	0		
Hernosand	30.47	773.8	30.52	775.1	26.8	— 2.9	94	SW			2		10			0	0		
Stockholm	30.28	769.1	30.46	773.6	32.4	0.2	89	E			2		10			0	0		
Wisby	30.27	768.8	30.33	770.3	34.5	1.4	82	Calm			0		10			0	0		
Sub-Series.																			
Upsala	30.36	771.2	30.45	773.4	30.9	— 0.6	93	N	2.5	1.1			10			0.048	1.21		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.61	726.6	30.07	763.7	42.6	5.9	79	SSW			1		9			0.087	2.2	Covered	The Observatory.
Zurich	28.39	721.0	30.08	763.9	38.8	3.8	67	S			2		6			0	0	Foggy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. +0.5 mm.; Ther. +2°.0 cent.; Hum. +8 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.23	767.8	40.1	4.5	62	N	3	1.5			9		N	0	0		The Observatory.
Valona			30.07	763.8	54.1	12.3		NW			1		2			0	0	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.95	760.8	59	15.0	53	WSW			2		5k		W	0.017	0.43		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Albany, New York	30.28	769.1	30.37	771.4	30	— 1.1	78	W	5	2.2			10s		W	0.04	1.0	Cloudy	
Alpena, Michigan	29.69	754.1	30.41	772.4	10	—12.2	79	SW	8	3.6			8s		W	0.05	1.3	Cloudy	
Atlanta, Georgia	29.24	742.7	30.47	773.9	35	1.7	52	NW	12	5.4		0	Sk	Calm		0	0	Clear	
Atlantic City, New Jersey	30.46	773.7	30.48	774.2	25	— 3.9	74	NW	8	3.6		0	0			0	0	Clear	
Attou Id., Alaska ‡	29.35	745.5			25	— 3.9	87	S	2	0.9		0	0			0.04	1.0	Clear	
Augusta, Georgia	30.31	769.9	30.52	775.2	35	1.7	80	W	1	0.4		0	Sk	Calm		0	0	Clear	
Baltimore, Maryland	30.49	774.4	30.55	776.0	28	— 2.2	77	W	5	2.2		10cs	0	Calm		0	0	Cloudy	
Barnegat, New Jersey	30.42	772.7	30.44	773.2	25	— 3.9	75	NW	19	8.5		0	0			0.03	0.8	Clear	
Benton, Montana	27.23	691.6			—17	—27.2	68	Calm	0	0		0	0			0	0	Clear	
Bismarck, Dakota	28.37	720.6	30.23	767.8	—23	—30.6	100	Calm	0	0		0	0			0	0	Clear	
Boise City, Idaho	27.25	692.1	30.21	767.3	23	— 5.0	93	Calm	0	0			Fg		Calm	0.18	4.6	Dense fog	
Boston, Massachusetts	30.10	764.5	30.26	768.6	24	— 4.4	87	W	8	3.6		5ck	Hz	NW	Calm	0.23	5.8	Fair	
Brackettville, Texas	28.88	733.5	29.95	760.7	46	7.8	100	SE	9	4.0			10n		SE	0.01	0.3	Light rain	
Brownsville, Texas	28.05	712.5	30.10	764.5	54	12.2	100	NE	2	0.9			10s		Calm	0.04	1.0	Cloudy	
Buffalo, New York	29.67	753.6	30.44	773.2	18	— 7.8	84	SW	23	10.3			10s		SW	0.10	2.5	Cloudy	
Burlington, Vermont	29.96	761.0	30.27	768.8	25	— 3.9	75	W	3	1.3			10s		W	Inap.	Inap.	Cloudy	
Cairo, Illinois	30.11	764.8	30.53	775.4	28	— 2.2	66	E	8	3.6			10s		W	0	0	Cloudy	
Campo, California	27.42	696.5	29.99	761.7	43	6.1	92	SW	4	1.8			8n		SW	0.08	2.0	Light rain	
Camp Thomas, Arizona	27.11	688.6			50	10.0	52	NW			1		10ks		Calm	0	0	Cloudy	
Cape Henry, Virginia	30.52	775.2	30.54	775.7	32	0.0	59	N	11	4.9		0	0			0	0	Clear	
Cape May, New Jersey																			
Castroville, Texas	29.30	744.2	30.02	762.5	48	8.9	93	SE	4	1.8			10n		Calm	0.04	1.0	Light rain	
Cedar Keys, Florida	30.34	770.6	30.37	771.4	50	10.0	86	NE	9	4.0		0	0			0	0	Clear	
Champaign, Illinois	29.67	753.6	30.57	776.5	11	—11.7	60	E	4	1.8			10s		W	0	0	Cloudy	
Charleston, S. Carolina	30.40	772.1	30.46	773.7	45	7.2	46	N	8	3.6		0	0			0	0	Clear	
Charlotte, N. Carolina	29.60	751.8	30.48	774.2	33	0.6	51	NE	5	2.2		0	Sk		Calm	0	0	Clear	
Chattanooga, Tennessee	29.68	753.9	30.55	776.0	29	— 1.7	78	Calm	0	0		0	Sk		Calm	0	0	Clear	
Cheyenne, Wyoming	23.85	606.0	29.80	756.9	18	— 7.8	68	NW	1	0.4		0	0			0	0	Clear	
Chicago, Illinois	29.76	755.9	30.54	775.7	10	—12.2	58	SW	5	2.2		2c	0	SW		0	0	Clear	
Chincoteague, Virginia	30.50	774.7	30.52	775.2	27	— 2.8	64	NW	13	5.8		0	0			Inap.	Inap.	Clear	
Cincinnati, Ohio	29.92	760.0	30.63	778.0	29	— 1.7	67	N	3	1.3		1cs	Sk	Calm	Calm	0	0	Dense smoke	
Cleveland, Ohio	29.76	755.9	30.57	776.5	13	—10.6	90	SW	8	3.6		2cs	2s;fg	Calm	W	0.03	0.8	Fair	
Coleman City, Texas	28.24	717.3	29.94	760.5	45	7.2	76	SE	8	3.6			10s		Calm	0	0	Cloudy	
Columbus, Ohio	29.66	753.4	30.59	777.0	17	— 8.3	76	W	3	1.3		2cs	0	Calm		0	0	Clear	
Concho, Texas	28.07	713.0	29.74	755.4	54	12.2	87	S	16	7.2			10s		Calm	0.03	0.8	Cloudy	
Corsicana, Texas	29.74	755.4	30.23	767.8	41	5.0	100	SE	8	3.6			Fg			Inap.	Inap.	Foggy	
Davenport, Iowa	29.81	757.2	30.54	775.7	2	—16.7	72	NE	4	1.8			10s		Calm	0	0	Cloudy	
Dayton, Washington T'y	28.49	723.6	30.33	770.4	9	—12.8	78	E	1	0.4		0	0			0.04	1.0	Clear	
Deadwood, Dakota	25.24	641.1			14	—10.0	82	NE	1	0.4			10s		Calm	0	0	Cloudy	
Decatur, Texas	28.96	735.6	30.18	766.6	37	2.8	100	E	8	3.6			Fg		Calm	0.03	0.8	Dense fog	
Delaware Breakwater, Del.	30.48	774.2	30.50	774.7	27	— 2.8	76	NW	23	10.3		0	0			0	0	Clear	
Denison, Texas	29.38	746.2	30.21	767.3	40	4.4	91	SE	8	3.6			10n		Calm	0.07	1.8	Light rain	
Denver, Colorado	24.65	626.1	29.87	758.7	5	—15.0	75	S	2	0.9		0	0			0	0	Clear	
Des Moines, Iowa	29.50	749.3	30.49	774.4	9	—12.8	78	SW	1	0.4		0	0			0	0	Clear	
Detroit, Michigan	29.76	755.9	30.52	775.2	18	— 7.8	84	SW	9	4.0		0	0			0	0	Clear	
Dodge City, Kansas	27.46	697.5	29.95	760.7	14	—10.0	64	NE	7	3.1			10n		Calm	Inap.	Inap.	Light snow	
Dubuque, Iowa	29.76	755.9	30.58	776.7	— 4	—20.0	82	SW	2	0.9			10s		Calm	0	0	Cloudy	
Duluth, Minnesota	29.64	752.8	30.42	772.7	— 4	—20.0	82	SW	3	1.3		0	0			0	0	Clear	
Eagle Pass, Texas	29.30	744.2	30.05	763.3	48	8.9	93	SE	6	2.7			10n		Calm	0.08	2.0	Light rain	
Eagle Rock, Idaho	25.17	639.3	29.82	757.4	19	— 7.2	85	N	8	3.6			10s		Calm	0.27	6.9	Cloudy	
Eastport, Maine	29.94	760.5	30.02	762.5	21	— 6.1	57	W	12	5.4		5c	0	NW		0.35	8.9	Fair	
Edinburg, Texas																			
El Paso, Texas	26.12	663.4			53	11.7	42	NW	4	1.8		0	8s		Calm	0	0	Cloudy	
Erie, Pennsylvania	29.71	754.6	30.49	774.4	17	— 8.3	83	SW	10	4.5		0	0			0.09	2.3	Clear	
Escanaba, Michigan	29.70	754.4	30.44	773.2	1	—17.2	71	S	6	2.7		0	0			Inap.	Inap.	Clear	
Florence, Arizona	28.46	722.9	30.06	763.5	50	10.0	65	Calm	0	0			10ks		SW	0	0	Threatening	
Fort Apache, New Mexico	24.88	631.9	30.33	770.4	37	2.8	71	SW	1	0.4			10s		Calm	0	0	Cloudy	
Fort Assiniboine, Montana	27.19	690.6			—17	—27.2	37	SW	5	2.2		0	0			0	0	Clear	
Fort Bennett, Dakota	28.63	727.2			0	—17.8	70	NE	1	0.4			10s		Calm	0	0	Cloudy	
Fort Buford, Dakota	28.14	714.7	30.30	769.6	—20	—28.9	64	Calm	0	0		0	0			0	0	Clear	
Fort Custer, Montana	26.85	682.0			—11	—23.9	76	Calm	0	0		0	0			0	0	Clear	
Fort Davis, Texas	25.11	637.8	30.07	763.8	48	8.9	43	SE	8	3.6		0	0			0	0	Clear	
Fort Elliott, Texas	27.28	692.9	29.75	755.6	16	— 8.9	66	E	4	1.8			10s		E	0	0	Cloudy	
Fort Gibson, Indian T'y	29.69	754.1	30.26	768.6	35	1.7	80	SE	6	2.7			10s		Calm	0	0	Cloudy	
Fort Grant, Arizona	25.11	637.8	29.91	759.7	48	8.9	36	N	3	1.3			10s		NW	0	0	Cloudy	
Fort Griffin, Texas	28.71	729.2	29.99	761.7	50	10.0	72	SE	4	1.8			10s		Calm	0	0	Cloudy	
Fort Keogh, Montana	27.56	700.0			—12	—24.4		NE	1	0.4		0	0			0	0	Clear	
Fort McKavett, Texas	27.73	704.3	29.64	752.8	53	11.7	93	SE	8	3.6			10n		Calm	0.01	0.3	Light rain	
Fort Macon, North Carolina	30.46	773.7	30.48	774.2	36	2.2	80	NE	19	8.5		Hz	0	Calm		0	0	Clear	
Fort St. Michaels	29.74	755.4	29.77	756.1	8	—13.3	100	NE	12	5.4			10k		E				
Fort Missoula, Montana	26.76	679.7			4	—15.6	74	Calm	0	0		8k	0	Calm		0	0	Cloudy	
Fort Shaw, Montana	26.35	669.3			— 8	—22.2	100	S	4	1.8		0	0			0	0	Clear	
Fort Sill, Indian Territory	28.88	733.5	30.03	762.7	38	3.3	81	S	14	6.3			10s		Calm	0	0	Cloudy	
Fort Stevenson, Dakota	28.33	719.6			—23	—30.6	100	Calm	0	0		0	0			0	0	Clear	
Fort Verde, Arizona					36	2.2	53	SW			1	5k	0	S		0	0	Fair	
Fredericksburg, Texas	28.33	719.6	29.92	760.0	49	9.4	100	S	9	4.0			Fg			0.05	1.3	Cloudy	
Galveston, Texas	30.15	765.8	30.19	766.8	57	13.9	94	SE	8	3.6			10n		SE	Inap.	Inap.	Light rain	
Grand Haven, Michigan	29.76	755.9	30.47	773.9	21	— 6.1	71	W	6	2.7			10s		W	0.05	1.3	Cloudy	
Hatteras, North Carolina	30.48	774.2	30.50	774.7	36	2.2	71	NE	24	10.7		0	0			0	0	Clear	
Helena, Montana	25.83	656.1			—10	—23.3	100	S	2	0.9		0	0			0	0	Clear	
Henrietta, Texas	29.13	739.9	30.11	764.8	37	2.8	100	SE	6	2.7			10n		Calm	0.02	0.5	Light rain	
Indianapolis, Indiana	29.70	754.4	30.56	776.2	16	— 8.9	66	Calm	0	0		4c	Sk	Calm	Calm	0	0	Fair	
Indianola, Texas	30.10	764.5	30.13	765.3	55	12.8	93	SE	8	3.6			10s		S	Inap.	Inap.	Cloudy	
Jacksboro, Texas	28.95	735.3	30.08	764.0	40	4.4	91	E	9	4.0			10s		Calm	0.04	1.0	Cloudy	
Jacksonville, Florida	30.37	771.4	30.42	772.7	47	8.3	62	N	7	3.1		0	0			0	0	Clear	
Keokuk, Iowa	29.76	755.9	30.49	774.4	7	—13.9	77	E	8	3.6			10s		Calm	0	0	Cloudy	
Key West, Florida	30.22	767.6	30.26	768.6	68	20.0	95	NE	11	4.9		8k	0	W		0	0	Cloudy	
Kittyhawk, North Carolina	30.50	774.7	30.52	775.2	32	0.0	69	N	24	10.7		0	0			Inap.	Inap.	Clear	
Knoxville, Tennessee	29.50	749.3	30.60	777.2	25	— 3.9	69	Calm	0	0		0	0			0	0	Clear	
La Crosse, Wisconsin	29.65	753.1	30.50	774.7	— 3	—19.4	66	S	6	2.7			10s		Calm	0	0	Cloudy	
La Mesilla, New Mexico	26.00	660.4	30.15	765.8	43	6.1	51	Calm	0	0			10s		Calm	0	0	Cloudy	
Laredo, Texas	29.65	753.1	30.00	762.0	48	8.9	93	E	1	0.4			10s		Calm	0.02	0.5	Cloudy	
Leavenworth, Kansas	29.43	747.5	30.35	770.9	17	— 8.3	83	E	4	1.8			10s		Calm	0.03	0.8	Cloudy	
Lewiston, Idaho	29.46	748.3	30.16	766.1	23	— 5.0	72	W	4	1.8			10s		W	Inap.	Inap.	Cloudy	
Little Rock, Arkansas	30.05	763.3	30.39	771.9	35	1.7	90	NE	4	1.8			10s		Calm	0	0	Cloudy	
Los Angeles, California	29.65	753.1	30.02	762.5	46	7.8	92	Calm	0	0		1c	Fg	SW	Calm	0.08	2.0	Fair	
Louisville, Kentucky	29.96	761.0	30.57	776.5	24	— 4.4	61	NE	4	1.8		2c	0	Calm		0	0	Clear	
Lynchburg, Virginia	29.84	757.9	30.58	776.7	31	— 0.6	58	W	5	2.2		0	0			0	0	Clear	
Madison, Wisconsin	29.40	746.7	30.52	775.2	3	—16.1	73	SW	5	2.2			10s		Calm	0	0	Cloudy	
Marquette, Michigan	29.58	751.3	30.38	771.6	5	—15.0	70	W	12	5.4		0	0			Inap.	Inap.	Clear	
Mason, Texas	28.41	721.6	30.18	766.6	48	8.9	85	SE	5	2.2			10s		SE	0	0	Cloudy	

UNITED STATES SERIES.

By authority of the Secretary of War.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
United States Series—Continued.																			
Memphis, Tennessee	30.07	763.8	30.44	773.2	35	1.7	70	E	4	1.8			10s		Calm	0.05	1.3	Cloudy	
Milwaukee, Wisconsin	29.69	754.1	30.52	775.2	5	—15.0	75	W	3	1.3			10s		Calm	0	0	Cloudy	
Mobile, Alabama	30.34	770.6	30.42	772.7	45	7.2	84	NE	4	1.8		0	1s		Calm	0	0	Clear	
Montgomery, Alabama	30.24	768.1	30.50	774.7	39	3.9	81	N	3	1.3		8k	0	NW		0	0	Fair	
Moorhead, Minnesota	29.30	744.2	30.43	772.9	—18	—27.8	67	SW	9	4.0		0	0			0	0	Clear	
Morgantown, W. Virginia	29.51	749.5	30.59	777.0	23	— 5.0	86	Calm	0	0		5cs	Hz	Calm		0.02	0.5	Fair	
Mt. Washington, N. H	23.36	593.3	29.72	754.9	— 5	—20.6	100	NW	72	32.2			Fg		NW	0.81	20.6	Dense fog	
Nashville, Tennessee	29.97	761.2	30.56	776.2	27	— 2.8	76	E	4	1.8		0	Sk		Calm	0	0	Clear	
New Haven, Connecticut	30.23	767.8	30.35	770.9	22	— 5.6	72	Calm	0	0		0	0			0.05	1.3	Clear	
New London, Connecticut	30.29	769.4	30.35	770.9	26	— 3.3	75	W	9	4.0		0	0			0.10	2.5	Clear	
New Orleans, Louisiana	30.30	769.6	30.36	771.1	51	10.6	79	E	9	4.0		1c	Sk	NW		0	0	Clear	
Newport, Rhode Island	30.23	767.8	30.29	769.4	29	— 1.7	78	W	18	8.0		0	Hz			0.37	9.4	Clear	
New River, N. Carolina					35	1.7	71	N			4	2cs	0	Calm				Clear	
New Shoreham, Rhode I'd	30.29	769.4	30.32	770.1	30	— 1.1	68	N	22	9.8		0	0			0	0	Clear	
New York, New York	30.23	767.8	30.43	772.9	27	— 2.8	76	W	7	3.1		0	Fg		Calm	0	0	Clear	
Norfolk, Virginia	30.49	774.4	30.56	776.2	31	— 0.6	69	N	12	5.4		0	0			0	0	Clear	
North Platte, Nebraska	27.18	690.4	30.01	762.2	5	—15.0	75	N	1	0.4		10c	0	Calm		0	0	Cloudy	
Olympia, Washington T'y	30.14	765.5	30.19	766.8	28.0	— 3.3	94	SE	2	0.9		1cs	0	Calm		0	0	Clear	
Omaha, Nebraska	29.18	741.2	30.42	772.7	3	—16.1	87	N	6	2.7			10s	Calm		0	0	Cloudy	
Oswego, New York	30.02	762.5	30.36	771.1	26	— 3.3	75	NW	10	4.5			10s		NW	0.52	13.2	Cloudy	
Pensacola, Florida	30.41	772.4	30.44	773.2	49	9.4	64	NE	6	2.7		0	Hz		Calm	0	0	Clear	
Philadelphia, Pa	30.42	772.4	30.48	774.2	28	— 2.2	77	NW	4	1.8		0	Fg		Calm	0	0	Clear	
Phœnix, Arizona	28.83	732.3	30.69	779.5	42	5.6	66	E	3	1.3		0	5ks		W	0	0	Fair	
Pike's Peak, Colorado	17.41	442.2	29.62	752.3	3	—16.1	73	W	14	6.3		0	5s		W	0	0	Fair	
Pilot Point, Texas	29.40	746.7	30.29	769.4	33	0.6	100	SE	6	2.7			10n		Calm	0.09	2.3	Light rain	
Ploche, Nevada	23.88	606.5	29.65	753.1	29	— 1.7	56	NW	3	1.3		10k	0	S		Inap.	Inap.	Cloudy	
Pittsburg, Pennsylvania	29.68	753.9	30.58	776.7	20	— 6.7	70	SW	8	3.6		0	0			0.02	0.5	Clear	
Port Huron, Michigan	29.76	755.9	30.50	774.7	12	—11.1	61	SW	8	3.6		8cs	0	Calm		0.10	2.5	Fair	
Portland, Maine	30.10	764.5	30.16	766.1	27	— 2.8	76	W	7	3.1		0	2s		Calm	0.50	12.7	Clear	
Portland, Oregon	30.16	766.1	30.24	768.1	29	— 1.7	94	SE	2	0.9		10cs	0	NW		Inap	Inap.	Cloudy	
Portsmouth, N. Carolina					34	1.1	61	NE	28	12.5		0	0			0	0	Clear	
Prescott, Arizona	24.61	625.1	29.97	761.2	26	— 3.3	63	S	1	0.4			10s		S	0	0	Cloudy	
Punta Rassa, Florida	30.26	768.6	30.28	769.1	61	16.1	77	NE	15	6.7		0	Hz	Calm	Calm	0	0	Clear	
Red Bluff, California	29.71	754.6	30.06	763.5	43.0	6.1	92	NW	3	1.3		0	0			0.14	3.6	Clear	
Rio Grande City, Texas	29.91	759.7	30.13	765.3	56	13.3	63	E	1	0.4			10s		Calm	Inap.	Inap.	Cloudy	
Rochester, New York	29.74	755.4	30.41	772.4	23	— 5.0	86	W	10	4.5			10n		Calm	0.32	8.1	Light snow	
Roseburg, Oregon	29.60	751.8	30.20	767.1	35	1.7	90	Calm	0	0			10s		Calm	0.07	1.8	Cloudy	
Sacramento, California	29.99	761.7	30.07	763.8	47	8.3	100	NW	3	1.3			Fg			0.53	13.5	Dense fog	
St. Louis, Missouri	29.85	758.2	30.48	774.2	20	— 6.7	70	E	8	3.6		10cs	0	Calm		0	0	Cloudy	
St. Paul, Minnesota	29.49	749.0	30.45	773.4	— 8	—22.2	79	Calm	0	0		5cs	0	NW		0	0	Fair	
Salt Lake City, Utah	25.58	649.7	29.91	759.7	32	0.0	79	Calm	0	0			Fg		Calm	0.02	0.5	Light fog	
San Antonio, Texas	29.43	747.5	30.15	765.8	47	8.3	92	NE	2	0.9			Fg		Calm	0.03	0.8	Dense fog	
San Diego, California	30.00	762.0	30.07	763.8	51	10.6	86	Calm	0	0			10n		Calm	0.12	3.0	Heavy rain	
Sandusky, Ohio	29.80	756.9	30.55	776.0	17	— 8.3	83	SW	6	2.7		0	0			0	0	Clear	
Sandy Hook, New Jersey	30.38	771.6	30.42	772.7	27	— 2.8	64	W	15	6.7		0	0			Inap.	Inap.	Clear	
San Francisco, California	30.00	762.0	30.07	763.8	50	10.0	89	NW	2	0.9		2ck	0	N		0.60	15.2	Clear	
Santa Fé, New Mexico	23.10	586.7	29.64	752.8	35	1.7	61	N	5	2.2			Hz		Calm	0	0	Dense haze	
Savannah, Georgia	30.34	770.6	30.44	773.2	43	6.1	59	NW	5	2.2		0	Fg		Calm	0	0	Clear	
Shreveport, Louisiana	30.05	763.3	30.30	769.6	42	5.6	91	E	5	2.2			10s		Calm	0.02	0.05	Cloudy	
Silver City, New Mexico	24.14	613.1	30.44	773.2	34	1.1	61	Calm	0	0			10s		Calm	0	0	Cloudy	
Smithville, North Carolina	30.42	772.7	30.46	773.7	39	3.9	46	N	11	4.9		0	0			0	0	Clear	
Socorro, New Mexico	25.32	643.1	29.39	746.5	38	3.3	72	S	4	1.8			1cs		Calm	0	0	Cloudy	
Springfield, Illinois	29.79	756.7	30.55	776.0	13	—10.6	72	E	4	1.8			10s			0	0	Cloudy	
Springfield, Massachusetts	30.18	766.6	30.32	770.1	28	— 2.2	66	NW	8	3.6		0	0			0.02	0.5	Clear	
Stockton, Texas	26.85	682.0	29.85	758.2	43	6.1	83	SE	16	7.2			10s		SE	0	0	Cloudy	
St. Vincent, Minnesota	29.36	745.7	30.32	770.1	—25	—31 7	100	S	4	1.8		0	0			0	0	Clear	
Thatcher's Island, Mass	30.18	766.6	30.24	768.1	23	— 5.0	73	W	8	3.6		0	0			0.15	3.8	Clear	
Toledo, Ohio	29.77	756.1	30.53	775.4	17	— 8.3	84	SW	6	2.7		0	Fg		Inap.	Inap.	Clear		
Tucson, Arizona	27.45	697.2	30.00	762.0	52	11.1	54	SW	1	0.4			10ks		W	0	0	Cloudy	
Umatilla, Oregon	30.04	763.0	30.00	777.2	3	—16.1	100	SE	4	1.8		0	Fg		Calm	0.01	0.3	Clear	
Uvalde, Texas	29.11	739.4	29.95	760.7	48	8.9	85	SE	3	1.3			10n		Calm	0.09	2.3	Light rain	
Vicksburg, Mississippi	30.10	764.5	30.38	771.6	48	8.9	56	E	12	5.4			10s		S	0	0	Cloudy	
Visalia, California	29.63	752.6	30.00	762.0	49.5	9.7	89	E	3	1.3			10ks		E	0.53	13.5	Cloudy	
Washington, D. C	30.43	772.9	30.55	776.0	24	— 4.4	81	NW	5	2.2		2c	Sk	Calm	Calm	0	0	Clear	
Wickenburg, Arizona					33	0.6	79	W			1	0	0			0	0	Clear	
Wilmington, N. Carolina	30.43	772.9	30.49	774.4	39	3.9	46	NE	4	1.8		0	0			0	0	Clear	
Winnemucca, Nevada	25.58	649.7	29.94	760.5	32	0.0	89	SE	4	1.8			10ks		N	Inap.	Inap.	Cloudy	
Wood's Holl, Mass	30.22	767.6	30.26	768.6	28	— 2.2	77	NW	29	13.0		0	Hz			0.47	11.9	Clear	
Yankton, Dakota	29.08	738.6	30.58	776.7	— 3	—19.4	66	E	4	1.8			10n		Calm	Inap.	Inap.	Light snow	
Yuma, Arizona	29.80	756.9	29.95	760.7	49	9.4	64	SW	2	0.9		2ck	0	W		0	0	Fair	
Sub-Series.																			
Bogota, U. S. Columbia	22.09	561.1			49.0	9.4	72	Calm	0	0		0	0			0	0	Clear	Thomas Herran.
Buff Bay Town, Jam ica	29.89	759.2	30.20	767.1	69	20.6	90	SE				2k	2k						
Havana, Cuba, W. I	30.17	766.3	30.22	767.6	72	22.2	71	Calm	0	0		0	2s		NE	0	0	Fair	Charles Hasselbrink.
Jakobshavn, Greenland	29.11	739.5	29.17	741.0	— 5.3	—20.7		Calm			0		4			0	0		K. V. Möller.
Kingston, Jamaica, W. I	30.09	764.3	30.10	764.5	66.8	19.3	85	Calm	0	0		0	2s		E	0	0		Robert Johnstone.
Navassa, W. I	30.00	762.0	30.05	763.0	76.5	24.7	73	NE	8.5	3.8		5k	10s	E	NE	0	0	Cloudy	F. M. Everett.
Paramaribo, S. A	30.00	762.0	30.00	762.6	80	26.7	82	NE			2	0	3c			0.010	0.25	Clear	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.44	747.8	30.00	762.0	80	26.7	80	Calm			0	5c	0	Calm		0	0	Hazy	Francesco J. Cisneros
Rivas, Nicaragua					80	26.7		E			3	0	9ks		E	0.08	2.		Earl Flint.
Santiago de Cuba, W. I	30.13	765.3	30.15	765.8	75	23.9	72	NNE	7.2	3.2		0	1s		NE	0	0	Clear	Robert Mason.
St. Thomas, W. I																			G. O. Gellich.
Upernavik, Greenland	29.12	739.7	29.19	741.3	— 5.8	—21.		Calm			0		4			0	0		K. Elberg.
York Factory, B. A	29.95	760.7	30.00	762.0	—20.0	—32.2		NW	12	5.4		5k	4s	N	NW	0	0	Threatening	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.02	762.5	62	16.7	77	ESE			3-4		5	SE						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 26° 51′, E. 50° 46′	29.89	759.2	70	21.1	75	SE			3-4		3	E				3	SE	D. clouds	Comm. G. Haud.
H. M. S. Bittern, Constantinople, Turkey			40	4.4		Calm			0		6	S						D. clouds	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.75	755.6	76.5	24.7	70	SE			1-2		0					4	SSE	Blue sky	Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser, N. 37° 06′, E. 15° 26′	30.07	763.8	58.5	14.7		SSE			4		9	S				4	S	D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa, Shanghai, China	30.14	765.5	43	6.1	75	SE			1		2							D. clouds	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.20	767.1	66	18.9	84	SSW			1-2		5	S						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 34′ E. 81° 14′	29.91	759.7	84	28.9		NE			1		5	NE				2	NNE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 1° 28′, E. 104° 36′	29.82	757.4	82	27.8		N			3		1	N				3	NE	D. clouds	Capt. W. H. Maxwell.
H. M. S. Emerald																			Comm. C. Johnstone.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.89	759.2	80	26.7	74	NW			2-3		4							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Bridgetown, Barbadoes.	30.03	762.7	78	25.6		NE			2-3		5	NE				Sm'h		D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, N. 26° 50′, W. 64° 39′	30.27	768.8	73	22.8	81	E			2		1					2	E	D. clouds	Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Panama, Panama	29.94	760.5	77	25.0	85	NW			1		2							Misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.68	753.9				SW			8									Showery	Capt. L. F. Jones.
H. M. S. Griffon																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris, N. 36° 05′, E. 16° 50′	30.11	764.8	58	14.4	88	SSE			2		9	S				1	SSE	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 18° 35′, E. 114° 18′	30.05	763.3	73	22.8	?	E			3		3	E				3	E	D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Africa	29.88	758.9	83	28.3	79	SE			1		4	E		Blank				D. clouds	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 47′, E. 122° 10′	30.26	768.6	43.5	6.4	68	SE			3		10					2	NE;SE	Misty	Capt. R. H. Napier.
H. M. S. Malabar, N. 49° 00′, W. 5° 39′	29.86	758.4	51	10.6	72	ENE			2		4	NE				4	NE	D. clouds	Capt. J. F. G. Grant.
H. M. S. Minotaur, N. 42° 13′, W. 9° 50′	29.86	758.4	62	16.7	80	S			2		4	SW				3	NW	D. clouds	Capt. H. Rawson.
H. M. S. Modeste, N. 1° 17′, E. 103° 51′	29.89	759.2	79	26.1	86	Var.			2		3					2	Var.	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Ayas Bay, Turkey, Asia.	29.87	758.7	55	12.8	100	NNE			4		3	NNE				Sm'h		D. clouds	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 16° 53′, W. 73° 20′	30.06	763.5	77	25.0	82	E			5		3	E				2	E	D. clouds	Capt. E. Drummond.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, N. 1° 31′, W. 4° 48′	29.90	759.4	83	28.3	87	SSW			2		2					2	S	D. clouds	Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.89	759.2	83	28.3	91	S			1		5							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	30.02	762.5	58	14.4	82	SW			3		6							D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.53	750.0	80	26.7	74	ESE			1		0					1	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	29.98	761.5	69	20.6	90	N			1		10					1	SW	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos, N. 9° 31′, W. 58° 55′	30.03	762.7	79	26.1	80	NNE			3		3					2	NNE	D. clouds	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, S. 37° 03′, E. 15° 18′	30.10	764.5	59.5	15.3	94	SE			4		9					2		D. clouds	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo Bay, Chili, S.A	30.02	762.5	61.5	16.4	94	NW			1		10							Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 19° 12′, E. 39° 12′	29.96	761.0	78	25.6		NNE			4		2					2	NNE	D. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I	30.10	764.5	72	22.2		Calm			0		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Busrah, Palestine	29.92	760.0	66.5	19.2	46	NNW			3		3	N						D. clouds	Capt. F. Negham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
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PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Bissao Bay, Guinea, Africa.	29.98	761.6	79.9	26.6	82	N			1		0					1		Blue sky	S. C. da Silva Costa, Comd't.
Sado. St. Paul de Loando, Africa.	29.88	759.0	86.2	30.1	78	NW			1		4							D° clouds	G. A. de Brito Capello, Comd t.
Tamega																			
SWEDISH NAVAL SERIES.																			
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H. M. Frigate Vanadis. ‡																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

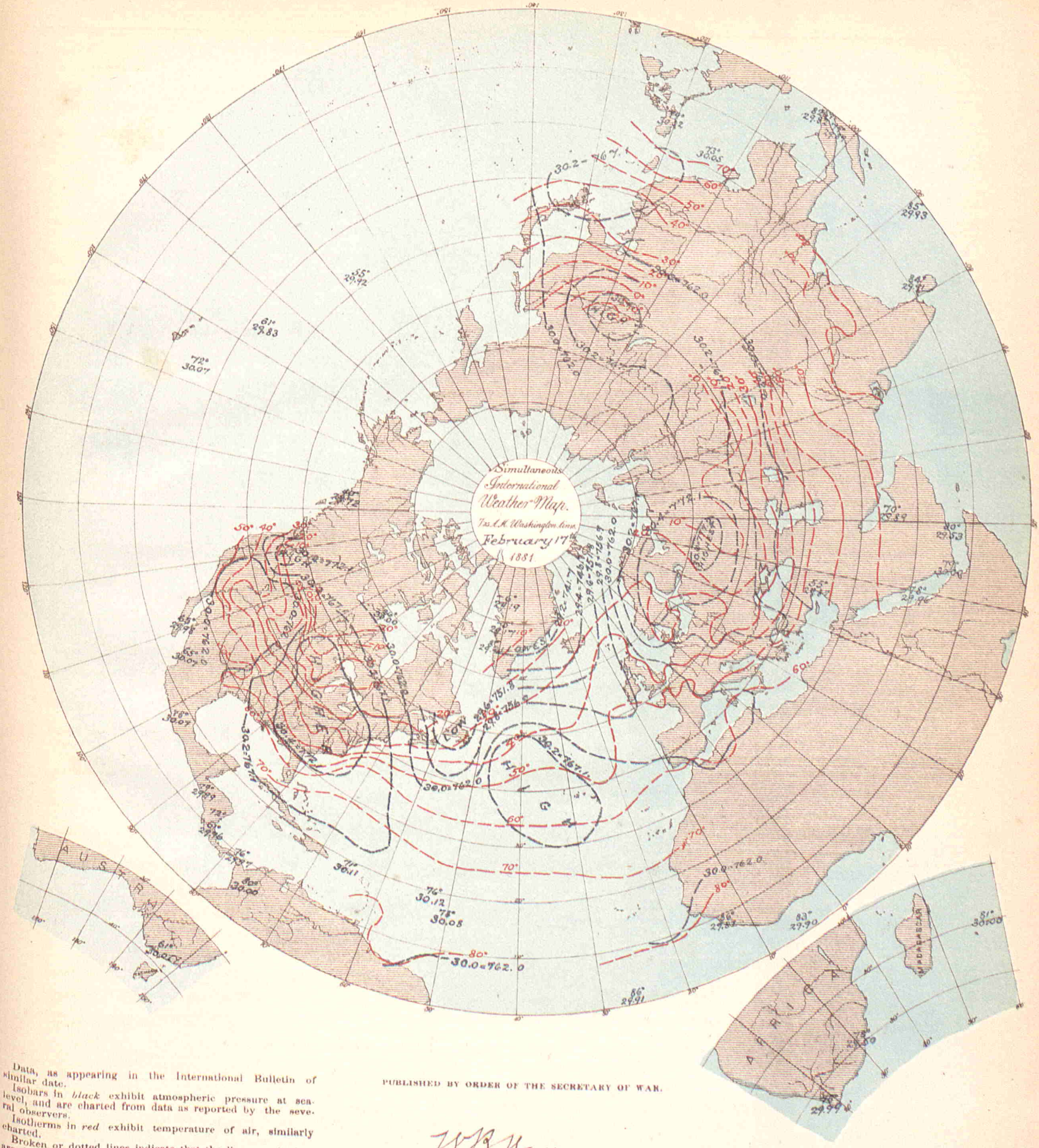
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.33	770.4	56	13.3	87	NE	2	0.9			0			0	0			Clear	
N. Yard, Portsmouth, N. H.	30.18	766.6	24	— 4.4	87	NW	8	3.6			0			0	0			Clear	
Naval Hospital, Yokohama, Japan	29.78	755.4	35.5	1.9	54	NNW			3		0			0.01	0.3			Clear	
Adams, Panama, Panama	29.96	761.0	78	25.6	91	NW			2		5		NW			Sm'h		Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.16	766.1	47	8.3	85	Calm			0		0			0.01	0.3			Clear	
Alert, Hong-Kong, China *.	29.98	761.5	65	18.3	84	ESE			3		10		SE			Sm'h		Cloudy	
Alliance, New Orleans, La	30.36	771.1	53	11.7	86	E			1		0			0	0	Sm'h		Clear	
Ashuelot, Tientsin, China	29.97	761.2	34	1.1	100	ENE			1		0							Clear	
Colorado, New York, N. Y.	30.39	771.9	27	— 2.8	100	WNW	9	4.0			0			0	0			Misty	
Constitution, N. Yard, League I'd., Pa	30.43	772 9	28	— 2.2		NW	2	0.9			0							Clear	
Franklin, Norfolk, Va	30.47	773.9	32	0.0	59	NE	12	5.4			2			0	0			Misty	
Galena, Naples, Italy	30.03	762.7	55	12.8	68	SE			3		8		SE			Sm'h		Cloudy	
Independence, N. Yard, Mare I'd, Cal.	30.02	762.5	45	7.2	100	E	12	5.4			0			0.15	3.8			Clear	
Jamestown, Sitka, Alaska *.	29.72	754.9	40	4.4	100	E			5		10			0.55	14.0			Rainy	
Kearsarge, N. 29° 03′, W. 88° 53′	30.33	770.4	64	17.8	83	ENE			2		2		Calm			Sm'h		Fair	
Marion, Sandy P't, Terra del Fuego	30.08	764.0	50	10.0	72	W			3		8		W			Sm'h		Fair	
Michigan, Erie, Pennsylvania	29.46	748.3	17	— 8.3		SW	2	0.9			10		W					Cloudy	
Minnesota, New York, N. Y.	30.44	773.2	30	— 1.1		NW			2		5							Hazy	
Monocacy, Shanghai, China	30.22	767.6	41	5.0	57	SSE			2		8		SSE					Cloudy	
New Hampshire, Port Royal, S. C.	30.43	772.9	45	7.2	?	ENE	12	5.4			0			0	0			Clear	
Nipsic, Barcelona, Spain	29.93	760.2	62	16.7	56	NE			2		10					Sm'h		Overcast	
Onward, Callao, Peru †.	29.94	760.5	69	20.6	90	Calm			0		8					Long	N;W	Cloudy	
Palos, Shanghai, China	30.27	768.8	42	5.6	66	SE			1		2							Fair	
Passaic, Washington, D. C.	30.59	777.0	27	— 2.8	76	NW			2		0							Clear	
Pensacola, Panama, Panama	29.97	761.2	83	28.3	71	WNW			1		0			0	0	Sm'h		Clear	
Powhatan, New York, N. Y.	30.39	771.9	28	— 2.2	88	NW			2		0							Clear	
Quinnebaug, Villafranca, France	29.99	751.7	57	13.9	81	Calm			0		10		SSW			Sm'h		Cloudy	
Richmond, Hong-Kong, China	30.13	765.3	64	17.8	100	ENE			2		10							Drizzling	
Saratoga, Baltimore, Md	30.50	774.7	25	— 3.9	100	W			2		0			0	0			Clear	
Shenandoah, Montevideo, Uruguay *	30.25	768.3	67	19.4	64	NNW			4		0					Sm'h		Clear	
St. Louis, League Island, Pa	30.42	772.7	26	— 3.3	75	WSW	8	3.6			0			0	0			Clear	
Swatara, Nagasaki, Japan †	30.20	767.1	40	4.4	64	NE			1		0					Sm'h		Blue sky	
Tennessee, New Orleans, La	30.46	73.7	50	10.0	86	ENE	2	0.9			5		Calm	0	0	Sm'h		Fair	
Ticonderoga, N. Yard, Mare Id., Cal.	30.03	762.7	49	9.4	93	ESE			1		2			0.22	5.6			Clear	
Trenton, Toulon, France *.	29.95	760.7	62	16.7	72	E			2-3		8			10 h'r	s h'vy	Sm'h		Fair	
Vandalia, Port Castries, St. Lucia, W. I	30.07	763.8	81	27.2	87	NE			2		2		ENE					Fair	
Wabash, Boston, Massachusetts	30.28	769.1	24	— 4.4	74	W	10	4.5			5		W	0	0			Fair	
Wachusetts, Panama, Panama *.	29.58	751.3	75	24.4	91	NW			3		5		N			Sm'h		Fair	
Wyoming, Villafranca, France	29.97	761.2	55	12.8	87	Calm			0		10		SE			Sm'h		Cloudy	

LINE AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
N. 0° 25′, W. 26° 10′	29.91	759.7	86	30.0	76	ENE			2		6							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 17° 29′, W. 50° 54′	30.08	764.0	77.5	25.3	78	NE			4		5							D. clouds	Capt. A. J. Brown.
British Merchant ‡																			Capt. E. J. Molony.
Chin Yang, ‡																			
N. 8° 30′, W. 51° 54′	29.99	761.7	79.7	26.5	74	ENE			3		2							Blue sky	Capt. N. Youlden.
S. S. Cipero,																			
N. 19° 40′, W. 52° 55′	30.12	765.0	76	24.4		NE			4		3					3	NE	D. clouds	Capt. W. N. Lailey.
City of Agra, ‡																			
S. 10° 19′, W. 31° 06′	29.94	760.5	84.0	28.9	82	NE			4		5							D. clouds	Capt. T. Young.
Barque Commewyne, ‡																			
N. 39° 10′, W. 45° 04′	30.43	772.9	54	12.2	61	SE			5		8							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra, ‡																			
S. 5° 02′, W. 18° 00′	29.96	761.0	85	29.4	72	ESE			3	5c	8							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart,																			
N. 1° 06′, E. 88° 56′	29.93	760.2	84.5	29.2	76	NNW			3		4							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams
Barquentine Hope, ‡																			
S. 6° 48′, W. 34° 15′	29.96	761.0	81.5	27.5	91	ENE			3		5							D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomeue																			Capt. W. P. Hughes.
Ship Lochoe ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majastic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 21° 43′, W. 63° 07′	30.17	766.3	76.0	24.4	91	NE			5		3							D. clouds	Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart
Barque Shun Lee, ‡																			
N. 1° 25′, W. 27° 14′	29.93	760.2	80.5	26.9	91	E			2		6					Slt	SE	D. clouds	Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven ‡																			Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton, ‡																			
N. 12° 38′, E. 43° 23′	30.00	762.0	78.5	25.8	84	E			4		0							Blue sky	Capt. R. J. Blacklin.
S. S. Yorkshire,																			
N. 31° 45′, W. 26° 40′	30.20	767.1	62	16.7	72	NW			3		5					2	NW	D. clouds	
ALLAN LINE.																			
A. Schumacher & Co.																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE.																			
Ch. G. Francklyn.																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE.																			
Ismay, Imrie & Co.																			
S. S. Adriatic,																			
N. 51° 17′, W. 15° 43′ †	29.79	756.7	50	10.0		NW			4		5		WNW			Long	WNW	Fair	Capt. J. W. Jennings.
S. S. Baltic,																			
N. 48° 44′, W. 28° 04′	29.97	761.2	45	7.2	61	Var.			5-6		5		NW			Swell	NW	Sleeting	Capt. H. Parsell.
S. S. Britanic																			Capt. H. Perry.
S. S. Celtic,																			
N. 43° 15′, W. 54° 50′ †	29.68	753.9	40	4.4		SW			6		8		WSW	3h'rs	he'vy	H'vy	SW	Cloudy	Capt. Benj. Gleadell.
S. S. Germanic,																			
New York, N. Y †	30.45	773.4	32	0.0		WNW			4		0			0	0			Clear	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN.																			
A. Schumacher & Co.																			
S. S. Hermann ‡																			Capt. H. Baur.
S. S. Köln,																			
N. 46° 01′, W. 46° 43′	30.20	767.1	34.7	1.5		S			6-6		10		S	Heavy Rain	squalls	Cross	S	Cloudy	
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg,																			
N. 52° 05′, E. 2° 59′ †	29.97	761.2	46.4	8.0		ESE			3		10		ESE	0	0	Sm'h		Hazy	
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm †																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. ‡ Liverpool, England....*†	29.81	757.2	48	8.9	92	ESE	.....	.....	4	.....	8	.....	ESE	.....	.....	.....	.....	Cloudy.....	Capt. J. W. Shackford.
S. S. Indiana, ‡ Philadelphia, Pa.....†	30.10	764.5	36	2.2	70	SSE	.....	.....	4	.....	8	.....	S	0	0	Sm'h	.....	Cloudy.....	Capt. R. W. Sargent.
S. S. Ohio, N. 48° 41′, W. 35° 57′...†*	30.22	767.6	45	7.2	100	NW	.....	.....	3	.....	5	.....	NW	Snow squalls		L'ge	NW	Fair.....	Wm. Shakford, 1st Off'r
S. S. Pennsylvania, N. 39° 11′, W. 71° 31′....†	30.25	768.3	36	2.2	70	NW	.....	.....	5	.....	5	.....	NW	0	0	Mod.	NW	Fair.....	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 25° 37′, W. 110° 35′....†	29.98	761.5	65	18.3	73	SW	.....	.....	3	.....	5	.....	W	0	0	Sm'll	NW	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 38° 02′, E. 176° 26′.....†	29.92	760.0	55	12.8	62	WNW	.....	.....	4	.....	5	.....	NW	0	0	High	WNW	Fair.....	Capt. H. Davison.
S. S. Gaelic, N. 23° 25′, E. 117° 42′..†*	30.27	768.8	69	20.6	82	NE	.....	.....	6	.....	10	.....	NE	.....	.....	Mod.	NE	Overcast.....	Capt. W. H. Kidley.
S. S. Oceanic N. 32° 18′, W. 164° 00′.....	29.83	757.7	61	16.1	94	SW	.....	.....	5	.....	8	.....	W	0.04	1.0	Mod.	W	.....	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, Mouth of Columbia River†	30.13	765.3	38	3.3	86	ENE	.....	.....	4	.....	5?	.....	WSW	.....	.....	Mod.	NW	Clear?.....	Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon.....†	30.13	765.3	30.0	— 1.1	90	Calm	.....	.....	0	.....	8	.....	WNW	.....	.....	.....	.....	Cloudy.....	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal.....†	30.00	762.0	50	10.0	93	N	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	Capt. J. N. Ingalls.
S. S. Idaho, ‡ San Francisco, Cal.....†	30.00	762.0	48	8.9	100	Calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	C. E. Lyons, 1st Officer.
S. S. Orizaba.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Senator, Santa Barbara, Cal.....†	29.98	761.5	51	10.6	86	NW	.....	.....	2	.....	0	.....	.....	.....	.....	Sm'h	.....	Clear.....	Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	30.07	763.8	49	9.4	85	N	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	Clear.....	Capt. G. Debney
S. S. Victoria.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 24° 27′, W. 152° 27′.....	30.07	763.8	72	22.2	100	ESE	.....	.....	4	.....	8	.....	ESE	.....	.....	Long	E	Cloudy	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.....†	30.11	764.8	73	22.8	95	Calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 16° 23′, W. 98° 57′.....†	30.07	763.8	78	25.6	82	NW	.....	.....	3	.....	2	.....	NW	.....	.....	Mod.	S	Clear.....	Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China.....†	30.02	762.5	64	17.8	78	E	.....	.....	4	.....	10	.....	NE	0	0	Sm'h	.....	Cloudy.....	Capt. G. G. Berry.
S. S. City of Sidney, N. 34° 55′, W. 129° 45′....†	30.16	766.1	58	14.4	70	NW	.....	.....	3	5c	.....	NW	.....	0	0	Long	NW	Fair	Capt. H. C. Dearborn.
S. S. City of Tokio.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 12° 41′, W. 88° 39′.....†	29.99	761.7	79	26.1	78	ENE	.....	.....	4	.....	5	.....	ESE	0	0	Mod.	ESE	Fair.....	Capt. R. R. Searle.
S. S. Dakota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. D. E. Griffiths.
S. S. Granada.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Zealandia, Sydney, N. S. Wales.....	29.99	761.7	79	26.1	74	NE	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	Fine.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland..... ‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Sam'l Jackson.
S. S. Nederland..... ‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. S. Stokes.
S. S. Rhynland, N. 50° 03′, W. 27° 38′..... ‡	29.95	760.7	40	4.4	.....	WNW	.....	.....	6	.....	2	.....	WNW	0.2	5.	Long	WNW	Fair.....	Capt. W. Geo. Randle.
S. S. Vaderland, N. 45° 16′ W. 51° 18′.....	29.72	754.9	.....	.....	.....	SSW	.....	.....	9	.....	10	.....	.....	Light snow		H'vy	SW	Cloudy.....	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, ‡ Jacksonville, Florida...†	30.29	769.4	63	17.2	.....	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	Hazy.....	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va.....	30.45	773.4	31	— 0.6	79	Calm	0	0	.....	.....	0	.....	.....	0	0	.....	.....	Clear.....	Capt J. Jorgensen.
Sch'r Annie R. Lewis, Martinique, W. I..... .†	30.01	762.2	86	30.0	.....	NE	.....	.....	1	.....	2	.....	NE	0	0	.....	.....	Clear.....	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 36° 28′, W. 7° 58′.....†*	30.20	767.1	60	15.6	.....	WNW	.....	.....	2	.....	2	.....	W	.....	.....	Mod.	NNW	Fair.....	Capt. B. F. Woodbury.
Brigantine George, ‡ N. 34° 48′, W. 72° 50′.....†	30.55	776.0	64	17.8	.....	NNW	.....	.....	5	.....	2	.....	N	0	0	.....	W	Fine.....	Capt. W H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va.†	30.49	774.4	33	0.6	70	NNE	3	1.3	.....	0	0	.....	.....	0	0	.....	.....	Clear.....	.....
Ship Jumna.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 23° 50′, W. 36° 28′...†	30.12	765.0	72	22.2	90	NE	.....	.....	6	.....	5	.....	ENE	Light		Mod.	NE	Fair.....	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 18, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.	Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower			
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.	
ALGERIAN SERIES.																		
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																		
Mogador, Morocco			30.01	762.3	65.1	18.4	77	W			2		3			0	0	Pretty fair.. Dr. Ollive.
Nemours			29.85	758.2	62.6	17.0	96	W			5		3			0	0	Pretty fair .. Raynard.
Algiers			29.90	759.5	58.3	14.6	87	W			3		3			0.260	6.6	Pretty fair.. Nicolas.
La Calle			29.82	757.4	58.3	14.6	86	ENE			6		5			0.917	23.3	Cloudy..... Fonfréde.
Tunis			29.86	758.4														Jacques.
Sfax			30.02	762.6														Gau.
Saida			29.96	760.9	58.3	14.6	74	W			1		0			0	0	Clear. ..... Dumas.
Tebessa			29.90	759.5	47.8	8.8	92	N			3		10			0.283	7.2	Covered. ..... Watrin.
Geriville																		Lonchamp.
Laghouat			30.04	763.0	59.4	15.2	60	SE			2		3			0	0	Pretty fair... Herbin.
Biskra																		Baudassé.
AUSTRALIAN SERIES.																		
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																		
Melbourne, Victoria	30.00	762.0	30.09	764.3	60.0	15.6	72	S	6	2.7			3			0	0	Fine..... R. L. J. Ellery.
Sub-Series.																		
Hobart Town, Tasmania																		Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES.																		
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																		
Agram	29.67	753.7	30.25	768.4	35.2	1.8	84	Calm			0		10			0.008	0.2	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.52	749.8	30.34	770.5	29.8	— 1.2	88	E	8.7	3.9			0			0	0	Dr. Wiersbicki.
Eperies	29.38	746.3	30.31	769.8	33.4	0.8	68	Calm			0		4cs			0	0	Julius Mikolik.
Gratz ‡	28.95	735.3	30.26	768.5	34.7	1.5	71	S			1		10			0.008	0.2	Andreas Rospini.
Hermannstadt	28.82	731.9	30.35	770.8	26.6	— 3.0	89	SW			2		0			0	0	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.76	730.4	30.17	766.2	32.7	0.4	89	NE			2		10			0	0	The Staff.
Lemberg	29.35	745.6	30.42	772.6	23.9	— 4.5	75	NE			1		10			0	0	Dr. T. Stanecki.
Pola	30.02	762.6	30.14	765.5	47.5	8.6	92	E			1		10			0.138	3.50	I. R. HydrographicOffice
Szathmar	29.87	758.8	30.33	770.4	35.1	1.7	71	E			2		2			0	0	Beicht Peter, S. J.
Szegedin	30.00	762.0	30.30	769.5	35.4	1.9	85	SE			1		4			0	0	Karl Stancel.
Trieste	30.07	763.8	30.17	766.4	45.5	7.5	74	Calm			0		10			0.102	2.6	Rainy..... P. Busin.
Vienna	29.52	749.7	30.28	769.0	29.8	— 1.2	88	SE			3		10			0.008	0.2	I. R. Central Met. Obs'y
BELGIAN SERIES.																		
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																		
Brussels	29.84	757.8	30.04	763.0	43.9	6.6	89	SE			1	8		E		0	0	Royal Observatory
Furnes	30.01	762.3	30.04	762.9	43.5	6.4	97	NNW			4		10			0	0	Foggy..... M. E. de Cae.
Maeseyck	29.93	760.3	30.06	763.5	46.6	8.1	92	WSW			2		10			0	0	Foggy..... M. Pierrôt.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 18, 1882.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.05	763.3	30.15	765.8	38.2	3.4	88	SSE	15	6.7			10			0	0	Misty	W. Boswell.
Armagh, Observatory	29.78	756.4	30.02	762.5	45.7	7.6	91	E	5	2.2			10					Overcast	S. Call.
Bidston, Liverpool Obs'y			30.04	763.0	42.5	5.8	87	SE	17	7.6			10					Misty	John Hartnup.
Bolton, Sharples	29.50	749.3	30.05	763.3	41.7	5.4	90	E	1	0.4			10					Raining	Thomas Mackereth.
Bradford, Yorkshire	29.67	753.6	30.07	763.8	39.4	4.1	95	E			1		10			0	0	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.96	761.0	29.99	761.7	80	26.7	66				2		4					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			30.04	763.0	42.2	5.7	98	E			0.2		10					Foggy	John McLaren.
Chatham, School M. E.	29.93	760.2	30.06	763.5	44.1	6.7	94	Calm			0		10					Foggy	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.72	754.9	29.95	760.7	48.0	8.9	90	ESE			3		10					Overcast	The Staff.
Fort Napier, Natal	27.56	700.0	29.78	756.4	74.3	23.5	68	NE			1		6?					Overcast ?	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	86	30.0	88	NW			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			29.92	760.0				WNW			1		10					Raining	J. O'Donaghadue.
Gibraltar, Mediterranean	29.82	757.4	29.88	758.9	62.8	17.1	92	E			1		4					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.98	761.5	30.18	766.6	87.5	30.8	87	NE			3							Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.88	758.9	30.05	763.3	44.6	7.0	89	SE			1		10					Overcast	The Staff.
Guernsey	29.72	754.9	29.95	760.7	45	7.2	100	ESE			1		10					Foggy	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.02	762.5	30.06	763.5	44.7	7.1	86	ENE	3	1.3			10					Threatening	The Met'g'l Office.
Leicester, Museum	29.84	757.9	30.10	764.5	38.5	3.6	95	SE			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.66	753.4	29.73	755.1	60.8	16.0	81	SE			5		10					Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas	30.16	766.1	30.20	767.1	73.0	22.8	72	E			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.53	750.0	30.07	763.8	40.0	4.4	100	ENE			1		10					Misty	Robert Pate.
Oxford, Radcliffe Obs'y	29.82	757.4	30.08	764.0	41.3	5.2	99	Calm			0		10					Drizzling	The Staff.
Plymouth	29.89	759.2	29.96	761.0	46.8	8.2	94	E			2		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.08	764.0	39	3.9	97	S	26	11.6			10					Misty	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.17	766.3	30.24	768.1	40.2	4.6	84	N			2		9					Drizzling	Serg't W. H. Lyne.
Sheffield	29.80	756.9	30.09	764.3	39.5	4.2	99	NE			1		10			0.01	0.3	Misty	W. F. Cooper.
Silloth Rectory	30.08	764.0	30.11	764.8	40.7	4.8	87	E			5		7			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.07	763.8	38.4	3.6	90	ENE	9	4.0			10					Misty	Rev. S. J. Perry.
Strathfield Turgiss	29.83	757.7	30.07	763.8	45.7	7.6	87	S			1		10					Foggy	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	29.90	759.4	29.96	761.0	49	9.4	78	E			4		10					Gloomy	W. Newcombe.
Valencia, Observatory	29.95	760.7	29.97	761.2	44.2	6.8	87	NE	19	8.5			10					Drizzling	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.29	769.4	30.34	770.6	15	— 9.4	95	W	4	1.8		0	5s			0.100	2.54	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.25	768.3	30.32	770.1	6.6	—14.1	93	Calm	0	0		2k	8ks	W	W	0	0	Cloudy	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.24	768.1	30.26	768.6	18	— 7.8	94	NW	2	0.9		2cs	5ks			0	0	Fair	J. McWilliams.
Fort Garry, Manitoba*	29.26	743.2	30.24	768.1	—24	—31.1	100	SW	3	1.3		0	0			0	0	Clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.28	769.1	30.42	772.7	18	— 7.8	76	W	6	2.7		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.93	760.2	30.29	769.4	20	— 6.7	99	SE	7	3.1			10n			0.02	0.5	Light snow	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.12	765.0	30.34	770.6	18	— 7.8	83	SW	7	3.1			10s			0	0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.46	748.3	30.21	767.3	16	— 8.9	92	S	4	1.8			10n		S	Inap.	Inap.	Light snow	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.45	748.0	30.19	766.8	22	— 5.6	99	E	4	1.8			10n			0.30	7.6	Light snow	H. Morgan.
Port Stanley, Ontario	29.47	748.5	30.12	765.0	22	— 5.6	99	E	16	7.2			10n		E	0.28	7.1	Heavy snow	M. Payne.
Quebec, Quebec*	30.00	762.0	30.36	771.1	9	—12.8	79	W			1	0	2s		W	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.76	755.9	30.28	769.1	— 1	—18.3	72	Calm	0	0		Hz	2s		SW	0	0	Hazy	K. Stewart.
Saugeen, Ontario*	29.41	747.0	30.18	766.6	19	— 7.2	97	SE	5	2.2			10ks			0.03	0.8	Light snow	W. H. McIntyre.
St. Andrews	30.34	770.6	30.39	771.9	15	— 9.4	86	NW	3	1.3		0	0			0	0	Clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.22	767.6	30.26	768.6	21	— 6.1	84	SW	4	1.8		0	2ks			0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.82	757.4	30.23	767.8	22	— 5.6	96	SE	2	0.9			10n			0.15	3.8	Light snow	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.34	770.6	30.40	772.1	26	— 3.3	80	N	9	4.0		2ck	2s	W	N	0.05	1.3	Fair	Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. John's, Newfoundland	30.09	764.3	30.36	771.1	15	— 9.4	82	W	1	0.4		0	5s			0	0	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape St. Francis Lt. House	29.95	760.7			66.3	19.1	79	SW	40.7	18.2			9s			0	0	Cloudy	John Duthie.
Cape Town, C. G. H. Obs'y.	30.07	763.8	30.11	764 8	79.0	26.1	50	SSE	15.9	7.1		4ck	6cs			0	0		The Staff, for D. Gill.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	30.06	763.4	30.08	764.0	48.4	9.1	96	SE	4.7	2.1			10n			0.08	2.1	Raining	M. Marc Dechevrens, S J

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

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	25.22	666.0	29.94	760.5	62.2	16.8	81	SE			2	2d		NE		0	0	Clear.	Federico Maison.

DANISH SERIES.

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

Copenhagen	30.32	770.0	30.36	771.2	32.9	0.5	87	ESE	16	7			10					Raining	Oversergent Fischer.
Fanöe	30.27	768.8	30.29	769.3	32.2	0.1	83	E			4		1						Overloerer Lauridsen.
Godthaab, Greenland	29.39	746.4	29.43	747.5	8.6	—13.0	84	Calm			0		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.46	748.3	29.50	749.4	32.9	0.5	90	S			8		10					Snowing	A. O. Thorlacius.
Thorshavn	30.07	763.8	30.11	764.7	42.4	5.8	93	Calm	0	0			7						Overloerer Bergh.
Vestervig	30.27	768.8	30.36	771.2	31.3	— 0.4		E			4		10						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.37	745.9	29.98	761.5	50.0	10	95	SSE			1	cn	SE	NW		0	0		M. Labroue, Director.
Alençon	29.50	749.2	30.05	763.2	45.7	7.6	94	NE			1	2ks	SW	NE		0	0	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.78	756.5	30.05	763.3	41.4	5.2	93	NNW				Fg						Foggy	M. Klein, Commandant.
Avignon, Normal School	29.97	761.3	30.05	763.3	56.7	13.7	71	E			1	0				0.043	1.1	Very clear	M. Giraud, Director.
Bar-sur-Seine	29.47	748.4	30.03	762.7	51.8	11.0	71	S			1	8				0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.78	756.4	30.06	763.4	41.7	5.4	94	ENE			1	10				0	0	Foggy	M. Frère Eugene Marie.
Besançon, Normal School	29.17	741.0	30.08	764.1	48.4	9.1	81	SE			1		cn		S	0.059	1.5		M. Gobin, Director.
Bordeaux, Observatory	29.68	753.9	29.95	760.6	52.2	11.2	79	SE			1	8			WSW	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.44	747.7	30.00	761.9	52.5	11.4	75	S			1		csn		S	0	0		M. Postel, Director.
Brest, Naval Observatory	29.71	754.6	29.95	760.8	51.1	10.6	89	S			2	8			SW	0.020	0.50		M. de Rermaree, Dir.
Caen, Normal School	29.88	758.9	29.96	760.9	50.2	10.1	100	SE				2				0	0	Slightly cl'dy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.72	755.0	30.06	763.4	54.1	12.3	76	S			1	2				0	0	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.56	750.9	30.10	764.5	47.8	8.8	71	S			1	0				0	0	Clear	M. Grimard.
Clermont-Ferrand Obs'y	28.62	726.9	29.97	761.2	56.8	13.8	49	E			1	5ck			S	0	0	½ covered	M. Allnard, Director.
Cluny, Normal School	29.15	740.3	29.99	761.8	51.4	10.8	79	S			2	1			S	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.18	741.2	30.07	763.8	46.8	8.2	81	SE			1		kn	SE	SE	0	0		Dr. Coulot, Director.
Gap, Normal School	27.50	698.6	30.06	763.6	47.3	8.5	72	S			2	10			E	0	0	Covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.97	735.8	30.11	764.8	53.4	11.9	76	E			1	5			E	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.30	744.3	30.08	764.0	53.6	12	62	ENE			1	c				0	0		M. Ablard, Director.
Guéret, Normal School	28.39	721.0	29.95	760.6	54.5	12.5	61	SE			1	ck			NW	0	0		M. Rivoir, Director.
Lamballe, Normal School	29.71	754.6	29.98	761.5	51.8	11	81	E			2				E	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.26	743.3	29.93	760.1	60.8	16	64	NE			1	2				0	0	Slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	29.86	758.5	29.97	761.1	51.4	10.8	93	ESE			1	10			E	0	0	Covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.97	735.9	30.00	762.0	52.2	11.2	73	SSE			2	5	SSE	SW		0.008	0.2	Cloudy	M. André, Director.
Mans, Normal School	29.72	754.9	30.04	762.9	48.0	8.9	87	E			1	5		SSW		0	0	Cloudy	M. Piboen, Director.
Marseille, Observatory	29.76	756.0	30.03	762.8	60.4	15.8	67	W			1	5		ENE		0	0		M. Stephan, Director.
Montlouis l'instituteur	24 75	628.7	29.99	761.7	41.0	5.0	69	W	7.4	3.3		5		SW		0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.93	760.2	30.04	763.0	57.2	14	98	Calm			0	5		SE		0.150	3.8	Raining	M. Galzin, Director.
Nancy, Normal School	29.28	743.8	30.05	763.3	47.5	8.6	79	SW			1	5cn		SW		0	0	Cloudy	M. Hasse.
Nantes, Observatory	29.82	757.5	29.98	761.0	54.7	12.6	76	ENE			1	9k		WSW		0	0		M. Larocque, Director.
Nice	30.01	762.3	30.05	763.2	56.8	13.8	78	E			3	10	E	E		0.024	0.6	Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.87	758.6	29.97	761.3	55.8	13.2	78	SE	22.4	10.0		6	NW			0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.39	568.7			31.3	—0.4						1		W		0	0	Clear	M. Bayine, for Gen'l de Nansouty.
Privas, Normal School	28.95	735.4	30.02	762.6	52.2	11.2	86	Calm			0	5	S	S		0	0	Cloudy	M. Tallien.
Puy de Dôme O. s'y, Summit	25.09	637.3			36.0	2.2	95	ESE			1	8k		SE		0	0		M. Allnard, Director.
Rochefort, Naval Obs'y	29.93	760.2	29.96	761.0	53.2	11.8	89					2		SE		0	0	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.75	755.6	29.97	761.1	55.4	13	100	SSE			1	8		S		0	0	Very cloudy	M. Mouillot, Director.
Rodez, Normal School	27.82	705.6	29.97	761.3	51.1	10.6	65	E			2	5kn		SW		0	0		M. Richard, Director.
Rouen, Normal School	29.95	760.8	30.04	763.0	41.0	5	90	S			1	5		SE		0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.86	758.4	30.02	762.4	53.6	12	73	SSE			1	2		SE		0	0	Slightly cl'dy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.87	758.7	30.04	762.9	47.3	8.5	83	NNW			1	9		SW		0.012	0.3		M. Renou, Director.
Toulouse, Observatory	29.26	743.3	29.99	761.7	54.3	12.4	81	ESE			2	10				0	0	Covered	M. Bailland, Director.
Tours	29.79	756.7	29.99	761.7	53.6	12.0	76	SE			1	9		W		0.106	2.7	¼ covered	M. de Tastes.
Versailles, Observatory	29.54	750.3	30.03	762.8	47.1	8.4	81	NW			1	0				0.004	0.11	Clear	Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

GERMAN SERIES.

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

Bamberg	29.24	742.7	30.11	764.7	37.4	3.0	87	E			3	7k	SE			0.157	4.0	Raining	Prof. Dr. Hoh.
Berlin	30.05	763.2	30.23	767.9	27.3	—2.6	67	NW			4	0				0	0		Prof. Dr. Arndt.
Breslau	29.75	755.6	30.28	769.2	30.4	—0.9	74	E			2	9				0	0		Royal University Obs'y.
Carlsruhe	29.64	752.9	30.08	764.0	44.6	7.0	91	NE			0	9	SW			0	0		Albert Senz.
Cassel	29.47	748.6	30.08	764.0	40.6	4.8	76	S			2	10	S			0	0		Dr. H. Möhl.
Frankfort on the Main	29.79	750.7	30.17	766.3	41.4	5.2	89	E			1	10				0.114	2.9	Foggy	Physical Society.
Friedrichshafen	28.62	727.0	30.10	764.6	39.2	4.0	87	SW			2	4	SW			0	0		Chief Telegrapher Wilhelm.
Hamburg	30.13	765.3	30.20	767.1	34.2	1.2	71	E			4	3				0	0		Dr. R. Kleeman.
Kiel	30.23	767.7	30.24	768.1	31.5	—0.3	78	E			2	0				0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.73	755.1	30.17	766.2	36.0	2.2	84	E			0-1	10				0	0		Prof. Dr. Bruhns.
Magdeburg	29.95	760.6	30.18	765.6	33.3	0.7	76	E			1	9ks	SSE			0	0		Dr. Assmann.
Memel	30.54	775.6	30.58	776.8	20.7	—6.3	84	E			3	10n							Reinbrecht & Issermann.
Munich	28.24	717.4	30.11	764.8	37.9	3.3	76	N			2	9	N			0	0		Central Station.
Neufahrwasser	30.47	774.0	30.49	774.4	29.5	—1.4	84	ESE			2	10				0	0		A Lothes.
Neustadt, Palatinate	29.49	749.1	30.02	762.4	42.8	6.0	93					10				0	0	Light fog	Dicknether.
Stuttgart	29.10	739.1	30.00	762.1	48.2	9.0	76	N			1	4	NW			0	0		Prof. Dr. Schoder.
Thorn	30.20	767.0	30.39	771.9	31.3	—0.4	66	SE			5	10				0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	28.56	725.4	30.08	764.0	38.8	3.8	83	NE			2	10	NW			0.071	1.8		Prof. Kemlein.
Wustrow	30.29	769.3	30.32	770.0	33.3	0.7	92	E			2	0				0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.80	756.9	30.20	767.1	50.2	10.1		N			2.0		5					½ Clear.	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.92	760.0	29.97	761.2	76.9	24.9	69	SW	30.0	13.4			7	WNW		0	0	D. clouds	
Deesa	29.47	748.5	29.94	760.5	86.1	30.1	11	W					0			0	0	Blue sky	
Bombay	29.92	760.0	29.96	761.0	80.7	27.1	71	NW	19.0	8.5			0			0	0	Blue sky	
Poona, Yarrowda	28.05	712.7	29.89	759.1	88.3	31.3	19	SSW	16.0	7.2			3		ESE	0	0	D. clouds	
Belgaum	27.40	696.0	29.92	759.9	81.8	27.7	23	WSW	9.0	4.0			5	W	W	0	0	D. clouds	
Lahore	29.17	741.0	29.92	760.0	78.9	26.1	37	NE	0.7	0.3			8			0	0	Gloomy	
Roorkee	28.99	736.4	29.90	759.4	76.6	24.8	35	NW	2.1	0.9			3			0	0		
Agra	29.36	745.8	29.93	760.2	83.3	28.5	28	W	2.8	1.2			7		W	0	0		
Nagpur	28.88	733.6	29.90	759.5	89.7	32.1	26	Calm	2.5	1.1			8		W			D. clouds	
Jubbulpore	28.60	726.3	29.96	761.0	81.7	27.6	37	Calm	1.8	0.8			4			0	0	D. clouds	
Lucknow	29.55	750.6	29.93	760.2	82.2	27.9	35	NNE	3.1	1.4			0			0	0	Blue sky	
Allahabad	29.61	752.1	29.92	760.0	81.7	27.6	40	Calm	1.9	0.8			0			0	0	Blue sky	
Patna	29.78	756.5	29.97	761.2	75.0	23.9	58	W	0.8	0.4			0			0	0	Blue sky	
Hazaribagh	27.92	709.2	29.95	760.8	74.0	23.3	32	NW	10.0	4.5			0			0	0	Blue sky	
Cuttack	29.87	758.7	29.95	760.8	86.6	30.3	42	Calm	0.5	0.2			1			0	0	D. clouds	
Calcutta, Alipore	29.91	759.7	29.93	760.3	80.3	26.8	40	NNW	1.0	0.4			0			0	0	Blue sky	
Goalpara	29.55	750.4	29.95	761.0	70.8	21.6	64	NE	9.7	4.3			0			0	0	Blue sky	
Chittagong	29.98	761.4	30.07	763.8	76.0	24.4	83	SSE	5.0	2.2			1			0	0	Blue sky	
Sibsagar	29.67	753.7	30.02	762.5	65.3	18.5	79	NE	1.7	0.8			4			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.71	754.7	30.13	765.4	44.6	7.0	62	Calm	0	0			8			0	0		Prof. Giovanni Clodig
Milan	29.62	752.4	30.16	766.0	43.3	6.3	76	ESE	2.5	1.1			10			0	0		Prof. Schiaparelli.
Padua	30.06	763.5	30.17	766.4	43.5	6.4	80	N	1.8	0.8			10			0.004	1.0		Prof. Dott. Lorenzoni.
Moncalieri	29.24	742.6	30.17	766.3	42.3	5.7	77	E	4.3	1.9			9			0	0		Prof. P. F. Denza.
Genoa	29.89	759.1	30.08	764.1	45.3	7.4	77	NE	6.9	3.1			10	S		0.461	11.7		Prof. G. M. Garibaldi.
Mondovi	28.20	716.3	30.18	766.6	36.5	2.5	93	W			2		10			0	0		Prof. D. C. Bruno.
Pesaro	30.12	765.1	30.17	766.4	42.1	5.6	94	NW	6.9	3.1			10			0.079	2.0		Prof. Luigi Guidi.
Florence	29.77	756.2	30.03	762.8	54.3	12.4	53	N			4		10			0	0		Cav. F. Meucci.
Leghorn	29.96	760.9	30.04	763.1	48.0	8.9	86	ENE	3.1	1.4			10			0	0		Prof. P. Monte.
Rome	29.82	757.5	30.00	762.0	57.2	14.0	54	Calm	0	0			6			0	0		Prof. P. S. Ferrari.
Lecce	29.87	758.8	30.13	765.3	51.6	10.9	86	ESE	7.4	3.3			8			0.098	2.5		Prof. C. de Giorgi.
Cosenza	29.14	740.2	30.06	763.4	51.4	10.8	71	NE	0.7	0.3			9	ENE		0	0		Prof. D. Conti.
Cagliari	29.71	754.7	29.91	759.7	61.3	16.3	56	ESE			2		9	SE		0	0		Prof. A. Pacinotti.
Palermo	29.64	752.8	29.89	759.2	58.1	14.5	67	Calm	0	0			10			0.008	0.2		Prof. G. Ciacciatore.
Syracuse	29.85	758.2	29.89	759.3	56.5	13.6	77	ESE	29.8	13.3			10	ESE		0.059	1.5		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R	29.46	748.3	29.98	751.6	56.3	13.5	56	E	3.1	1.4			1			0	0		Prof. F. Brioschi.
Stelvio	22.18	563.4			27.0	— 2.8	70	ENE			1		10		SW	0	0	Misty	P. F. Denza.
Valdobbia	22.12	561.9			26.2	— 3.2	89	NE			2		10kn		SW	0	0	Covered	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.32	770.1	30.34	770.6	32.3	0.2	72	NNE	5.1	2.3			10s			0	0	Clear.	K. Sasaki.
Kioto	30.16	766.0	30.35	770.9	28.9	— 1.7	100						0			0	0	Clear.	M. Tojima.
Nagasaki, I. M. Obs'y	30.06	763.5	30.27	768.8	38.7	3.7	86	SW	0.8	0.4			0			0.435	11.05	Clear.	S. Takehayashi.
Tokei Obs'y, Yeddo	30.18	766.6	30.25	768.3	33.5	0.8	78	SSW	3.5	1.6			1s			0	0	Fair	The Staff.
Wakayama	30.29	769.3	30.33	770.4	33.4	0.8	69	NW	3.9	1.7			0			0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Maurjtius Obs'y, Mauritius	29.89	759.2	30.08	764.0	80.4	26.9	67	ENE	18.5	8.3		0	3		E	0.26	6.6	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.49	622.1	30.25	768.4	54.5	12.5	82	N			1	4c	0			0	0	Hazy	Prof. M. Leal.
Mazatlan	29.79	756.8	30.06	763.5	63.0	17.2	94	N	1.6	0.8		10cs	0	WSW		0	0	Covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.11	586.9	30.25	768.3	50.0	10.0	67	Calm	0	0		10pk				0	0	Fine	The Staff.
Pabellon, Aguascalientes	23.93	607.9	29.97	761.1	56.5	13.6	61	SE			1	10k				0	0	Fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.44	595.3	30.25	768.2	44.6	7.0	60	Calm	0	0		0	3		SW	0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.21	615.3	30.23	767.8	55.7	13.2	63	SW	0.9	0.4		0	0			0	0	Clear	G. Barroeta, M. D.
Tlacotalpam	29.98	761.6	30.00	761.9	65.5	18.6	95	Calm	0	0		0	0			0	0	Foggy	Prof. M. Cházaro.
Zacatecas	22.58	573.5	30.30	769.6	48.0	8.9	55	SSW	1.7	0.8			10		SSW	0	0	Covered	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.06	763.5	30.06	763.5	43.9	6.6		SE			2					0	0		
Groningen	30.07	763.7	30.12	765.1	32.7	0.4		E			4					0	0		
Helder	30.10	764.4	30.10	764.4	31.8	— 0.1		ENE			4					0	0		
Hellevoetsluis	30.05	763.2	30.05	763.2	41.4	5.2	91	ENE			1					0	0		
Utrecht	30.02	762.6	30.07	763.8	41.9	5.5	75	E			1		2			0	0	Lightly cl'dy	H. van der Brink

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

NORWEGIAN SERIES.

Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.

Bergen	30.32	770.1	30.38	771.7	34.2	1.2	68	Calm	0	0			1			0	0		
Christiania	30.37	771.4	30.53	775.4	30.7	— 0.7	92	ENE	7	3			10			0.004	0.1	Snowing	
Gjæsvær	30.17	766.4	30.20	767.0	32.2	0.1		SSE			4		10						
Lodingen	30.29	769.3	30.34	770.5	31.8	— 0.1	63	SSW			6		7			0	0		

PORTUGUESE SERIES.

Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Angra, Azores																			Dr. J. A. Sampaio.
Campo Major	28.87	733.2	29.87	758.6	56.5	13.6	69	ESE	9.4	4.2			7			0	0		Dr. A. M. R. dos Santos
Funchal, Madeira	29.99	761.7	30.08	763.9	61.7	16.5	42	WNW	4.9	2.2			4			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.47	748.4	29.83	757.7	52.0	11.1	97	SW	13.0	5.8			10			0.346	8.8	Raining	The Staff.
Ponta Delgada, Azores	30.32	770.1	30.39	771.9	55.4	13.0	47	NE	4.3	1.9			4			0	0		

RUSSIAN SERIES.

Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.

Akmolinski	28.71	729.1	29.88	758.9	6.4	—14.2	87	W	4	2			10						Capt. Lasarew.
Archangel	30.67	778.9	30.69	779.4	20.8	— 6.2	93	S	2	1			10						Capt. Sselliwerstow.
Astrakhan	30.28	769.0	30.19	766.9	25.3	— 3.7	54	NE	20	9			3s			Blank		Light clouds	Capt. Wisganow.
Barnaul	29.25	743.0	29.82	757.4	— 9.0	—22.8	72	Calm	0	0			7						Meteorological Obs'y.
Dorpat	30.53	775.5	30.80	782.4	9.9	—12.3	74	ESE	7	3			0						Obervatory.
Ekaterinburg	29.29	743.9	30.36	771.1	4.5	—15.3	51	N	18	8			0						Meteorological Obs'y.
Kasan	30.35	771.0	30.65	778.5	18.7	— 7.4	60	N	2	1			0						Observatory.
Kertch	30.24	768.2	30.26	768.7	25.2	— 3.8	93	NNE	7	3			9						Lagorio.
Kieff	29.82	757.3	30.52	775.3	9.7	—12.4	70	NNE	7	3			10ks						Cand. Fatjanow.
Lugan	30.19	766.9	30.41	772.5	22.3	— 5.4	54	ENE	13	6			4			Blank		Light clouds	Meteorological Obs'y.
Moscow	30.11	764.9	30.72	780.4	15.8	— 9.0	57	S	7.8	3.5			8ks						Meteorological Obs'y.
Nertchinsk	27.98	710.6	30.71	780.0	—27.8	—33.2	81	Calm	0	0			0						Meteorological Obs'y.
Nikolaiev	30.35	771.0	30.43	772.8	17.4	— 8.1	80	NE	13	6			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.96	760.9	30.04	763.1	— 6.2	—21.2	67	W	2	1			5k						Lieut. Iwanow.
Nukuss	29.61	752.1	29.85	758.2	39.6	4.2	93	NE	5.1	2.3			10n						Dr. Dobrochotow.
Pekin, China	30.06	763.6	30.21	767.2	29.1	— 1.6	66	SE	4	2			2k						Physical Observatory.
St. Petersburg	30.79	782.0	30.80	782.4	22.1	— 5.5	63	SE	11	5			0						Central Physical Obs'y.
Tashkend, Laboratory	28.17	715.5	29.71	754.6	59.9	15.5	62	NW	2	1			10						Teich, A. M.
Tiflis	28.52	724.4	29.97	761.3	41.2	5.1	55	NW	45	20			10						Physical Observatory.
Warsaw	30.02	762.4	30.47	773.9	28.8	— 1.8	76	ESE	16	7			10ks						Astronomical Obs'y.
Wilna	30.24	758.0	30.70	779.8	16.9	— 8.4	67	SE	2	1			0						Berg, Assistant.
Yeniseisk	29.40	746.8	29.71	754.7	6.8	—14.0	85	S	4	2			10						M. O. Marks.

SCOTTISH SERIES.

Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.

Leith, Restalrig Park			30.10	764.5	41.0	5.0	87	E			1		0			0	0	Hazy	Andrew Gibb.
Monach Lt. House, Hebrides			30.05	763.3	47	8.3	92	SSE			3		10			0.4	10.	Overcast	J. Youngclause.
North Unst, Shetland Isl'ds			30.16	766.1				S			6		10			Blank			Robert Burnet.

SPANISH SERIES.

Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.

Barcelona, Met. Obs'y	29.91	759.7	30.02	762.4	56.7	13.7	82	E	3.4	1.5			5			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	29.86	758.5	29.92	759.9	63.1	17.3	51	SE	2.0	0.9		3	2	SW		0	0	Cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	28.96	684.7			50.4	10.2	58	SW	4.9	2.2		0	8			0	0	Cloudy	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.72	704.2	29.95	760.8	55.6	13.1	62	E	2.0	0.9		0	6			0	0	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.85	758.2	30.00	762.0	66.2	19.0	63	SSE	11.2	5.0		4	5	N		0.063	1.6	Raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.84	732.5	29.74	755.4	50.0	10.0	90	SSE	5.6	2.5			10			0.181	4.6	Raining	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.08	764.1	30.15	765.8	70.0	21.1	80	E	9.8	4.4		3ck	8	NE		0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.97	761.3	30.02	762.6	81.0	27.2	68	ESE	2.2	1.0			18			0	0	Fair	Federico Faura, S. J
San Fernando, Naval Obs'y	29.87	758.6	29.97	761.1	60.6	15.9	69	SE	8.3	3.7		0	7		S	0.039	1.0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.01	762.3	30.11	764.7	76.6	24.8	77	E	11.7	5.22		3c	2k	E	E	0	0	Clear	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.95	760.7	30.10	764.4	79.2	26.2	70	SE	1.7	0.8			4k		SSE	0	0	Clear	José L. Fastovra.

SWEDISH SERIES.

Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.

Haparanda	30.61	777.5	30.65	778.5	26.2	— 3.2	96	S			2		10			0	0		
Umea	30.61	777.4	30.66	778.7	28.8	— 1.8	96	S			2		10			0	0		
Hernosand	30.65	778.5	30.70	779.8	28.6	— 1.9	94	S			2		10			0.028	0.7		
Stockholm	30.41	772.5	30.59	777.0	30.7	— 0.7	88	SE			2		10			0.043	1.1		
Wisby	30.44	773.1	30.59	774.6	30.2	— 1.0	84	SE			2		10			0	0		
Sub-Series.																			
Upsala	30.50	774.6	30.58	776.8	30.9	— 0.6	90	ESE	6.5	2.9			10			0.003	0.07		Nils Ekholm

SWISS SERIES.

Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.

Geneva	28.63	727.3	30.10	764.4	43.3	6.3	79	N			2		6			0.024	0.6	Cloudy	The Observatory.
Zurich	28.42	721.8	30.09	764.2	43.9	6.6	66	E			1		7			0	0	Foggy	The Observatory.

At Geneva the corresponding departures from the normal values are: Bar. +1.2 mm.; Ther. +2°.3 cent.; Hum. +9 per cent.

TURKISH SERIES.

Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.

Constantinople			30.29	769.4	38.7	3.7	82	NE	8	3.5			10		N	0	0		The Observatory.
Valona			30.06	763.4	58.6	14.8		W			1		5			0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.05	763.6	57.6	14.2	67	S			1		7n		SW	0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES. By authority of the Secretary of War. Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	30.37	771.4	30.46	773.7	27	— 2.8	88	S	3	1.3			10n		Calm	0.01	0.3	Light snow.	
Alpena, Michigan	29.45	748.0	30.15	765.8	15	— 9.4	82	S	5	2.2			10s		Calm	0.03	0.8	Cloudy	
Atlanta, Georgia	29.06	738.1	30.24	768.1	45	7.2	60	E	14	6.3			10s		Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.44	773.2	30.46	773.7	32	0.0	89	SE	8	3.6		8k;cs	0	W		0	0	Fair	
Attou Id., Alaska	29.41	747.0			30	— 1.1	90	SE	10	4.5			10s		E	0	0	Cloudy	
Augusta, Georgia	30.15	765.8	30.36	771.1	45	7.2	68	E	3	1.3		5ck	0	SE		0	0	Fair	
Baltimore, Maryland	30.37	771.4	30.42	772.7	37	2.8	71	S	4	1.8		10cs	0	SW		0	0	Cloudy	
Barnegat, New Jersey	30.44	773.2	30.46	773.7	32	0.0	79	S	10	4.5		5k	5s	W	Calm	0	0	Cloudy	
Benton, Montana	27.21	691.1			— 6	—21.1	61	Calm	0	0		5cs	0	Calm		0	0	Fair	
Bismarck, Dakota	28.30	718.8	30.16	766.1	— 4	—20.0	100	Calm	0	0		0	0			0	0	Clear	
Boise City, Idaho	27.41	696.2	30.27	768.8	21	— 6.1	86	Calm	0	0		5cs	0	Calm		0	0	Fair	
Boston, Massachusetts	30.31	769.9	30.48	774.2	21	— 6.1	86	W	3	1.3			10s;fg		W;C	0	0	Cloudy	
Brackettville, Texas	28.77	730.7	29.83	757.7	49	9.4	93	S	8	3.6		4cs	0	S		0.03	0.8	Fair	
Brownsville, Texas	29.85	758.2	29.89	759.2	66	18.9	95	S	12	5.4			10ks		S	0.03	0.8	Cloudy	
Buffalo, New York	29.45	748.0	30.20	767.1	22	— 5.6	86	E	6	2.7			10n		Calm	0.17	4.3	Heavy snow	
Burlington, Vermont	30.07	763.8	30.38	771.6	23	— 5.0	73	S	10	4.5			10s		S	Inap.	Inap.	Cloudy	
Cairo, Illinois	29.57	751.1	29.95	761.0	46	7.8	84	S	11	4.9			10s		Calm	0.72	18.3	Cloudy	
Campo, California	27.53	699.2	30.10	764.5	35	1.7	90	NW	4	1.8		8c	0	NW		0.05	1.3	Cloudy	
Camp Thomas, Arizona	27.32	693.9			33	0.6	79	Calm			0	10k	0	Calm		0.07	1.8	Cloudy	
Cape Henry, Virginia	30.45	773.4	30.47	773.9	34	1.1	79	SE	7	3.1		0	0			0	0	Clear	
Cape May, New Jersey																			
Castroville, Texas	29.11	739.4	29.80	756.9	64	17.8	89	SW	7	3.1			10s		SW	0.12	3.0	Cloudy	
Cedar Keys, Florida	30.22	767.6	30.25	768.3	55	12.8	87	NE	8	3.6		2c	0	Calm		0	0	Clear	
Champaign, Illinois	29.06	738.1	29.88	758.9	33	0.6	89	N	17	7.6			10n		N	1.47	37.3	Light rain	
Charleston, S. Carolina	30.27	768.8	30.33	770.4	50	10.0	86	N	6	2.7		2c	0	Calm		0	0	Clear	
Charlotte, N. Carolina	29.48	748.8	30.34	770.6	37	2.8	81	SE	2	0.9			10s		S	0	0	Cloudy	
Chattanooga, Tennessee	29.38	746.2	30.20	767.1	45	7.2	68	S	17	7.6		5cs	1ks;s'k	Calm	SW;C	0	0	Fair	
Cheyenne, Wyoming	23.98	609.1	29.92	760.0	14	—10.0	82	NW	4	1.8			10s		NW	0	0	Cloudy	
Chicago, Illinois	29.25	742.9	29.97	761.2	26	— 3.3	75	N	8	3.6			10n		Calm	0.62	15.7	Light snow.	
Chincoteague, Virginia	30.46	773.7	30.48	774.2	33	0.6	89	SE	5	2.2		1k	0	Calm		0	0	Clear	
Cincinnati, Ohio	29.44	747.8	30.12	765.0	37	2.8	81	SE	3	1.3			10n;fg		Calm	0.14	3.6	Light rain	
Cleveland, Ohio	29.32	744.7	30.08	764.0	28	— 2.2	94	S	18	8.0			10n		Calm	0.48	12.2	Heavy snow	
Coleman City, Texas	28.17	715.5	29.89	759.2	38	3.3	81	N	20	8.9			10s		Calm	0.04	1.0	Cloudy	
Columbus, Ohio	29.24	742.7	30.10	764.5	34	1.1	90	SE	12	5.4			10n		Calm	0.06	1.5	Light rain	
Concho, Texas	28.01	711.4	29.71	754.6	46	7.8	92	Calm	0	0		0	8s		Calm	0	0	Cloudy	
Corsicana, Texas	29.43	747.5	29.89	759.2	63	17.2	100	SE	4	1.8			10n		Calm	0.15	3.8	Light rain	
Davenport, Iowa	29.43	747.5	30.12	765.0	15	— 9.4	82	N	12	5.4			10s		Calm	0.37	9.4	Cloudy	
Dayton, Washington T'y	28.46	722.9	30.26	768.6	18	— 7.8	84	NW	3	1.3			10s		Calm	0	0	Cloudy	
Deadwood, Dakota	25.36	644.1			9	—12.8	57	S	4	1.8		0	0			0	0	Clear	
Decatur, Texas	28.75	730.5	29.96	761.0	39	3.9	100	N	14	6.3			10n		Calm	1.01	25.7	Heavy rain	
Delaware Breakwater, Del.	30.42	772.7	30.45	773.4	31	— 0.6	79	SE	13	5.8		4cs	Fg	Calm	Calm	0	0	Fair	
Denison, Texas	29.11	739.4	29.92	760.0	41	5.0	91	N			1		10n		Calm	1.80	45.7	Light rain	
Denver, Colorado	24.79	629.6	30.01	762.2	19	— 7.2	89	N	2	0.9			10s		Calm	0	0	Cloudy	
Des Moines, Iowa	29.22	742.2	30.17	766.3	19	— 7.2	85	NE	7	3.1			10s		NE	0.11	2.8	Cloudy	
Detroit, Michigan	29.33	745.0	30.06	763.5	31	— 0.6	89	E	8	3.6			10n		Calm	0.51	13.0	Light snow.	
Dodge City, Kansas	27.44	697.0	29.93	760.2	11	—11.7	80	N	13	5.8			10s		Calm	0.08	2.0	Cloudy	
Dubuque, Iowa	29.39	746.5	30.15	765.8	16	— 8.9	83	N	6	2.7			10s		Calm	0.08	2.0	Cloudy	
Duluth, Minnesota	29.47	748.5	30.24	768.1	— 5	—20.6	82	Calm	0	0		0	0			0	0	Clear	
Eagle Pass, Texas	29.19	741.4	29.93	760.2	52	11.1	86	NW	6	2.7		5cs	0	Calm		0.01	0.3	Fair	
Eagle Rock, Idaho	25.37	644.4	30.02	762.5	17	— 8.3	83	SW	4	1.8			10s		Calm	0	0	Cloudy	
Eastport, Maine	30.32	770.1	30.39	771.9	17	— 8.3	67	W	8	3.6		0	0			Inap.	Inap.	Clear	
Edinburg, Texas																			
El Paso, Texas	26.37	669.8			38	3.3	63	NW	10	4.5		0	0			0	0	Clear	
Erie, Pennsylvania	29.37	746.0	30.12	765.0	29	— 1.7	100	SE	12	5.4			10n		Calm	0.15	3.8	Light snow.	
Escanaba, Michigan	29.46	748.3	30.20	767.1	— 4	—20.0	82	N	4	1.8		2c	0	Calm		0	0	Clear	
Florence, Arizona	28.66	728.0	30.26	768.6	43	6.1	75	SW	2	0.9		0	0			0.03	0.8	Clear	
Fort Apache, New Mexico	25.05	636.3	30.50	774.7	32	0.0	63	SE	4	1.8			10s		Calm	0.21	5.3	Cloudy	
Fort Assinniboine, Montana	27.07	687.6			12	—11.1	61	SW	22	9.8			10s		Calm	0	0	Cloudy	
Fort Bennett, Dakota	28.58	725.9			—13	—25.0	74	Calm	0	0		0	0			0	0	Clear	
Fort Buford, Dakota	28.08	713.2	30.17	766.3	— 9	—22.8	56	SW	4	1.8		2cs	0	W		0	0	Clear	
Fort Custer, Montana	26.95	684.5			— 3	—19.4	66	SE	6	2.7		0	0			0	0	Clear	
Fort Davis, Texas	25.17	639.3	30.13	765.3	40	4.4	56	SW	8	3.6		0	0			0	0	Clear	
Fort Elliott, Texas	27.16	689.8	29.58	751.3	19	— 7.2	39	N	24	10.7		0	0			0.02	0.5	Clear	
Fort Gibson, Indian T'y	29.45	748.0	30.01	762.2	33	0.6	89	N	10	4.5			10s		N	0.70	17.8	Cloudy	
Fort Grant, Arizona	25.23	640.8	30.03	762.7	48	8.9	28	SE	5	2.2			10s		Calm	0.23	5.8	Cloudy	
Fort Griffin, Texas	28.65	727.7	29.96	761.0	36	2.2	90	NW	10	4.5			10s		Calm	0.79	20.1	Cloudy	
Fort Keogh, Montana	27.57	700.3			—15	—25.1		SW	6	2.7		0	0			0	0	Clear	
Fort McKavett, Texas	27.68	703.1	29.62	752.3	45	7.2	61	W	8	3.6		0	0			0.02	0.5	Clear	
Fort Macon, North Carolina	30.40	772.1	30.41	772.4	39	3.9	91	E	12	5.4		5c	Hz	Calm	Calm	0	0	Fair	
Fort St. Michaels	29.98	761.5	30.01	762.2	15	— 9.4	100	E	56	25.0			10s		Calm				
Fort Missoula, Montana	26.86	682.2			— 7	—21.7	100	Calm	0	0		0	0			0	0	Clear	
Fort Shaw, Montana	26.27	667.2			28	— 2.2	66	SW	22	9.8		10cs	0	Calm		0	0	Cloudy	
Fort Sill, Indian Territory	28.78	731.0	29.94	760.5	29	— 1.7	89	N	10	4.5			10s		Calm	0.59	15.0	Cloudy	
Fort Stevenson, Dakota	28.26	717.8			—13	—25.0	74	W	1	0.4		0	0			0	0	Clear	
Fort Verde, Arizona					30	— 1.1	78	N			1	0	0			0.03	0.8	Clear	
Fredericksburg, Texas	28.16	715.3	29.68	753.9	61	16.1	94	W	8	3.6			10ks		W	0.05	1.3	Cloudy	
Galveston, Texas	29.92	760.0	29.97	761.2	60	15.6	94	SE	7	3.1			Fg		S	0.05	1.3	Dense fog	
Grand Haven, Michigan	29.35	745.5	30.04	763.0	21	— 6.1	86	NE	5	2.2			10s		Calm	0.22	5.6	Cloudy	
Hatteras, North Carolina	30.42	772.7	30.44	773.2	39	3.9	82	NE	12	5.4		0	0			0	0	Clear	
Helena, Montana	25.87	657.1			— 2	—18.9	100	Calm	0	0		0	0			0	0	Clear	
Henrietta, Texas	28.98	736.1	29.96	761.0	33	0.6	100	N	14	6.3			10n		Calm	0.16	4.1	Light rain	
Indianapolis, Indiana	29.08	738.6	29.88	758.9	37	2.8	90	SE	10	4.5			10n		Calm	0.85	21.6	Light rain	
Indianola, Texas	29.88	758.9	29.90	759.4	64	17.8	94	S	8	3.6			10s		S	Inap	Inap.	Cloudy	
Jacksboro, Texas	28.82	732.0	29.99	761.7	36	2.2	100	N	12	5.4			10n		NW	0.45	11.4	Light rain	
Jacksonville, Florida	30.24	768.1	30.29	769.4	53	11.7	86	N	3	1.3			Fg			0	0	Dense fog	
Keokuk, Iowa	29.38	746.2	30.07	763.8	19	— 7.2	85	N	10	4.5			10n		Calm	0.80	20.3	Light snow.	
Key West, Florida	30.16	766.1	30.20	767.1	71	21.7	80	E	10	4.5		0	0			0	0	Clear	
Kittyhawk, North Carolina	30.44	773.2	30.46	773.7	34	1.1	90	E	3	1.3		2c	0	N		0	0	Clear	
Knoxville, Tennessee	29.16	740.7	30.22	767.6	33	0.6	79	NE	3	1.3		8cs;hz	S'k	Calm	Calm	0	0	Cloudy	
La Crosse, Wisconsin	29.39	746.5	30.22	767.6	— 4	—15.6	74	N	7	3.1		0	5s		Calm	0.02	0.5	Fair	
La Mesilla, New Mexico	26.12	663.4	30.27	768.8	37	2.8	71	NW	8	3.6		1c	0	Calm		Inap.	Inap.	Clear	
Laredo, Texas	29.46	748.3	29.80	756.9	54	12.2	87	NW	1	0.4			10s		Calm	0.03	0.8	Cloudy	
Leavenworth, Kansas	29.21	741.9	30.11	764.8	18	— 7.8	84	N	8	3.6			10s		Calm	0.66	16.8	Cloudy	
Lewiston, Idaho	29.44	747.8	30.13	765.3	22	— 5.6	72	E	2	0.9		0	0			0	0	Clear	
Little Rock, Arkansas	29.66	753.4	29.98	761.5	53	11.7	93	SW	2	0.9			10n		Calm	1.15	29.2	Heavy rain	
Los Angeles, California	29.77	756.1	30.14	765.5	49	9.4	85	SW	8	3.6			10s		Calm	0	0	Cloudy	
Louisville, Kentucky	29.46	748.3	30.03	762.7	44	6.7	68	SE	14	6.3			10n		Calm	0.07	1.8	Heavy rain	
Lynchburg, Virginia	29.69	754.1	30.42	772.7	29	— 1.7	78	Calm	0	0		1cs	Fg	Calm	Calm	0	0	Fair	
Madison, Wisconsin	29.04	737.6	30.11	764.8	12	—11.1	80	N	12	5.4			10s		Calm	0.03	0.8	Cloudy	
Marquette, Michigan	29.38	746.2	30.17	766.3	0	—17.8	70	NW	2	0.9		0	0			0	0	Clear	
Mason, Texas	28.30	718.8	30.05	763.3	55	12.8	81	W	18	8.0		0	2ks		W	0	0	Fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.73	755.1	30.08	764.0	51	10.6	100	NW	1	0.4	.....	.....	1cn	.....	Calm	0.19	4.8	Light rain	
Milwaukee, Wisconsin	29.31	744.5	30.09	764.3	17	— 8.3	83	N	12	5.4	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
Mobile, Alabama	30.05	763'3	30.12	765.0	56	13.3	83	E	6	2.7	.....	.....	10ks	.....	Calm	0	0	Cloudy	
Montgomery, Alabama	29.98	761.5	30.22	767.6	48	8.9	85	E	5	2.2	.....	8k	0	SW	.....	0	0	Fair	
Moorhead, Minnesota	29.17	740.9	30.30	769.6	—20	—28.9	63	S	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Morgantown, W. Virginia	29.09	738.9	30.11	764.8	37	2.8	71	NE	4	1.8	.....	.....	10s	.....	SW	0	0	Cloudy	
Mt. Washington, N. H.	23.66	601.0	30.02	762.5	— 1	—18.3	68	NW	50	22.4	.....	.....	10s	.....	NW	0	0	Cloudy	
Nashville, Tennessee	29.05	750.6	30.09	764.3	51	10.6	46	S	5	2.2	.....	.....	1cn	.....	Calm	0.03	0.8	Light rain	
New Haven, Connecticut	30.35	770.9	30.48	774.2	22	— 5.6	72	Calm	0	0	.....	.....	10s;sk	.....	Calm	0	0	Cloudy	
New London, Connecticut	30.48	774.2	30.53	775.4	28	— 2.2	66	Calm	0	0	.....	7k	0	Calm	.....	0	0	Fair	
New Orleans, Louisiana	30.01	762.2	30.07	763.8	58	14.4	88	E	5	2.2	.....	.....	10s	.....	E	0	0	Cloudy	
Newport, Rhode Island	30.44	773.2	30.49	774.4	28.5	— 1.9	72	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
New River, N. Carolina	.....	.....	.....	.....	38	3.3	91	NE	.....	.....	4	2cs	Hz	Calm	Calm	.....	.....	Light haze	
New Shoreham, Rhode I'd	30.46	773.7	30.50	774.7	36	2.2	71	SE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
New York, New York	30.29	769.4	30.48	774.2	31	— 0.6	89	SE	3	1.3	.....	.....	10s;fg	.....	Calm	0	0	Cloudy	
Norfolk, Virginia	30.39	771.9	30.45	773.4	37	2.8	53	SE	4	1.8	.....	5c	Hz	Calm	Calm	0	0	Fair	
North Platte, Nebraska	29.17	690.1	30.09	764.3	— 7	—21.7	80	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Olympia, Washington T'y	30.05	763.3	30.09	764.3	36.5	2.5	80	S	12	5.4	.....	.....	10s	.....	SW	0.01	0.3	Cloudy	
Omaha, Nebraska	28.99	736.3	30.20	767.1	9	—12.8	89	N	13	5.8	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Oswego, New York	29.95	760.7	30.30	769.6	22	— 5.6	86	SE	8	3.6	.....	.....	1cn	.....	Calm	0.34	8.6	Light snow	
Pensacola, Florida	30.15	765.8	30.18	766.6	59	15.0	94	SE	8	3.6	.....	.....	10s;hs	.....	SE;C	0	0	Cloudy	
Philadelphia, Pa	30.39	771.9	30.45	773.4	31	— 0.6	89	S	4	1.8	.....	10cs	0	Calm	.....	0	0	Cloudy	
Phœnix, Arizona	29.06	738.1	30.96	786.4	40	4.4	82	E	4	1.8	.....	8k	0	Calm	.....	0	0	Cloudy	
Pike's Peak, Colorado	17.45	443.2	29.66	753.4	— 5	—20.6	63	W	6	2.7	.....	0	0	.....	.....	0.14	3.6	Clear	
Pilot Point, Texas	29.18	741.2	30.05	763.3	40	4.4	100	SE	13	5.8	.....	.....	1cn	.....	Calm	2.62	66.5	Heavy rain	
Pioche, Nevada	24.07	611.4	29.84	757.9	25	— 3.9	50	NW	3	1.3	.....	5c	0	Calm	.....	0	0	Fair	
Pittsburg, Pennsylvania	29.33	745.0	30.17	766.3	35	1.7	53	N	5	2.2	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Port Huron, Michigan	29.39	746.5	30.10	764.5	23	— 5.0	86	NE	6	2.7	.....	.....	1cn	.....	Calm	0.31	7.9	Light snow	
Portland, Maine	30.37	771.4	30.42	772.7	24	— 4.4	87	W	2	0.9	.....	.....	10s;fg	.....	Calm	0	0	Cloudy	
Portland, Oregon	30.18	766.6	30.26	768.6	32.5	0.3	95	SE	4	1.8	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	46	7.8	69	NE	14	6.3	.....	0	Hz	.....	Calm	0	0	Clear	
Prescott, Arizona	24.78	629.4	30.14	765.5	24	— 4.4	61	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	30.19	766.8	30.21	767.3	64	17.8	89	E	8	3.6	.....	0	1s	.....	E	0	0	Clear	
Red Bluff, California	29.85	758.2	30.21	767.3	45.5	7.5	92	NW	3	1.3	.....	2c	0	Calm	.....	0	0	Clear	
Rio Grande City, Texas	29.73	755.1	29.94	760.5	63	17.2	89	Calm	0	0	.....	.....	Fg	.....	.....	0	0	Foggy	
Rochester, New York	29.58	751.3	30.24	768.1	24	— 4.4	100	SE	6	2.7	.....	.....	1cn	.....	Calm	0.09	2.3	Heavy snow	
Roseburg, Oregon	29.69	754.1	30.28	769.1	40	4.4	91	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Sacramento, California	30.13	765.3	30.20	767.1	48	8.9	93	SE	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
St. Louis, Missouri	29.35	745.5	29.95	760.7	34	1.1	79	N	.....	.....	.....	.....	10n;sk	.....	Calm	1.01	25.7	Light rain	
St. Paul, Minnesota	29.30	744.2	30.23	767.8	3	—16.1	73	NW	1	0.4	.....	2ck	0	NW	.....	Inap.	Inap.	Clear	
Salt Lake City, Utah	25.77	654.6	30.10	764.5	31	— 0.6	69	E	1	0.4	.....	7k	0	W	.....	0	0	Fair	
San Antonio, Texas	29.31	744.5	30.00	762.0	64	17.8	94	S	3	1.3	.....	.....	1cn	.....	Calm	0.24	6.1	Light rain	
San Diego, California	30.12	765.0	30.20	767.1	48	8.9	93	Calm	0	0	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
Sandusky, Ohio	29.34	745.2	30.04	763.0	31	— 0.6	89	SE	13	5.8	.....	.....	1cn	.....	Calm	0.06	1.5	Light snow	
Sandy Hook, New Jersey	30.44	773.2	30.48	774.2	31	— 0.6	79	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
San Francisco, California	30.15	765.8	30.22	767.6	48	8.9	85	S	1	0.4	.....	0	1s	.....	Calm	0	0	Clear	
Santa Fé, New Mexico	23.11	587.0	29.65	753.1	24	— 4.4	72	N	4	1.8	.....	0	0	.....	.....	0.14	3.6	Clear	
Savannah, Georgia	30.21	767.3	30.31	769.9	48	8.9	85	NE	2	0.9	.....	5c	Hz	Calm	.....	0	0	Fair	
Shreveport, Louisiana	29.70	754.4	29.94	760.5	60	15.6	88	S	10	4.5	.....	.....	10s	.....	Calm	0.09	2.3	Cloudy	
Silver City, New Mexico	24.26	616.2	30.66	778.7	31	— 0.6	69	Calm	0	0	.....	0	8s	.....	W	0.11	2.8	Fair	
Smithville, North Carolina	30.38	771.6	30.42	772.7	47	8.3	92	NE	8	3.6	.....	1c	Hz	Calm	.....	0	0	Clear	
Socorro, New Mexico	25.46	646.7	29.53	750.0	32	0.0	89	SE	12	5.4	.....	0	5s	.....	Calm	Inap.	Inap.	Fair	
Springfield, Illinois	29.26	743.2	29.96	761.0	32	0.0	89	N	10	4.5	.....	.....	1cn	.....	.....	1.40	35.6	Light snow	
Springfield, Massachusetts	30.34	770.6	30.49	774.4	20	— 6.7	85	SW	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Stockton, Texas	25.94	684.3	29.94	760.5	41	5.0	74	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.24	742.7	30.18	766.6	—24	—31.1	100	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Thatcher's Island, Mass	30.41	772.4	30.47	773.9	22	— 5.6	86	W	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
Toledo, Ohio	29.32	744.7	30.04	763.0	32	0.0	84	E	1	0.4	.....	.....	1cn	.....	Calm	0.45	11.4	Light snow	
Tucson, Arizona	27.05	702.3	30.20	767.1	40	4.4	73	SE	2	0.9	.....	.....	8ks	.....	NW	0.04	1.0	Cloudy	
Umatilla, Oregon	29.98	761.5	30.52	775.2	18.5	— 7.5	93	SE	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Uvalde, Texas	28.95	735.6	29.78	756.4	57	13.9	81	NW	4	1.8	.....	.....	10ks	.....	W	0.08	2.0	Cloudy	
Vicksburg, Mississippi	29.80	756.9	30.06	763.5	57	13.9	69	SE	2	0.9	.....	.....	10s	.....	S	0	0	Cloudy	
Visalia, California	29.80	756.9	30.18	766.6	46	7.8	92	NW	2	0.9	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Washington, D. C.	30.28	769.1	30.41	772.4	32	0.0	79	S	7	3.1	.....	5ck	0	W	.....	0	0	Fair	
Wickenburg, Arizona	.....	.....	.....	.....	32	0.0	79	W	.....	.....	1	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	30.34	770.6	30.40	772.1	40	4.4	82	E	3	1.3	.....	8ck	0	Calm	.....	0	0	Fair	
Winnemucca, Nevada	25.71	653.0	30.07	763.8	31	— 0.6	69	NE	6	2.7	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Wood's Holl, Mass	30.44	773.2	30.48	774.2	27	— 2.8	76	NW	4	1.8	.....	10k	0	W	.....	0	0	Cloudy	
Yankton, Dakota	28.94	735.1	30.41	772.4	— 3	—19.4	66	W	2	0.9	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Yuma, Arizona	29.98	761.5	30.13	765.3	45	7.2	84	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.07	560.6	.....	.....	49.5	9.7	78	Calm	0	0	.....	5cs	0	.....	.....	0	0	Fair	Thomas Herman.
Buff Bay Town, Jam ica	29.88	758.9	30.19	766.8	73	22.8	100	S	.....	.....	.....	.....	10k	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	30.10	764.5	30.15	765.8	72	22.2	81	SE	2.4	1.1	.....	0	0	.....	.....	0	0	Clear	Charles Hasselbrink.
Jakobshavn, Greenland	29.43	747.6	29.49	749.1	— 4.7	— 20.4	.....	W	.....	.....	4	.....	3	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I.	30.05	763.3	30.06	763.5	67.6	19.8	87	Calm	0	0	.....	0	2s	.....	E	0	0	.....	Robert Johnstone.
Navassa, W. I.	29.87	758.7	29.95	760.7	75	23.9	73	NE	17.2	7.7	.....	5k	2s	E	NE	0.06	1.5	Cloudy	F. M. Everett.
Paramaribo, S. A.	29.97	761.2	29.97	761.2	78	25.6	82	NE	.....	.....	2	5ck	4s	.....	.....	0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	746.2	30.08	764.0	81	27.2	76	NE	.....	.....	1	0	5s	.....	Calm	0	0	Hazy	Francesco J. Cisneros
Rivas, Nicaragua	.....	.....	.....	.....	71.6	22	.....	SE	.....	.....	3	0	0	.....	.....	0.08	2.	.....	Earl Flint.
Santiago de Cuba, W. I.	30.08	764.0	30.10	764.5	75	23.9	69	NNE	4.8	2.1	.....	4ck	1s	NE	NE	0	0	Fair	Robert Mason,
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	29.23	742.5	29.30	744.1	—11.2	—24.	.....	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	K. Elberg.
York Factory, B. A.	29.94	760.5	30.00	762.0	—29.0	—33.9	.....	N	10	4.5	.....	4k	2s	N	N	0.11	2.8	Cloudy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.77	756.1	61.8	16.6	82	E			6		10	SSE						Overcast	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 28° 15′, E 50° 51′	29.94	760.5	66	18.9	59	NNW			4		4	NNW				4	NNW	D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			40	4.4		NE			1–2		10					1	N	Raining	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.93	760.2	76	24.4	77	SW			2		10					3	SW	Overcast	Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus																			Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruiser, Syracuse, Sicily	29.95	760.7	57	13.9		E			5		10	E						Raining	Capt. F. A. Wetherall.
H. M. S. Curacoa, Shangbai, China	29.99	761.7	53	11.7	86	Calm			0		10							Overcast	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.36	771.1	61	16.1	82	N			2–3		5	N						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 34′, E. 81° 14′	29.91	759.7	83	28.3		NNE			1		3	NE				1	NE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.95	760.7	79	26.1	78	NW			3–4		0							Squally	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Bridgetown Barbadoes	30.06	763.5	78	25.6		ENE			1–2		9	NE				Sm'h		D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, N. 24° 47′, W. 66° 49′	30.28	769.1	73	22.8	76	NE			3		7					2	NE	D. clouds	Capt. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Panama, Panama	29.90	759.4	75	23.9	86	NW			2									Misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.94	760.5				W			4									D. clouds	Capt. L. F. Jones.
H. M. S. Griffon																			
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 16° 30′, E. 113° 32′	30.04	763.0	76	24.4	91	SE			1–2		0					2	NE	Blue sky	Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Zanzibar, Africa	29.89	759.2	85	29.4	76	S			1		4	SE				1	S	D. clouds	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 40′ E. 122° 30′	30.09	764.3	49.2	9.6	95	ESE			1		10					1	SE	Raining	Capt. R. H. Napier.
H. M. S. Malabar																			Capt. J. F. G. Grant.
H. M. S. Minatour, N. 42° 09′, W. 9° 32′	29.73	755.1	53.5	11.9	93	W			3		10	W				4	NW; SW		Capt. H. Rawson.
H. M. S. Modeste, N. 1° 17′, E. 103° 51′	29.92	760.0	81	27.2	87	NW			2		2					1		D. clouds	Capt. J. G. Mead.
H. M. S. Monarch. Ayas Bay, Turkey, Asia	30.02	762.5	54	12.2	100	N			1		1	N				Sm'h		Blue sky	Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Off Pt. Royal, Jamaica, W.I.	30.03	762.7	77	25.0	86	E			3		7	E				2	E	D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes																			Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, N. 2° 53′, W. 3° 03′	29.88	758.9	84	28.9	87	SSE			3		3	SSE				2	S	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.89	759.2	85	29.4	87	NNW			1		8							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Spain	29.82	757.4	55	12.8	93	SW			2		10							Raining	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.55	750.6	80	26.7	74	ESE			1		1ck					1	ESE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	29.97	761.2	69.5	20.8	92	SE			2		4	SE				1	W	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 11° 31′, W. 60° 00	30.01	762.2	78.5	25.8	80	ENE			3		2					1	NE	D. clouds	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, N. 37° 03′, E. 15° 18′	29.95	760.7	57.5	14.2	100	E			6		10					3	ESE	Raining	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo Bay, Chili, S.A.	29.95	760.7	60	15.6	94	NNW			2		10							Drizzling	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne, N. 15° 56′, E. 41° 25′	29.89	759.2	80	26.7		SSE			1		2					1	N	D. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.05	763.3	73	22.8		N			1		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, Palestine	30.04	763.0	67.5	19.7	38	N			1–2		2	N						D. clouds	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Bissao, Guinea, Africa	29.90	759.5	81.9	27.7	83	NW			1		0					1		Blue sky	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando, Africa	29.93	760.1	82.4	28.0	76	NNE			6		9			5 minutes		4	NE	Gloomy	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla.	30.15	765.8	64	17.8	89	SE	8	3.6			8		SE	0	0			Fair.	
N. Yard, Portsmouth, N. H.	30.43	772.9	20	— 6.7	85	WNW	2	0.9		10c				0	0			Cloudy.	
Naval Hospital, Yokohama, Japan	30.06	763.5	37	2.8	76	Calm			0		2		W	0	0			Clear.	
Adams, Panama, Panama	29.96	761.0	78	25.6	86	NW			2		5		NW			Sm'h		Fair.	
Alaska, N. Yard, Mare I'd, Cal.	30.15	765.8	50	10.0	86	Calm			0		0			0	0			Clear.	
Alert, Hong-Kong, China *.	29.92	760.0	67	19.4	84	ENE			1		5		Calm	0	0	Sm'h		Hazy	
Alliance, New Orleans, La.	30.09	764.3	60	15.6	88	ESE			1		10			0	0	Sm'h		Foggy.	
Ashuelot, Tientsin, China	30.19	766.8	28	— 2.2	100	ESE			3		10		E					Cloudy.	
Colorado, New York, N. Y.	30.46	773.7	30	— 1.1	100	S	1	0.4			8			0	0			Misty.	
Constitution, N. Yard, League I'd., Pa	30.39	771.9	32	0.0		E	1	0.4			10							Hazy.	
Franklin, Norfolk, Va.	30.44	773.2	36	2.2	61	SE	7.2	3.2			2		W	0	0			Fair.	
Galena, N. 37° 50′, E. 15° 30′	29.94	760.5	66	18.9	45	SE			6		8		SE			R'gh	SE	Cloudy.	
Independence, N. Yard, Mare I'd, Cal.	30.19	766.8	47	8.3	100	ESE	1.2	0.5			2		ESE	0.02	0.5			Clear.	
Jamestown, Sitka, Alaska *.	29.56	750.8	35	1.7	100	Calm			0		10			0.20	5.1			Drizzling	
Kearsarge, N. 29° 35′, W. 89° 47′	30.03	762.7	59	15.0	94	SE			2		10		S			Sm'h		Cloudy.	
Marion, Sandy P't, Terra del Fuego	29.60	751.8	56	13.3	69	NNE			1		10		W			Sm'h		Drizzling	
Michigan, Erie, Pennsylvania	30.05	763.3	28	— 2.2		S	2	0.9			10		S					Snowing	
Minnesota, New York, N. Y.	30.46	773.7	34	1.1		S			1		10		S					Misty.	
Monocacy, Shanghai, China	30.11	764.8	50	10.0	93	SE			1		10							Rainy.	
New Hampshire, Port Royal, S. C.	30.30	769.6	51	10.6	93	NNE	6	2.7			8		SE	0	0			Fair.	
Nipsic, N. 41° 15′, E. 2° 12′	30.06	763.5	64	17.8	73	NE			2		8		NE			Long	NE	D. clouds	
Onward, Callao, Peru †	29.92	760.0	69	20.6	95	SSE			1		8					Long	N;W.	Cloudy.	
Palos, Shanghai, China	30.15	765.8	50	10.0	100	SE			1		10							Foggy	
Passaic, Washington, D. C.	30.49	774.4	34	1.1	90	S			1		8		S					Cloudy.	
Pensacola, Panama, Panama	29.96	761.0	79	26.1	78	W			2		2			0	0	Sm'h		Fair.	
Powhatan, New York, N. Y.	30.46	773.7	31	— 0.6	100	SE			1		10							Overcast.	
Quinnebaug, Villafranca, France	30.03	762.7	58	14.4	64	ESE			1		8		E			Sm'h		Cloudy.	
Richmond, Hong-Kong, China	30.10	764.5	67	19.4	95	E			4		2		E	0.03	0.8			Fair.	
Saratoga, Baltimore, Md.	30.40	772.1	34	1.1	100	SE			3		10		Calm	0	0			Cloudy	
Shenandoah, Montevideo, Uruguay *	30.31	769.9	67	19.4	79	WNW			1		0					Sm'h		Clear.	
St. Louis, League Island, Pa.	30.47	773.9	31	— 0.6	89	SSE	2	0.9			10			0	0			Cloudy.	
Swatara, Nagasaki, Japan †	30.16	766.1	45	7.2	76	SE			1		8		E			Sm'h	S	D. clouds	
Tennessee, New Orleans, La.	30.20	767.1	59	15.0	94	SE	2	0.9			10		Calm	0	0	Sm'h		Cloudy.	
Ticonderoga, N. Yard, Mare Id., Cal.	30.17	766.3	49	9.4	100	WSW			1		2		Calm	0	0			Fair.	
Trenton, Toulon, France *.	29.99	761.7	64	17.8	58	E			2		8			0	0	Sm'h		Fair.	
Vandalia, N. 16° 18′, W. 61° 51′	30.07	763.8	77	25.0	86	ENE			3		5		ENE					Fair.	
Wabash, Boston, Massachusetts	30.52	775.2	21	— 6.1	86	WSW	1	0.4			5?		Calm	0	0			Cloudy?	
Wachusetts, Panama, Panama *.	29.55	750.6	76	24.4	91	NW			2		2		N			Sm'h		Fair.	
Wyoming, Villafranca, France	30.02	762.5	58	14.4	76	E			0-1		10		SW			Sm'h		Cloudy.	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.	Force	Amount and kind.		Direction.							
									Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r / Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																		
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																		
S. S. Algeria																		Capt. W. Gill.
Barque Astarte																		Capt. G. F. Parson.
Ship Baroda, ‡ N. 1° 35′, W. 26° 40′	29.93	760.2	85.5	29.7	76	NE		2		6							D. clouds	Capt. C. J. Russell.
S. S. Bateshire																		Capt. John Arbuckle.
Barque Belleisle, N. 17° 09′, W. 53° 11′	30.07	763.8	75.5	24.2	82	ENE		4		5							D. clouds	Capt. A. J. Brown.
British Merchant																		Capt. E. J. Molony.
Chin Yang, ‡ N. 7° 26′, W. 53° 26′	29.98	761.5	80.5	26.9	70	ENE		3		4							D. clouds	Capt. H. Youlden.
S. S. Cipero, N. 22° 15′, W. 51° 20′	30.19	766.8	74	23.3		ENE		4		2					4	ENE	D. clouds	W. N. Lalley.
City of Agra, ‡ S. 8° 09′, W. 31° 30′	29.94	760.5	84.3	29.1	81	ENE		4		5							D. clouds	Capt. T. Young.
Barque Commewyne, ‡ N. 41° 04′, W. 41° 36′	30.01	762.2	51.5	10.8	70	W		6		10							Overcast	Capt. W. Scott.
Barque Coppename																		Capt. A. Buchan.
Denbighshire																		Capt. H. Y. Murdock.
Barque Dochra, ‡ S. 4° 29′, W. 19° 02′	29.96	761.0	81	27.2	78	SE		4		10							Overcast	Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 0° 05′, E. 88° 34′	29.92	760.0	83.5	28.6	75	N		2		5							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																		Capt. A. Watson.
S. S. Ethiopia ‡																		Capt. A. Campbell.
S. S. Fleurs Castle																		Capt. J. Kidder.
Barque Gem																		Capt. H. Park.
S. S. Gordon Castle																		Capt. W. Waring.
Barque Harvest Home																		Capt. H. H. Williams.
Barquentine Hope, ‡ S. 8° 28′, W. 33° 30′	29.96	761.0	81.7	27.6	93	ENE		4		2					4	SE	D. clouds	Capt. Jas. Campbell.
Ship Iron Cross, N. 52° 15′, W. 6° 00′	29.98	761.5	45.8	7.7		ESE		4		8							Misty	Capt. W. Randall.
S. S. Kangaroo																		Capt. A. Kellett.
Kryolith																		Capt. Alex. Wilson.
S. S. Lamperts																		Capt. G. H. Jones.
Laomene																		Capt W. P. Hughes.
Ship Lochee																		Capt. J. Raeburn, R. N.R
S. S. Lusitania																		Capt. C. A. F. Powell.
Majestic																		Capt. W. Ellery.
Barque Markland, ‡ N. 24° 19′, W. 65° 48′	30.22	767.6	72.0	22.2	88	NE		6		8							D. clouds	Capt. H. W. Dyke.
Barque Mertola																		Capt. E. W. Turner.
Nairnshire																		Capt. W. Niven.
S. S. Nizam																		Capt. G. W. Brady.
Queen of Cambria																		Capt. M. Parry.
S. S. Richmond																		Capt. W. H. Stuart.
Barque Shun Lee, ‡ N. 0° 32′, W. 27° 43′	29.91	759.7	81.0	27.2	89	SE		3		4					Sl't	SE	D. clouds	Capt. John M. Gray.
S. S. Seine																		Capt. H. Manning.
S. S. Strathleven																		Capt. C. W. Pearson.
Schr. Traveller																		Capt. A Simpson.
S. S. Wyberton, ‡ N. 12° 25′, E. 47° 42′	30.06	763.5	77	25.0	86	ENE		4		3							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire, N. 30° 35′, W. 30° 45′	30.23	767.8	65	18.3	54	ENE		2		6					3	NNE	D. clouds	
ALLAN LINE. *A. Schumacher & Co.*																		
S. S. Hibernian																		Capt. F. Archer.
S. S. Nova Scotian ‡																		Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																		
S. S. Algeria																		Capt. W. Watson.
S. S. Bothnia																		
S. S. Scythia																		
WHITE STAR LINE. *Ismay, Imrie & Co.*																		Capt. W. H. P. Hains.
S. S. Adriatic, ‡ N. 50° 15′, W. 24° 35′ †	30.00	762.0	47	8.3		SW		6		5		S			Mod.	W	Clear	Capt. J. W. Jennings.
S. S. Baltic, ‡ N. 50° 28′, W. 19° 00′	30.16	766.1	48	8.9	63	Var.		2-3		8					Sw'll	WNW; NW	D. clouds	Capt. H. Parsell.
S. S. Britannic																		Capt. H. Perry.
S. S. Celtic, N. 42° 03′, W. 60° 10′ †	30.34	770.6	33	0.6		Var.		4		10		NW	0	0	Mod.	WNW	Overcast	Capt. Benj. Gleadell.
S. S. Germanic, ‡ New York, N. Y. †	30.49	774.4	30	— 1.1		S		1		10		SW	0	0			Hazy	Capt. Ch. W. Kennedy.
S. S. Republic																		Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																		
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																		
S. S. Braunschweig																		Capt. C. Undütsch.
S. S. Hermann																		Capt. H. Maur.
S. S. Köln, N. 44° 57′, W. 5° 42′	30.07	763.8	26.6	— 3.0		WNW		4-5		10		WNW	Heavy Ra	squalls; in	Cross	WNW	Cloudy	
S. S. Leipzig ‡																		Capt. F. Pfeiffer.
S. S. Ohio																		Capt. G. Meyer.
S. S. Strassburg, N. 50° 51′, E. 0° 58′	30.05	763.3	52.7	11.5		Calm		0		10		E	0	0	Sm'h		Foggy	
SWEDISH MERCHANT-MARINE SERIES.																		
Barque Adolph Fredholm ‡																		Capt. Albert Fredholm.
Ship Pern ‡																		Capt. O. F. Sköterbrand.

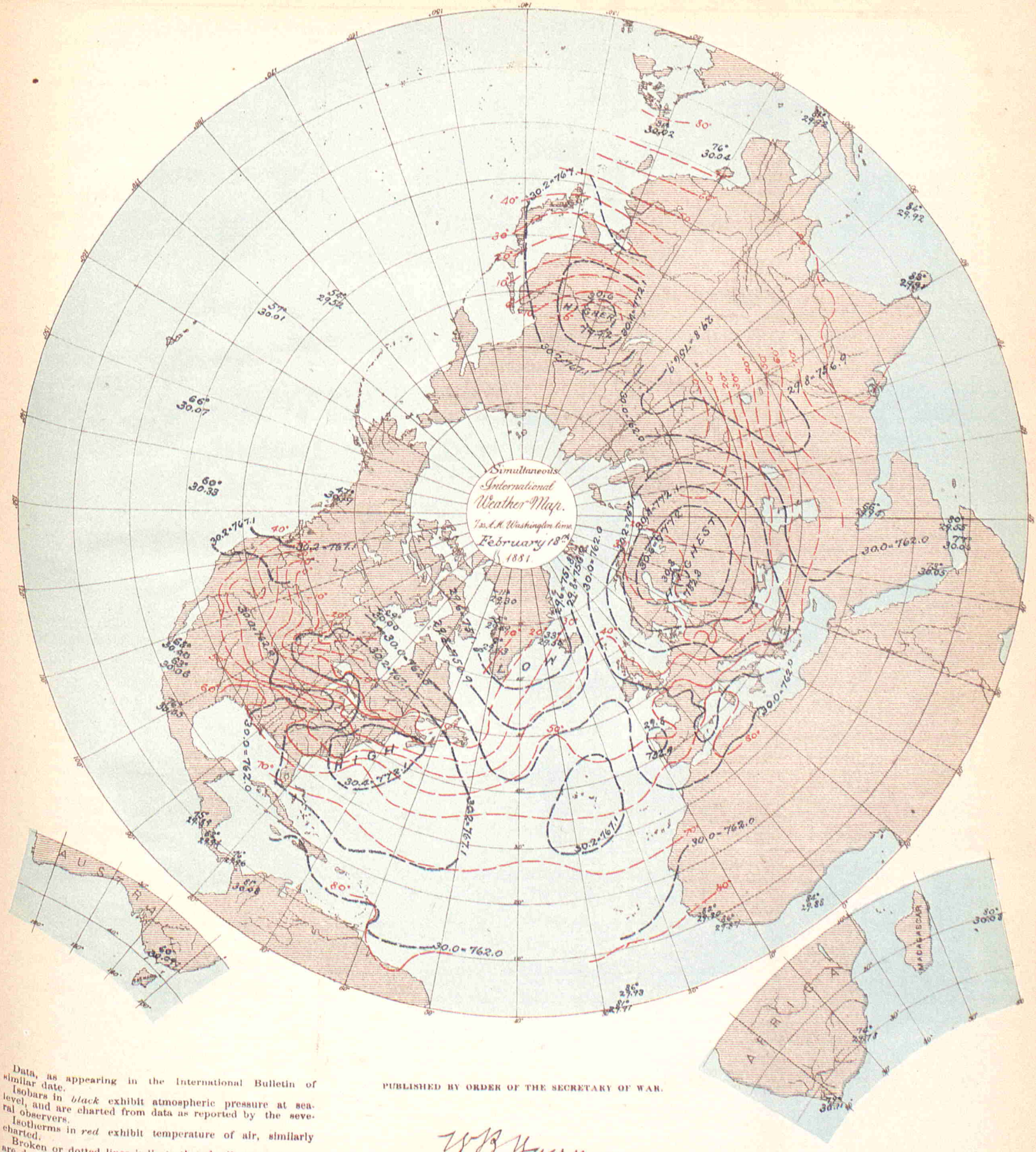
UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England. ...†	29.83	757.7	48	8.9	92	SE	.....	.....	4	.....	10	.....	SE	.....	.....	.....	.....	Cloudy..	Capt. J. W. Shackford
S. S. Indiana, ‡ Philadelphia, Pa.....§†	30.44	773.2	36	2.2	70	W	.....	.....	4	.....	2	.....	W	0	0	Sm'h	.....	Clear.....	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 50° 30′, W. 28° 17′...*†	30.00	762.0	47	8.3	92	SW	.....	.....	6	.....	10	.....	SW	Heavy rain	squalls	L'ge	SW	Rainy	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, N. 41° 00′, W. 65° 38′ ....†	30.43	772.9	41	5.0	65	N	.....	.....	2	.....	2	.....	N	0	0	Sm'h	W	Fair.....	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 23° 38′, W. 108° 21′...†	30.00	762.0	68	20.0	79	NNW	.....	.....	3	.....	8	.....	NNE	0	0	Sm'll	NNW	Fair.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 38° 27′, W. 177° 28′...†	29.52	749.8	54	12.2	61	SW	.....	.....	5	.....	8	.....	WSW	0	0	High Con.	W	Cloudy.... ..	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China.....†*	30.14	765.5	65	18.3	78	E	.....	.....	2	.....	10	.....	E	.....	.....	.....	.....	Overcast.....	Capt. W. H. Kidley.
S. S. Oceanic, N. 32° 15′, W. 167° 41′.....	30.01	762.2	57	13.9	87	WNW	.....	.....	4	.....	5	.....	WNW	0.30	7.6	Mod.	WNW	Fine.....	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Fred. Bolles
S. S. Oregon, N. 42° 55′, W. 124° 45′.....†	30.19	766.8	48.5	9.2	85	SSE	.....	.....	3	.....	10	.....	S	.....	.....	Mod.	SSE	Cloudy.....	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, N. 35° 14′, W. 120° 56′....†	30.14	765.5	54	12.2	93	NW	.....	.....	4	.....	0	.....	.....	.....	.....	Mod.	W	Clear.....	Capt. J. N. Ingalls.
S. S. Idaho, San Francisco, Cal..... †	30.20	767.1	47	8.3	100	Calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	C. E. Lyons, 1st Officer.
S. S. Orizaba..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Senator, N. 36° 10′, W. 121° 54′.... †	30.22	767.6	53	11.7	93	NW	.....	.....	2	.....	0	.....	.....	.....	.....	Mod.	W	Clear.	Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	30.21	767.3	47	8.3	92	N	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	Clear.....	Capt. G. Debney.
S. S. Victoria.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 27° 20′, W. 147° 44′.....	30.07	763.8	69	20.6	100	SE	.....	.....	4	.....	10	.....	.....	.....	.....	Long	E	Hazy.....	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.....†	29.98	761.5	77	25.0	91	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	Clear.....	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 17° 14′, W. 100° 49′....†	30.05	763.3	76	24.4	86	W	.....	.....	4	.....	8	.....	NW	0	0	Sm'll	NW	Cloudy.....	Capt. D. S. Austin.
S. S. City of Peking, N. 22° 47′, E. 114° 50′..*†	30.13	765.3	64	17.8	62	ENE	.....	.....	5	.....	10	.....	S	0	0	Sm'll	.....	Cloudy.....	Capt. G. G. Berry.
S. S. City of Sidney, N. 32° 51′, W. 134° 52′....†	30.33	770.4	60	15.6	65	Calm	.....	.....	0	5c	.....	NW	.....	0	0	Mod.	NW	Fair.....	Capt. H. C. Dearborn.
S. S. City of Tokio.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 9° 48′, W. 85° 51′.....†	29.89	759.2	75	23.9	77	ENE	.....	.....	5	.....	2	.....	Calm	0	0	Mod.	ENE	Clear.....	Capt. R. R. Searle.
S. S. Dakota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. D. E. Griffiths.
S. S. Granada.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Zealandia, Sydney, N. S. W.....	30.13	765.3	75	23.9	68	SSE	.....	.....	2	.....	5	.....	SE	.....	.....	.....	.....	Cloudy.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland.....‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Sam'l Jackson.
S. S. Nederland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. S. Stokes.
S. S. Rhynland, ‡ N. 49° 59′, W. 33° 28′.....	29.41	747.0	50	10.0	.....	SSW	.....	.....	7	.....	10	.....	SSW	0.05	1.3	H'vy	SSW	Overcast.....	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 46° 33′, W. 45° 29′.....	29.92	760.0	.....	.....	.....	NW	.....	.....	7	.....	10	.....	.....	Snow squalls		H'vy	NW	Cloudy.....	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Jacksonville, Florida...†	30.19	766.8	60	15.6	.....	Calm	.....	.....	0	.....	Fog	.....	.....	0	0	.....	.....	Dense fog....	Capt. A. Melhaffey.
Sch'r Addie Fuller, Newport News, Va	30.38	771.6	36	2.2	80	SSE	2	0.9	.....	.....	8k	.....	Calm	0	0	.....	.....	Cloudy.....	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, Martinique, W. I.....†	29.99	761.7	80	26.7	.....	ENE	.....	.....	3	.....	2	.....	NE	0	0	.....	.....	Clear.	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 37° 00′, W. 9° 08′.....†*	30.00	762.0	67	19.4	.....	S	.....	.....	5	.....	8	.....	SW	.....	.....	Long	W	Squally.....	Capt B. F. Woodbury.
Brigantine George, ‡ N. 35° 03′, W. 73° 00′.....†	30.63	778.0	63	17.2	.....	SSE	.....	.....	2	.....	10	.....	S	0	0	Mod.	NE	Cloudy.....	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va†	30.40	772.1	36	2.2	70	SSE	1	0.4	.....	2c	2s	.....	.....	0	0	.....	.....	Clear.	.....
Ship Jumna.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 23° 32′, W. 40° 00′.....†	30.12	765.0	76	24.4	100	ENE	.....	.....	6	.....	5	.....	ENE	0	0	Mod.	NE	Fair.....	Capt. Jos. Hand.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 19, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Velocity.		Force	Clouds. Amount and kind.		Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.00	761.9	61.2	16.2	91	W			2		8			1.240	31.5	Very cloudy	Dr. Ollive.
Nemours			29.81	757.1	63.3	17.4	94	W			7		4			0	0	Cloudy	Raynard.
Algiers			29.91	759.7	69.8	21.0	44	SE			1		9			0	0	Covered	Nicolas.
La Calle			29.90	759.5	62.2	16.8	72	SSE			3		7			0.059	1.5	Very cloudy	Fonfrède.
Tunis			29.88	758.9															Jacques.
Sfax			30.05	763.6															Gau.
Saida			29.93	760.1	55.4	13.0	68	SSE			6		7			Inap.	Inap.	Very cloudy	Damas.
Tebessa			29.95	760.8	55.0	12.8	61	SSE			1		9			0.024	0.6	Covered	Watrin.
Geriville																			Lonchamp.
Laghouat			30.02	762.5	61.2	16.2	51	SW			2		6			0	0	Cloudy	Herbin.
Biskra																			Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.08	764.0	30.17	766.3	61.6	16.4	66	S	10	4.5			8			0	0	Dull	R. L. J. Ellery.
Sun-Series.																			
Hobart Town, Tasmania																			Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.76	755.8	30.34	770.5	36.7	2.6	83	Calm			0		8			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.62	752.3	30.44	773.2	26.2	— 3.2	94	NE	8.7	3.9			2			0	0		Dr. Wiersbicki.
Eperies	29.43	747.5	30.36	771.1	34.2	1.2	66	Calm			0		2cs			0	0		Julius Mikolik.
Gratz‡	29.02	737.2	30.34	770.6	34.3	1.3	89	WSW			2		10			0.035	0.9		Andreas Rospini.
Hermannstadt	28.87	733.3	30.39	772.0	29.1	— 1.6	90	SE			2		5			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.81	731.8	30.22	767.7	32.0	0.0	90	ENE			1		10			0	0		The Staff.
Lemberg	29.45	748.1	30.53	775.5	20.5	— 6.4	69	SE			2		10			0.008	0.2		Dr. T. Stanecki.
Pola	30.23	767.8	30.22	767.7	48.9	9.4	71	SE			1		10			0	0		I. R. HydrographicOffice
Szathmar	29.92	760.0	30.38	771.7	35.6	2.0	65	S			1		1			0	0		Beicht Peter, S. J.
Szegedin	30.20	767.1	30.38	771.7	32.0	0.0	89	SE			1		10			0	0		Karl Stancel.
Trieste	30.15	765.7	30.25	768.3	46.0	7.8	82	Calm			0		10			0	0	Cloudy	P. Busin.
Vienna	29.57	751.0	30.32	770.2	34.7	1.5	71	SE			3		8			0.024	0.6		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.92	759.9	30.13	765.2	34.5	1.4	100	E			1	1		ESE		0	0	Light fog	Royal Observatory
Furnes	30.08	764.1	30.11	764.7	41.5	5.3	92	NE			1		10			0	0	Foggy	M. E. de Cae.
Maeseyck	29.94	760.5	30.07	763.7	41.2	5.1	94	E			2		10			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 22, 1882.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted *snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.24	768.1	30.34	770.6	37.0	2.8	77	SSE	18	8.0			10			0	0	Overcast	W. Boswell.
Armagh, Observatory	29.93	760.2	30.18	766.6	42.2	5.7	88	ESE	7	3.1			10					Overcast	S. Call.
Bidston, Liverpool Obs'y			30.20	767.1	36.7	2.6	85	E	14	6.3			10					Misty	John Hartnup.
Bolton, Sharples	29.66	753.4	30.20	767.1	34.9	1.6	91	SE	6	2.7			10					Overcast	Thomas Mackereth.
Bradford, Yorkshire	29.82	757.4	30.22	767.6	36.9	2.7	92	E			2		10			0.02	0.5	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	82	27.8	69				3		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			30.15	765.8	37.0	2.8	96	E			0.6		10					Foggy	John McLaren.
Chatham, School M. E	30.54	775.7	30.68	779.3	39.1	3.9	93	NW			1		10					Overcast	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.84	757.9	30.08	764.0	44.2	6.8	86	E			4		10					Foggy	The Staff.
Fort Napier, Natal	27.74	704.6	29.96	761.0	66.4	19.1	87	NE			0		8					Overcast	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.88	758.9	85	29 4	87	W			1		3					D. clouds	C. E. Keane.
Galway, Queen's College			30.01	762.2				SE			1		10					Overcast	J. O'Donoghadue.
Gibraltar, Mediterranean	29.86	758.4	29.91	759.7	60.6	15.9	94	WNW			2		6					D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.03	762.7	30.24	768.1	36.1	2.3	89	NE			3							Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.98	761.5	30.16	766.1	37.0	2.8	96	NE			1		10					Overcast	The Staff.
Guernsey	29.78	756.4	30.00	762.0	45	7.2	96	NE			2		10					Misty	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.07	763.8	30.13	765.3	37.0	2.8	88	NE					10					Misty	The Met'g'l Office.
Leicester, Museum	29.87	758.7	30.14	765.5	39.4	4.1	92	NE			2		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.99	761.7	30.07	763.8	60.2	15.7	84	SE			3		6					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	30.02	762.5	30.06	763.5	74.0	23.3	76	S			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.66	753.4	30.20	767.1	34.0	1.1	98	ENE			3		10					Misty	Robert Pate.
Oxford, Radcliffe Obs'y	29.93	760.2	30.19	766.8	35.5	1.9	97	ENE			2		10					Drizzling	The Staff.
Plymouth	30.00	762.0	30.08	764.0	43.8	6.6	90	ENE			4		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.24	768.1	38.8	3.8	84	SSE	42	18.8			7					D. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.31	769.9	30.38	771.6	36.4	2.4	80	NE			3		9					Gloomy	Serg't W. H. Lyne.
Sheffield	29.95	760.7	30.24	768.1	36.1	2.3	93	NE			2		10			0.03	0.8	Overcast	W. F. Cooper.
Silloth Rectory	30.19	766.8	30.21	767.3	42.7	5.9	80	E			6		4			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.22	767.6	36.2	2.3	82	E	13	5.8			10					Overcast	Rev. S. J. Perry.
Strathfield Turgiss	29.92	760.0	30.15	765.8	37.9	3.3	96	SE			1		10					Foggy	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	30.00	762.0	30.06	763.5	46	7.8	77	E			6		10					Gloomy	W. Newcombe.
Valencia, Observatory	30.00	762.0	30.03	762.7	47.9	8.8	90	ESE	21	9.4			10					D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.76	755.9	29.80	756.9	28	— 2.2	100	SE	8	3.6			10n			0.500	12.70	Light snow	H. J. Cundall, C. E.
Chatham, N. B.*	29.72	754.9	29.79	756.7	22.0	— 5.6	96	Calm	0	0			10n			0.19	4.8	Light snow	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	29.77	756.1	29.79	756.7	16	— 8.9	68	SE	1	0.4			10n			0	0	Threatening	J. McWilliams.
Fort Garry, Manitoba*	29.18	741.2	30.10	764.5	2	—16.7	100	NE	4	1.8			Hz			0	0	Hazy	James Stewart.
Fredericton, N. B																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.66	753.4	29.80	756.9	34	1.1	97	SE	10	4.5			10n			0.130	3.30	Heavy rain	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.59	751.6	29.95	760.7	17	— 8.3	97	NW	2	0.9		5c	0			0.38	9.7	Fair	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	29.66	753.4	29.87	758.7	19	— 7.2	84	NW	7	3.1		8c	2s	W		0.20	5.1	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.32	744.7	30.09	764.3	— 1	—18.3	85	Calm	0	0		0	0			0.02	0.5	Fair	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.34	745.2	30.09	764.3	15	— 9.4	98	NW	8	3.6		5c	0	SW		0.40	10.2	Fair	H. Morgan.
Port Stanley, Ontario	29.41	747.0	30.11	764.8	13	—10.6	85	W	9	4.0		0	2ks			0.28	7.1	Clear	M. Payne.
Quebec, Quebec*	29.48	748.8	29.82	757.4	16	— 8.9	83	NW			1	0	5s		NW	0.10	2.5	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.49	749.0	30.00	762.0	0	—17.8	79	NW	2	0.9		0	0			0.05	1.3	Clear	K. Stewart.
Saugeen, Ontario*	29.34	745.2	30.13	765.3	7	—13.9	93	NW	2	0.9		0	0			0.10	2.5	Clear	W. H. McIntyre.
St. Andrews	29.64	752.8	29.70	754.4	32	0.0	97	Calm	0	0			10n			0.43	10.9	Light snow	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.98	761.5	30.02	762.5	28	— 2.2	97	S	13	5.8			10n			0.03	0.8	Light snow	T. C. Hill, C. E.
Toronto, Ontario*	29.66	753.4	30.08	764.0	16	— 8.9	83	NW	5	2.2		0	2s			0.25	6.3	Clear	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.64	752.8	29.71	754.6	37	2.8	99	SW	4	1.8			Fg			0.69	17.5	Heavy rain	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	30.22	767.6	30.49	774.4	17	— 8.3	67	SW	1	0.4			10			0	0	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony					69.0	20.6	83	S	17.1	7.6			2k			0	0	Fine	John Duthie.
Cape St. Francis Lt. House	30.09	764.3																	
Cape Town, C. G. H. Obs'y	30.03	762.7	30.07	763.8	80.0	26.7	53	S	14	6.3		0	10s			0	0		The Staff, for D. Gill.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.21	767.4	30.24	768.1	45.0	7.2	90	NNE	3.4	1.5			10			0.16	4.1	Covered	M. Marc Dechevrens, S J

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

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	25.24	666.5	29.96	761.0	64.0	17.8	90	SE.			3	3d		NE		0	0	Fair	Federico Maison.

DANISH SERIES.

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

Copenhagen	30.46	773.6	30.50	774.8	28.9	—1.7	82	ESE	25	11			2						Oversergent Fischer.
Fanöe	30.41	772.3	30.43	772.8	27.9	—2.3	89	E			6		10						Overloerer Lauridsen.
Godthaab, Greenland	29.49	749.1	29.54	750.2	8.2	—13.2	100	NW			4		10					Snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.26	743.1	29.30	744.2	40.1	4.5	92	S			8		10					Raining	A. O. Thorlacius.
Thorshavn	30.15	765.8	30.19	766.7	43.2	6.2	90	S	22	10			10						Overloerer Bergh.
Vestervig	30.41	772.5	30.51	774.9	28.4	—2.0		ENE			4		10						Locarer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.29	744.0	29.94	760.4	59.4	15.2	70	SSE			1		k		NW	0	0		M. Labroue, Director.
Alençon	29.50	749 4	30.06	763.4	48.9	9.4	89	NE			2		2k		NE	0	0	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.83	757.7	30.10	764.5	40.6	4.8	87	NNE			1		0					Light fog	M. Klein, Commandant.
Avignon, Normal School	30.03	762.8	30.11	764.8	58.6	14.8	60	SE			3		5		SE	0.16	4.	Cloudy	M. Giraud, Director.
Bar-sur-Seine	29.49	749.1	30.05	763.3	53.6	12.0	68	S			1		5			0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.82	757.3	30.09	764.3	45.5	7.5	87	ENE			1		8		ENE	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.21	741.9	30.11	764.9	48.4	9.1	79	E			1		cn		SW	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.67	753.7	29.94	760.4	53.6	12.0	76	SSE			1		10			0	0	Covered	M. Rayet, Director.
Bourges, Normal School	29.38	746.3	29.93	760.3	54.0	12.2	78	SE			1	c			SE	0	0		M. Postel, Director.
Brest, Naval Observatory	29.75	755.6	29.99	761.8	47.5	8.6	97	NE			1		10		SE			Raining	M. de Rermaree, Dir.
Caen, Normal School	29.91	759.8	29.99	761.8	51.1	10.6	93	E			1		10			0	0	Covered	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.78	756.4	30.11	764.7	48.6	9.2	92	E			1		5			0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.59	751.6	30.18	766.5	40.6	4.8	74	SSE			1		10			0	0	Covered	M. Grimard.
Clermont-Ferrand Obs'y	28.64	727.5	29.99	761.8	55.2	12.9	56	S			1		8		S	0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.22	742.3	30.09	764.3	59.7	15.4	80	SE			1		5	E	SE	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.25	742.9	30.14	765.8	40.6	4.8	93	E			1		n		E	0	0	Foggy	Dr. Coulet, Director.
Gap, Normal School	27.50	698.5	30.10	764.6	39.2	4	83	SE			2		2		N	0	0	¼ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	29.02	737.0	30.16	766.0	53.1	11.7	69	SE			3		10		SE	0	0	Covered	M. Kina, Director.
Grenoble, Normal School	29.29	744.0	30.07	763.7	51.8	11	57	NW			1	c				0	0		M. Ablard, Director.
Guéret, Normal School	28.36	720.4	29.95	760.7	52.7	11.5	59	SSE			1		ion		NNW			Light rain	M. Rivoir, Director.
Lamballe, Normal School	29.72	755.0	30.00	762.0	52.7	11.5	83	NNE			1		Mist		NNE	0.20	5.	Misty	M. Ollitrault, Director.
Lesear, Normal School	29.32	744.6	29.98	761.6	55.8	13.2	79	E			1		0			0	0	Clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.88	759.0	29.98	761.6	55.8	13.2	77	E			1		10			0.079	2.0	Covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	29.02	737.1	30.05	763.2	52.3	11.3	71	S			1	5c		SSE	NNW	0	0	Cloudy	M. André, Director.
Mans, Normal School	29.72	755.0	30.04	763.0	50.2	10.1	96	E			1		2	NW	W	0.008	2.0	Slightly cl'dy	M. Piboeu, Director.
Marseille, Observatory	29.82	757.5	30.10	764.4	58.3	14.6	67	ESE			2		9		S	0	0		M. Stephan, Director.
Montlouis l'instituteur																			M. Cave, for Dr. Fines.
Montpellier, Normal School	29.99	761.7	30.10	764.5	54.0	12.2	86	E			3		8		ESE	0.016	0.4	Light rain	M. Galzin, Director.
Nancy, Normal School	29.34	745.3	30.13	765.4	39.2	4.0	97	NW			1		10			0	0	Misty	M. Hasse.
Nantes, Observatory	29.84	757.9	30.00	762.0	59.0	15	89	ENE			1		4ck		SW	0	0		M. Larocque, Director.
Nice	30.12	765.0	30.15	765.9	55.8	13.2	66	E			4		10	E	E			Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.96	759.4	30.00	762.1	55.8	13.2	81	SE	15.0	6.7			7	SW	SE	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.38	568.5			31.1	—0.5							1		S	0	0	Clear	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.04	737.7	30.12	765.1	52.5	11.4	71	S			1		10		S	0	0	Covered	M. Tallien.
Puy de Dôme Obs'y, Summit	25.10	637.5			35.2	1.8	95	S			3		10			0	0	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.93	760.2	29.96	761.0	58.6	14.8	61	ESE			1		2		ESE	0	0	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.78	756.3	29.99	761.8	56.1	13.4	98	E			2		5		SSW	0	0	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.83	706.9	30.00	762.0	48.9	9.4	80	E			4		6n		SW	0	0		M. Richard, Director.
Rouen, Normal School	29.96	761.0	30.05	763.2	49.3	9.6	73	NE			1		5		SE	0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.90	759.4	30.06	763.4	51.1	10.6	95	NE			2		8	SW	NE	0	0	Very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.89	759.2	30.06	763.4	51.1	10.6	75	NNE			1		4	W	SW	0	0	Foggy	M. Renou, Director.
Toulouse, Observatory	29.24	742.8	29.97	761.2	56.5	13.6	70	SSE			3		8			0	0	Very cloudy	M. Baillaud, Director.
Tours	29.80	756.8	29.99	761.8	57.2	14.0	65	SE			1		2		SW	0	0	¼ covered	M. de Tastes.
Versailles, Observatory	29.56	750.7	30.05	763.2	48.9	9.4	81	SE			2		5			0	0	Fair	Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

GERMAN SERIES.

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

Bamberg	29.32	744.8	30.19	766.8	40.6	4.8	70	E			2		7k	E		0.039	1.0		Prof. Dr. Hoh.
Berlin	30.19	766.9	30.38	771.6	27.3	—2.6	81	SE			2		10			0	0		Prof. Dr. Arndt.
Breslau	29.87	758.6	30.41	772.3	25.7	—3.5	76	ESE			2		10			0	0		Royal University Obs'y.
Carlsruhe	29.69	754.0	30.12	765.1	46.8	8.2	72	E			0		5	W		0	0		Albert Senz.
Cassel	29.58	751.3	30.19	766.8	40.3	4.6	74	E			2		10	E		0	0		Dr. H. Möhl.
Frankfort on the Main	29.87	758.8	30.26	768.5	42.1	5.6	72	E			1		9			0	0		Physical Society.
Friedrichshafen	28.67	728.2	30.15	765.7	41.7	5.4	85	W			4		6	W		0	0		Chief Telegrapher Wilhelm.
Hamburg	30.30	769.6	30.37	771.4	28.4	—2.0	92	E			3		10			0	0		Dr. R. Kleeman.
Kiel	30.37	771.4	30.39	771.8	27.0	—2.8	74	E			4		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.85	758.2	30.30	769.5	32.2	0.1	81	ENE			3		8			0.008	0.2		Prof. Dr. Bruhns.
Magdeburg	30.08	764.1	30.32	770.1	46.4	8.0	83	ENE			4		10ks	ENE		0	0	Light fog	Dr. Assmann.
Memel	30.70	779.8	30.75	781.0	23.0	—5.0	41	ESE			3		1s						Reinbrecht & Issermann.
Munich	28.30	718.9	30.17	766.4	33.3	0.7	84	NE			1		9			0	0	Hazy	Central Station.
Neufahrwasser	30.60	777.2	30.61	777.6	21.4	—5.9	72	SE			3		1			0	0		A Lothes.
Neustadt, Palatinate	29.56	750.8	30.09	764.2	44.2	6.8	79	NE			2		7			0	0	Light fog	Dicknether.
Stuttgart	29.15	740.5	30.07	763.6	46.9	8.3	75	N			1		4	W		0	0		Prof. Dr. Schoder.
Thorn	30.30	769.7	30.50	774.6	21.4	—5.9	72	E			3		10			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	28.61	726.6	30.13	765.4	41.2	5.1	74	SE			4		3			0	0		Prof. Kemlein.
Wustrow	30.41	772.5	30.44	773.2	25.7	—3.5	98	E			2		8s			0	0		Profs. Brandes & Reimer.

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

GREEK SERIES.

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

Athens	29.87	758.6	30.27	768.8	47.7	8.7		NE			4.0		5					½ clear	Schmidt & Wourlisch.

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	29.92	760.0	29.98	761.4	77.7	25.4	73	SW	26.0	11.6			5	WNW		0	0	D. clouds	
Deesa	29.48	748.8	29.95	760.8	84.0	28.9	23	WSW					6	W		0	0	D. clouds	
Bombay	29.90	759.5	29.94	760.5	80.5	26.9	72	NW	22.0	9.8			0			0	0	Blue sky	
Poona, Yarrowda	28.05	712.6	29.88	759.0	87.8	31.0	23	SSW	12.0	5.4			3		W	0	0	D. clouds	
Belgaum	27.41	696.3	29.92	759.9	85.1	29.5	13	SW	7.0	3.1			1		W	0	0	D. clouds	
Lahore	29.15	740.4	29.90	759.5	76.9	24.9	38	E	2.0	0.9			8			0	0	Gloomy	
Roorkee	29.04	737.7	29.95	760.6	79.4	26.3	54	Calm	0.7	0.3			7			0	0		
Agra	29.38	746.3	29.94	760.6	86.3	30.2	25	SE	3.0	1.3			0			0	0		
Nagpur	28.89	733.7	29.91	759.8	89.7	32.1	23	SSE	3.6	1.6			8		W	0	0	D. clouds	
Jubbulpore	28.59	726.3	29.97	761.1	79.7	26.5	42	NW	1.4	0.6			3			0	0	D. clouds	
Lucknow	29.59	751.5	29.96	761.0	83.2	28.4	29	ENE	0.8	0.4			0			0	0	Blue sky	
Allahabad	29.64	752.8	29.95	760.8	81.6	27.6	42	Calm	2.1	0.9			0			0	0	Blue sky	
Patna	29.82	757.4	30.00	762.0	76.2	24.6	56	W	0.7	0.3			4	W	W	0	0	D. clouds	
Hazaribagh	27.96	710.1	29.99	761.7	74.8	23.8	31	NNW	6.7	3.0			0			0	0	Blue sky	
Cuttack	29.87	758.7	29.95	760.8	87.7	30.9	42	Calm	0.1	0.04			1			0	0	Blue sky	
Calcutta, Alipore	29.94	760.6	29.97	761.2	80.2	26.8	40	WNW	1.0	0.4			0			0	0	Blue sky	
Goalpara	29.59	751.6	30.00	762.0	74.2	23.4	52	ENE	7.7	3.4			0			0	0	Blue sky	
Chittagong	29.91	759.7	30.00	762.0	76.0	24.4	98	W	3.3	1.5			3			0	0	Blue sky	
Sibsagar	29.70	754.5	30.05	763.2	71.0	21.7	71	NW	1.9	0.8			0			0	0	Blue sky	

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.82	757.4	30.24	768.1	47.1	8.4	54	E	0.7	0.3			8			0	0		Prof. Giovanni Clodig.
Milan	29.69	754.2	30.23	767.8	45.3	7.4	83	WSW	0.7	0.3			10			0	0		Prof. Schiaparelli.
Padua	30.10	764.4	30.21	767.3	48.2	9.0	64	NE	1.3	0.6			10	SW		0.012	0.3		Prof. Dott. Lorenzoni.
Moncalieri	29.34	745.3	30.28	769.0	44.1	6.7	74	E	1.3	0.6			9			0	0		Prof. P. F. Denza.
Genoa	30.00	762.1	30.20	767.1	51.3	10.7	60	N	4.3	1.9			10	NE		0.008	0.2		Prof. G. M. Garibaldi.
Mondovi	28.26	717.7	30.24	768.0	44.2	6.8	68	NW			2		9			0	0		Prof. D. C. Bruno.
Pesaro	30.19	766.9	30.24	768.2	43.7	6.5	95	NW	11.2	5.0			10			0	0		Prof. Luigi Guidi.
Florence	29.91	759.7	30.17	766.3	54.9	12.7	57	NE			2		10			0.024	0.6		Cav. F. Meucci.
Leghorn	30.09	764.2	30.17	766.4	54.3	12.4	65	NE	9.4	4.2			10			0	0		Prof. P. Monte.
Rome	29.97	761.3	30.15	765.8	57.6	14.2	52	Calm	0	0			2			0	0		Prof. P. S. Ferrari.
Lecce	29.95	760.6	30.20	767.1	53.8	12.1	77	WNW	9.4	4.2			10			0.020	0.5		Prof. C. de Giorgi.
Cosenza	29.27	743.5	30.19	766.7	51.4	10.8	71	NE	0.7	0.3			10	ENE		0	0		Prof. D. Conti.
Cagliari	29.85	758.3	30.17	766.3	61.9	16.6	68	SE			2		2			0	0		Prof. A. Pacinotti.
Palermo	29.88	759.0	30.13	765.4	60.4	15.8	70	SE	0.7	0.3			10			0.142	3.6		Prof. G. Ciaccatore.
Syracuse	30.07	763.6	30.11	764.7	58.3	14.6	84	ESE	12.5	5.6			10	E		0.315	8.0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R	29.60	751.9	30.14	765.5	55.4	13.0	69	E	0.7	0.3			8			0	0		Prof. F. Brioschi.
Stelvio	22.21	564.1			23.4	— 4.8	83	SSW			2		18			0	0	Misty	P. F. Denza.
Valdobbia	22.17	563.1			24.8	— 4.0	57	N			2		0			0	0	Misty	

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	29.98	761.5	30.00	762.0	37.6	3.1	91	N	6.9	3.1			10n			0.672	17.07	Raining	K. Sasaki.
Kioto	29.84	757.9	30.02	762.5	38.5	3.6	86						10n			0.570	14.48	Raining	M. Tojima.
Nagasaki, I. M. Obs'y	29.75	755.6	29.95	760.7	47.1	8.4	89	N	11.7	5.2			9s			0.125	3.17	Cloudy	S. Takehayashi.
Tokei Obs'y, Yeddo	30.06	763.5	30.13	765.3	38.9	3.8	77	E	1.8	0.8			10s;n			0.516	12.98	Cloudy	The Staff.
Wakayama	29.89	759.2	29.94	760.5	41.3	5.2	92	E	3.2	1.4			10n			0.448	11.38	Raining	Y. Kuwamura.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.89	759.2	30.08	764.0	80.8	27.1	64	ESE	18.0	8.0		0	4		E	0	0	Squally	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Leon	24.49	622.0	29.78	756.4	59.0	15.0	79	N			1	10cs	0			0.001	0.04	Raining	Prof. M. Leal.
Mazatlan	29.75	755.6	30.01	762.2	65.5	18.6	86	WNW	1.6	0.8		8cs	0	SW		0	0	Cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.17	588.4	30.30	769.5	48.2	9.0	64	Calm	0	0		8ck	0	W		0	0	Cloudy	The Staff.
Pabellon, Aguascallentes																			M. V. de Leon, M. E.
Puebla, Catholic Institute	25.43	595.1	30.33	770.3	45.0	7.2	50	Calm	0	0		0	4		E	0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.28	616.6	30.41	772.3	43.0	6.1	81	SW	0.9	0.4		1	4	W	SE	0	0	Fair	G. Barroeta, M. D.
Tlacotalpam	30.05	763.4	30.07	763.7	67.8	19.9	93	NW	0.9	0.4		1	3	SW	N	0	0	Clear	Prof. M. Cházaro.
Zacatecas	22.60	574.0	30.33	770.4	48.9	9.4	58	Calm	0	0		0	9cs		SSW	0	0	Very cloudy	J. A. Bonilla, M. E.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	30.15	765.7	30.15	765.7	38.5	3.6		ESE			2					0	0		
Groningen	30.20	767.1	30.26	768.5	31.6	— 0.2		E			4					0	0		
Helder	30.20	767.0	30.20	767.0	32.9	0.5		ENE			4					0.134	3.4		
Hellevoetsluis	30.16	766.0	30.16	766.0	38.3	3.5	97	ENE			1					0	0		
Utrecht	30.13	765.4	30.18	766.6	37.9	3.3	80	E			2		10			0	0	Dull	H. van der Brink

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direc-tion.	Wind. Velocity.		Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.48	774.1	30.54	775.7	33.8	1.0	62	Calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Christiania	30.54	775.7	30.70	779.7	28.6	— 1.9	78	ENE	4	2	.....	.....	10	.....	.....	0.012	0.3	Snowing	
Gjæsvær	30.54	775.6	30.56	776.2	35.6	2.0	.....	SW	.....	.....	2	.....	10	.....	.....	.....	.....	.....	
Lodingen	30.56	775.3	30.61	777.5	33.8	1.0	87	Calm	.....	.....	0	.....	10	.....	.....	0.047	1.2	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Raining	Dr. J. A. Sampaio.
Campo Major	28.80	731.6	29.82	757.4	48.6	9.2	94	E	3.1	1.4	.....	.....	10	.....	.....	0.579	14.7	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.08	764.0	30.17	766.3	59.0	15.0	49	WSW	0.7	0.3	.....	.....	8	.....	.....	0.031	0.8	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.47	748.4	29.82	757.5	54.3	12.4	71	SW	3.1	1.4	.....	.....	5	SSE	.....	0.402	10.2	.....	The Staff.
Ponta Delgada, Azores	30.10	764.5	30.17	766.3	57.9	14.4	65	SW	21.0	9.4	.....	.....	10	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.85	732.7	30.10	764.4	—18.0	—27.8	77	NNW	9	4	.....	.....	0	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	30.69	779.4	30.71	779.9	24.1	— 4.4	93	WNW	18	8	.....	.....	10	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	30.74	780.8	30.66	778.7	23.4	— 4.8	62	NE	13	6	.....	.....	0	.....	.....	.....	.....	.....	Capt. Wisganow.
Barnaul	29.35	745.6	29.98	760.2	—18.0	—27.8	64	SW	9	4	.....	.....	3	.....	.....	.....	.....	.....	Meeorological Obs'y.
Dorpat	29.87?	758.6?	30.13?	765.4?	10.8	—11.8	67	ESE	4	2	.....	.....	0	.....	.....	.....	.....	.....	Obervatory.
Ekaterinburg	29.11	739.3	30.17	766.3	2.8	—16.2	75	W	4	2	.....	.....	6cs;s	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	30.28	769.0	30.57	776.5	18.7	— 7.4	81	WNW	4	2	.....	.....	10	.....	.....	.....	.....	Light snow	Observatory.
Kertch	30.45	773.5	30.47	774.0	29.5	— 1.4	76	E	11	5	.....	.....	3	.....	.....	.....	.....	.....	Lagorio.
Kieff	30.03	762.8	30.73	780.6	19.9	— 6.7	81	ENE	9	4	.....	.....	9cks	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	30.48	774.1	30.7c	779.7	21.7	— 5.7	62	ENE	22	10	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	30.33	770.4	30.94	785.9	19.0	— 7.2	84	SSE	4	2	.....	.....	10s	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.98	710.5	30.71	779.9	—27.4	—33.0	81	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	30.52	775.3	30.60	777.1	20.1	— 6.6	68	ENE	13	6	.....	.....	4cs	.....	.....	.....	.....	Light clouds	1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.94	760.4	30.02	762.6	6.8	—14.0	91	W	4	2	.....	.....	10n	.....	.....	.....	.....	Snowing	Lieut. Iwanow.
Nukuss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. Dobrochotow.
Pekin, China	30.13	765.3	30.27	768.9	28.2	— 2.1	41	SW	9	4	.....	.....	0	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	30.91	785.2	30.93	785.6	20.1	— 6.6	89	SSE	4	2	.....	.....	10n	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.43	722.2	30.05	763.2	43.7	6.5	87	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.93	734.7	30.38	771.7	47.7	8.7	55	SE	9	4	.....	.....	2k	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	30.09	764.2	30.54	775.8	21.7	— 5.7	72	ESE	16	7	.....	.....	4ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	30.35	770.8	30.81	782.6	19.0	— 7.2	69	E	2	1	.....	.....	5	.....	.....	.....	.....	Light clouds	Berg, Assistant.
Yeniseisk	29.37	746.0	29.69	754.0	2.7	—16.3	74	SW	4	2	.....	.....	0	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	30.29	769.4	36.9	2.7	87	E	.....	.....	2	.....	10s	.....	.....	0	0	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.13	765.3	44	6.7	92	SSE	.....	.....	4	.....	10	.....	.....	0	0	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	30.42	772.7	.....	.....	.....	S	.....	.....	6	.....	10	.....	.....	Blank		.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.91	759.7	30.02	762.4	56.1	13.4	81	E	3.8	1.7	.....	.....	9	.....	.....	0	0	Almost cov'd	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.85	758.2	29.91	759.6	65.5	18.6	53	SE	2.5	1.1	.....	1	8	SW	.....	0	0	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.91	683.5	.....	.....	50.9	10.5	64	SE	9.8	4.4	.....	0	8	.....	.....	0	0	Cloudy	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.61	701.2	29.82	757.5	55.2	12.9	71	E	14.8	6.6	.....	.....	10	.....	.....	0	0	Covered	The Staff.
Murcia, Met. Obs'y ‡	29.70	754.4	29.85	758.2	62.6	17.0	72	SE	17.4	7.8	.....	4	5	W	.....	0	0	Almost cov'd	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.87	733.2	29.75	756.0	51.3	10.7	90	SW	0	0	.....	.....	10	.....	.....	0.130	3.3	Covered	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.06	763.4	30.12	765.1	66.5	19.2	88	Calm	0	0	.....	2ck	1s	SSE	.....	0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.97	761.2	30.02	762.5	81.4	27.4	73	SE	5.5	2.5	.....	.....	.....	.....	.....	0	0	Fair	Federico Faura, S. J
San Fernando, Naval Obs'y	29.71	754.5	29.81	757.1	52.5	11.4	94	NW	5.8	2.6	.....	.....	10	.....	NW	1.655	42.0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.01	762.2	30.10	764.5	73.0	22.8	92	SW	0	0	.....	3k	3km	SW	SW	0	0	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.91	759.8	30.06	763.5	79.7	26.5	72	NNW	2.5	1.2	.....	.....	7ks	.....	N	0	0	Covered	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.67	779.0	30.71	780.0	23.7	— 4.6	95	SW	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	30.76	781.4	30.82	782.7	23.0	— 5.0	90	SW	.....	.....	2	.....	10	.....	.....	0	0	.....	
Hernosand	30.80	782.2	30.85	783.5	22.8	— 5.1	88	S	.....	.....	2	.....	10	.....	.....	0	0	.....	
Stockholm	30.61	777.4	30.78	781.9	25.9	— 3.4	78	ENE	.....	.....	2	.....	10	.....	.....	0	0	.....	
Wisby	30.61	777.4	30.67	778.9	27.7	— 2.4	79	SE	.....	.....	2	.....	10	.....	.....	0	0	.....	
Sub-Series.																			
Upsala	30.68	779.3	30.77	781.5	22.5	— 5.3	83	ESE	4.0	1.8	.....	.....	10	.....	ESE	0	0	.....	Nils Ekholm.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.68	728.5	30.14	765.5	44.8	7.1	65	N	.....	.....	1	.....	7	.....	.....	0	0	Vapory	The Observatory.
Zurich	28.47	723.0	30.15	765.9	39.6	4.2	82	W	.....	.....	2	.....	5	.....	.....	0	0	Foggy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. +2.5 mm.; Ther. +3°.0 cent.; Hum. —5 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.43	772.8	34.9	1.6	74	N	22	10.0	.....	.....	10	.....	N	0	0	.....	The Observatory.
Valona	.....	.....	30.15	765.8	58.6	14.8	.....	W	.....	.....	1	.....	5	.....	.....	0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.13	765.4	56.5	13.6	60	NNW	.....	.....	1	1c	.....	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.71	754.6	29.80	756.9	38	3.3	81	S	1	0.4			10s		Calm	0.19	4.8	Cloudy	
Alpena, Michigan	29.49	749.0	30.22	767.6	— 5	—20.6	63	NW	7	3.1		0	0			0.03	0.8	Clear	
Atlanta, Georgia	28.82	732.0	29.96	761.0	55	12.8	80	NW	14	6.3		0	8s		NW	0.46	11.7	Cloudy	
Atlantic City, New Jersey	29.74	755.4	29.75	755.6	45	7.2	100	N	4	1.8			10n;fg		Calm	0.90	22.9	Light rain	
Attou Id., Alaska ‡	29.33	745.0			33	0.6	89	NE	19	8.5			10s		NE	0.06	1.5	Cloudy	
Augusta, Georgia	29.78	756.4	29.98	761.5	62	16.7	94	S	3	1.3			10n		Calm	0.15	3.8	Light rain	
Baltimore, Maryland	29.75	755.6	29.80	756.9	45	7.2	84	NW	5	2.2		0	8s		N	1.77	45.0	Clearing	
Barnegat, New Jersey	29.71	754.6	29.73	755.1	43	6.1	100	W	4	1.8			10n		NW	1.76	44.7	Light rain	
Benton, Montana	27.09	688.1			28	— 2.2	77	W	17	7.6			10s		Calm	0	0	Cloudy	
Bismarck, Dakota	28.00	711.2	29.86	758.4	6	—14.4	85	SE	3	1.3		2cs	0	Calm		0	0	Fair	
Boise City, Idaho	27.34	694.4	30.30	769.6	27	— 2.8	82	W	1	0.4			10s		NW	Inap.	Inap.	Cloudy	
Boston, Massachusetts	29.56	750.8	29.72	754.9	37	2.8	100	NW	7	3.1			10n;fg		NW;C	0.75	19.0	Light rain	
Brackettville, Texas	29.08	738.6	30.20	767.1	34	1.1	70	N	2	0.9		Hz	0	Calm		0	0	Hazy	
Brownsville, Texas	30.12	765.0	30.17	766.3	55	12.8	93	NE	8	3.6		8c	0	Calm		0	0	Fair	
Buffalo, New York	29.29	744.0	30.03	762.7	23	— 5.0	86	NW	6	2.7			10s		Calm	0.55	14.0	Cloudy	
Burlington, Vermont	29.58	751.3	29.89	759.2	22	— 5.6	86	N	15	6.7			10n		N	0.12	3.0	Light snow	
Cairo, Illinois	29.92	760.0	30.34	770.6	29	— 1.7	91	N	16	7.2			10s		NW	0.36	9.1	Cloudy	
Campo, California	27.53	699.2	30.10	764.5	28	— 2.2	88	E	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.28	692.9			42	5.6	83	SE			2		10ks		Calm	0	0	Cloudy	
Cape Henry, Virginia	29.78	756.4	29.80	756.9	65	18.3	78	S	20	8.9			10s		SW	0	0	Threatening	
Cape May, New Jersey																			
Castroville, Texas	29.46	748.3	30.21	767.3	36	2.2	71	NW	6	2.7		10c	0	Calm		0	0	Cloudy	
Cedar Keys, Florida	30.09	764.3	30.11	764.8	63	17.2	89	S	11	4.9		5c	0	Calm		0	0	Fair	
Champaign, Illinois	29.38	746.2	30.26	768.6	13	—10.6	62	NW	7	3.1		0	0			0.03	0.8	Clear	
Charleston, S. Carolina	29.99	761.7	30.05	763.3	60	15.6	94	SW	12	5.4		0	8s		SW	0	0	Cloudy	
Charlotte, N. Carolina	29.04	737.6	29.83	757.7	57	13.9	94	SW	10	4.5			10n		SW	1.01	25.7	Light rain	
Chattanooga, Tennessee	29.22	742.2	30.03	762.7	49	9.4	78	NW	11	4.9			10ks		NW	0.84	21.3	Cloudy	
Cheyenne, Wyoming	23.91	607.3	29.85	758.2	27	— 2.8	53	NW	32	14.3		0	0			0	0	Clear	
Chicago, Illinois	29.48	748.8	30.24	768.1	11	—11.7	60	NW	2	0.9		0	0			0.06	1.5	Clear	
Chincoteague, Virginia	29.74	755.4	29.76	755.9	43	6.1	100	SW	43	19.2			10n		SW	0.21	5.3	Heavy rain	
Cincinnati, Ohio	29.47	748.5	30.15	765.8	32	0.0	79	NW	8	3.6			10s		Calm	0.62	15.7	Cloudy	
Cleveland, Ohio	29.37	746.0	30.15	765.8	19	— 7.2	85	N	10	4.5		2cs	0	W		0.27	6.9	Clear	
Coleman City, Texas	28.48	723.4	30.29	769.4	24	— 4.4	74	N	6	2.7		0	0			0	0	Clear	
Columbus, Ohio	29.22	742.2	30.10	764.5	27	— 2.8	76	NW	12	5.4		2cs	0	Calm		0.75	19.0	Clear	
Concho, Texas	28.34	719.8	30.16	766.1	23	— 5.0	86	NW	1	0.4		2c	0	Calm		0	0	Fair	
Corsicana, Texas	29.90	759.4	30.41	772.4	28	— 2.2	66	N	8	3.6		0	0			0.40	10.2	Clear	
Davenport, Iowa	29.60	751.8	30.34	770.6	— 4	—20.0	82	W	1	0.4		0	0			0	0	Clear	
Dayton, Washington T'y	28.42	721.9	30.15	765.8	33	0.6	89	S	2	0.9			10s		Calm	0.06	1.5	Cloudy	
Deadwood, Dakota	25.20	640.1			31	— 0.6	69	SW	5	2.2		2cs	0	Calm		0	0	Fair	
Decatur, Texas	29.10	739.1	30.37	771.4	23	— 5.0	86	N	8	3.6		0	0			0.07	1.8	Clear	
Delaware Breakwater, Del.	29.76	755.9	29.79	756.7	42	5.6	100	N	5	2.2			10n		N	0.50	12.7	Heavy rain	
Denison, Texas	29.51	749.5	30.38	771.6	24	— 4.4	87	N	8	3.6			10s		Calm	0.20	5.1	Cloudy	
Denver, Colorado	24.75	628.6	29.97	761.2	16	— 8.9	66	N	3	1.3		0	0			0	0	Clear	
Des Moines, Iowa	29.37	746.0	30.39	771.9	— 3	—19.4	66	Calm	0	0		0	2s		Calm	0.03	0.8	Clear	
Detroit, Michigan	29.44	747.8	30.18	766.6	20	— 6.7	92	W	6	2.7		0	0			0.29	7.4	Clear	
Dodge City, Kansas	27.50	698.5	30.03	762.7	8	—13.3	55	NW	1	0.4		0	0			0	0	Clear	
Dubuque, Iowa	29.55	750.6	30.34	770.6	— 1	—18.3	84	Calm	0	0		0	Fg		Calm	0	0	Fair	
Duluth, Minnesota	29.40	746.7	30.15	765.8	9	—12.8	78	SW	2	0.9		0	5s		Calm	0	0	Fair	
Eagle Pass, Texas	29.52	749.8	30.29	769.4	40	4.4	73	NW	10	4.5		Hz	0	Calm		0	0	Light haze	
Eagle Rock, Idaho	25.36	644.1	30.01	762.2	19	— 7.2	85	Calm	0	0			10ks		NW	0.04	1.0	Cloudy	
Eastport, Maine	29.63	752.6	29.70	754.4	34	1.1	100	S	1	0.4			10n		Calm	0.33	8.4	Light snow	
Edinburg, Texas																			
El Paso, Texas	26.30	668.0			34	1.1	61	E	4	1.8		2c	0	Calm		0	0	Clear	
Erie, Pennsylvania	29.31	744.5	30.07	763.8	22	— 5.6	86	N	14	6.3			10s		Calm	0.36	9.1	Cloudy	
Escanaba, Michigan	29.48	748.8	30.22	767.6	— 3	—19.4	66	N	1	0.4		0	0			0	0	Clear	
Florence, Arizona	28.55	725.2	30.15	765.8	37	2.8	63	Calm	0	0		0	0			0	0	Clear	
Fort Apache, New Mexico	25.03	635.8	30.48	774.2	34	1.1	79	Calm	0	0		2ck	8s	W	Calm	0	0	Cloudy	
Fort Assiniboine, Montana	27.00	685.8			24	— 4.4	74	SW	6	2.7			10s		Calm	0	0	Cloudy	
Fort Bennett, Dakota																			
Fort Buford, Dakota	27.78	705.6	29.76	755.9	8	—13.3	78	Calm	0	0		10cs	0	W		0	0	Cloudy	
Fort Custer, Montana	26.73	678.9			24	— 4.4	88	Calm	0	0		0	0			0	0	Clear	
Fort Davis, Texas	25.26	641.6	30.22	767.6	26	— 3.3	75	NE	2	0.9		0	0			0	0	Clear	
Fort Elliott, Texas	27.43	696.7	29.93	760.2	13	—10.6	44	SW	6	2.7		10cs	0	SW		0.11	2.8	Cloudy	
Fort Gibson, Indian T'y	29.79	756.7	30.38	771.6	24	— 4.4	87	NW	8	3.6			10s		N	0.25	6.3	Cloudy	
Fort Grant, Arizona	25.20	640.1	30.00	762.0	43	6.1	36	N	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas	28.95	735.3	30.32	770.1	23	— 5.0	73	NW	4	1.8		0	0			0	0	Clear	
Fort Keogh, Montana	27.34	694.4			22	— 5.6	72	Calm	0	0		0	0			0	0	Clear	
Fort McKavett, Texas	27.96	710.2	30.03	762.7	25	— 3.9	87	NE	2	0.9		0	0			0	0	Clear	
Fort Macon, North Carolina	29.97	761.2	29.98	761.5	56	13.3	94	SW	20	8.9			10s;fg		SW;C	0	0	Cloudy	
Fort St. Michaels	30.21	767.3	30.24	768.1	— 2	—18.9	100	NE	2	0.9		0	0						
Fort Missoula, Montana	26.76	679.7			14	—10.0	82	S	1	0.4		8k	0		S	0.20	5.1	Cloudy	
Fort Shaw, Montana	26.24	666.5			25	— 3.3	75	W	12	5.4		5cs	0	Calm		0	0	Fair	
Fort Sill, Indian Territory	29.04	737.6	30.25	768.3	19	— 7.2	69	Calm	0	0		0	0			0.05	1.5	Clear	
Fort Stevenson, Dakota	27.96	710.2			7	—13.9	88	S	1	0.4		Hz	0	S		0	0	Dense haze	
Fort Verde, Arizona					27	— 2.8	76	N			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.50	723.9	30.16	766.1	32	0.0	89	N	7	3.1		4cs	0	Calm		0	0	Fair	
Galveston, Texas	30.20	767.1	30.24	768.1	41	5.0	82	N	25	11.2		0	5ks		N	0.02	0.5	Fair	
Grand Haven, Michigan	29.51	749.5	30.24	768.1	3	—16.1	100	Calm	0	0		0	0			0	0	Clear	
Hatteras, North Carolina	29.91	759.7	29.94	760.5	54	12.2	100	S	28	12.5			10s		S	0	0	Cloudy	
Helena, Montana	25.70	652.8			28	— 2.2	43	S	16	7.2		2c	0	Calm		0	0	Fair	
Henrietta, Texas	29.30	744.2	30.32	770.1	22	— 5.6	58	NW	7	3.1		0	0			Inap.	Inap.	Clear	
Indianapolis, Indiana	29.35	745.5	30.17	766.3	26.5	— 3.1	75	N	6	2.7		0	4ks		NW	0.12	3.0	Fair	
Indianola, Texas	30.20	767.1	30.23	767.8	42	5.6	74	N	26	11.6			10s		Calm	0.01	0.3	Cloudy	
Jacksboro, Texas	29.12	739.6	30.36	771.1	24	— 4.4	74	N	6	2.7		0	1s		N	0.02	0.5	Clear	
Jacksonville, Florida	30.05	763.3	30.10	764.5	63	17.2	89	S	10	4.5		2cs	0	Calm		0	0	Clear	
Keokuk, Iowa	29.61	752.1	30.34	770.6	6	—14.4	76	W	3	1.3		0	0			Inap.	Inap.	Clear	
Key West, Florida	30.12	765.0	30.15	765.8	72	22.2	90	E	4	1.8		0	2ks		SE	0.04	1.0	Fair	
Kittyhawk, North Carolina	29.85	758.2	29.88	758.9	61	16.1	88	S	32	14.3			10ks		SW	0	0	Cloudy	
Knoxville, Tennessee	28.99	736.3	30.00	762.0	50	10.0	86	W	8	3.6			10s		W	1.28	32.5	Cloudy	
La Crosse, Wisconsin	29.44	747.8	30.28	769.1	— 3	—19.4	66	S	8	3.6		0	0			0	0	Clear	
La Mesilla, New Mexico	26.17	664.7	30.32	770.1	31	— 0.6	58	Calm	0	0		5ck	2s	SW	Calm	0	0	Cloudy	
Laredo, Texas	29.84	757.9	30.20	767.1	42	5.6	91	N	8	3.6		0	0			0	0	Clear	
Leavenworth, Kansas	29.41	747.0	30.37	771.4	0	—17.8	70	NW	1	0.4		0	0			0	0	Clear	
Lewiston, Idaho	29.39	746.5	30.08	764.0	25	— 3.9	60	NE	1	0.4		2k	0	Calm		Inap	Inap	Clear	
Little Rock, Arkansas	29.96	761.0	30.30	769.6	33	0.6	79	NW	12	5.4			10s		Calm	1.73	43.9	Cloudy	
Los Angeles, California	29.77	756.1	30.14	765.5	49	9.4	78	NW	10	4.5		0	0			0	0	Clear	
Louisville, Kentucky	29.58	751.3	30.17	766.3	30	— 1.1	78	N	9	4.0			10s		N	0.54	13.7	Cloudy	
Lynchburg, Virginia	29.12	739.6	29.80	756.9	48	8.9	85	Calm	0	0		5k	0	SW		0.36	9.1	Fair	
Madison, Wisconsin	29.15	740.4	30.25	768.3	5	—15.0	75	W	3	1.3		0	0			0	0	Clear	
Marquette, Michigan	29.38	746.2	30.16	766.1	9	—12.7	57	W	5	2.2		0	0			0	0	Clear	
Mason, Texas	28.63	727.2	30.52	775.2	28	— 2.2	77	NW	4	1.8		2cs	0	NW		0	0	Fair	

UNITED STATES SERIES—CONTINUED.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Memphis, Tennessee	29.92	760.0	30.28	769.1	33	0.6	89	NW	4	1.8	.....	.....	10s	.....	Calm	1.58	40.1	Cloudy	
Milwaukee, Wisconsin	29.44	747.8	30.24	768.1	8	—13.3	78	W	7	3.1	.....	0	1s	.....	Calm	0	0	Clear.	
Mobile, Alabama	30.01	762.2	30.09	764.3	60	15.6	88	NW	9	4.0	.....	0	8s	.....	W	0.03	0.8	Fair	
Montgomery, Alabama	29.86	758.4	30.10	764.5	57	13.9	81	NW	14	6.3	.....	0	9ks	.....	W	0.39	9.9	Clearing	
Moorhead, Minnesota	28.96	735.6	30.01	762.2	0	—17.8	85	S	14	6.3	.....	.....	10s	.....	S	0	0	Cloudy	
Morgantown, W. Virginia	28.93	734.8	29.94	760.5	38	3.3	81	N	11	4.9	.....	.....	10n	.....	Calm	1.35	34.3	Light snow	
Mt. Washington, N. H.	23.29	591.6	29.65	753.1	13	—10.6	100	NW	46	20.6	.....	.....	10n;fg	.....	C;NW	0.63	16.0	Light snow.	
Nashville, Tennessee	29.63	752.6	30.19	766.8	35	1.7	90	W	8	3.6	.....	.....	10n	.....	W	2.57	65.3	Light rain	
New Haven, Connecticut	29.61	752.1	29.73	755.1	37	2.8	95	Calm	0	0	.....	.....	10n;fg	.....	Calm	1.07	27.2	Light rain	
New London, Connecticut	29.68	753.9	29.73	755.1	40	4.4	100	SW	2	0.9	.....	.....	10n	.....	SW	2.50	63.5	Heavy rain	
New Orleans, Louisiana	30.06	763.5	30.12	765.0	58	14.4	82	NW	11	4.9	.....	0	8s	.....	NW	0.09	2.3	Fair	
Newport, Rhode Island	29.66	753.4	29.71	754.6	41	5.0	100	Calm	0	0	.....	.....	10n;fg	.....		1.86	47.2	Heavy rain	
New River, N. Carolina	...	...	.....	.....	58	14.4	100	SW	.....	.....	6	.....	10s	.....	SW	.....	.....	Cloudy	
New Shoreham, Rhode I'd	29.71	754.6	29.74	755.4	41	5.0	100	NW	9	4.0	.....	.....	10n	.....	NW	1.13	28.7	Light rain	
New York, New York	29.58	751.3	29.76	755.9	38	3.3	100	NW	1	0.4	.....	.....	10n;fg	.....	Calm	1.22	31.0	Light rain	
Norfolk, Virginia	29.68	753.9	29.73	755.1	65	18.3	84	SW	26	11.6	.....	.....	10n	.....	Calm	0.15	3.8	Heavy rain	
North Platte, Nebraska	27.08	687.8	29.89	759.2	5	—15.0	75	W	8	3.6	.....	2c	0	W	.....	0	0	Clear.	
Olympia, Washington T'y	30.18	766.6	30.22	767.6	38.0	3.3	91	S	7	3.1	.....	0	8s	.....	W	0.08	2.0	Cloudy	
Omaha, Nebraska	29.03	737.3	30.27	768.8	0	—17.8	85	S	6	2.7	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Oswego, New York	29.61	752.1	29.95	760.7	26	— 3.3	82	N	12	5.4	.....	.....	10s	.....	N	0.67	17.0	Cloudy	
Pensacola, Florida	30.07	763.8	30.10	764.5	63	17.2	89	NW	3	1.3	.....	0	9ks	.....	NW	0.14	3.6	Cloudy	
Philadelphia, Pa	29.70	754.4	29.76	755.9	41	5.0	91	N	5	2.2	.....	.....	10s	.....	NW	1.78	45.2	Cloudy	
Phœnix, Arizona	28.96	735.6	30.85	783.6	37	2.8	63	W	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Pike's Peak, Colorado	17.56	446.0	29.77	756.1	0	—17.8	39	W	49	17.9	.....	2cs	0	Calm	.....	0	0	Clear.	
Pilot Point, Texas	29.54	750.3	30.46	773.7	22	— 5.6	86	N	6	2.7	.....	0	2s	.....	Calm	0.12	3.0	Fair	
Pioche, Nevada	24.08	611.6	29.85	758.2	23	— 5.0	60	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	29.13	739.9	29.97	761.2	31	— 0.6	100	W	8	3.6	.....	.....	10n	.....	Calm	0.62	15.7	Light snow.	
Port Huron, Michigan	29.44	747.8	30.17	766.3	11	—11.7	80	NW	6	2.7	.....	0	0	.....	.....	0.28	7.1	Clear	
Portland, Maine	29.70	754.4	29.75	755.0	31	— 0.6	89	NW	5	2.2	.....	.....	10n	.....	Calm	0.62	15.7	Light snow.	
Portland, Oregon	30.22	767.6	30.30	769.6	37.5	3.1	95	NW	1	0.4	.....	.....	Fg	.....	Calm	0.15	3.8	Dense fog	
Portsmouth, N. Carolina	.....	.....	.....	.....	58	14.4	100	SW	28	12.5	.....	.....	10n	.....	SW	0.18	4.6	Light rain	
Prescott, Arizona	24.80	629.9	30.16	766.1	22	— 5.6	58	N	1	0.4	.....	5ck	0	SW	.....	0	0	Fair	
Punta Rassa, Florida	30.12	765.0	30.13	765.3	65	18.3	94	E	5	2.2	.....	2c	Hz	Calm	Calm	Inap.	Inap.	Fair	
Red Bluff, California	29.92	760 0	30.28	769.1	43.0	6.1	92	N	3	1.3	.....	2cs	0	Calm	.....	0	0	Clear	
Rio Grande City, Texas	30.13	765.3	30.36	771.1	52	11.1	73	N	10	4.5	.....	10ck	0	Calm	.....	0	0	Cloudy	
Rochester, New York	29.36	745.7	30.01	762.2	26	— 3.3	88	N	8	3.6	.....	.....	10n	.....	Calm	0.69	17.5	Light snow.	
Roseburg, Oregon	29.73	755.1	30.32	770.1	39.5	4.2	91	SW	5	2.2	.....	6c;ck	0	NW	.....	0	0	Fair	
Sacramento, California	30.18	766.6	30.26	768.6	46	7.8	92	SE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
St. Louis, Missouri	29.69	754.1	30.31	769.9	21	— 6.1	93	NW	10	4.5	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
St. Paul, Minnesota	29.25	742.9	30.18	766.6	— 1	—18.3	68	SE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Salt Lake City, Utah	25.76	654.3	30.09	764.3	29	— 1.7	45	Calm	0	0	.....	7cs	0	Calm	.....	Inap.	Inap.	Fair	
San Antonio, Texas	29.58	751.3	30.33	770.4	34	1.1	79	N	4	1.8	.....	4cs	0	Calm	.....	0.01	0.3	Fair	
San Diego, California	30.08	764.0	30.16	766.1	46	7.8	84	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Sandusky, Ohio	29.44	747.8	30.16	766.1	20	— 6.7	70	NW	15	6.7	.....	0	5s	.....	Calm	0.52	13.2	Fair	
Sandy Hook, New Jersey	29.72	754.9	29.76	755.9	36	2.2	100	N	3	1.3	.....	.....	10n	.....	Calm	1.41	35.8	Light rain	
San Francisco, California	30.21	767.3	30.28	769.1	49	9.4	85	N	2	0.9	.....	0	Fg	.....	Calm	0	0	Clear	
Santa Fé, New Mexico	23.27	591.0	29.81	757.2	22	— 5.6	72	N	8	3.6	.....	0	Hz	.....	Calm	Inap.	Inap.	Clear	
Savannah, Georgia	29.96	761.0	30.05	763.3	62	16.7	88	S	7	3.1	.....	2cs	8ks	W	SW	0	0	Cloudy	
Shreveport, Louisiana	30.07	763.8	30.33	770.4	36	2.2	80	N	10	4.5	.....	.....	10s	.....	Calm	0.43	10.9	Cloudy	
Silver City, New Mexico	24.28	616.7	30.69	779.5	31	— 0.6	79	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Smithville, North Carolina	30.00	762.0	30.03	762.7	60	15.6	93	S	22	9.8	.....	.....	10s	.....	S	0.10	2.5	Cloudy	
Socorro, New Mexico	25.56	649.2	29.62	752.3	34	1.1	79	NE	3	1.3	.....	.....	10s	.....	NE	0	0	Cloudy	
Springfield, Illinois	29.59	751.6	30.34	770.6	14	—10.0	73	NW	4	1.8	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Springfield, Massachusetts	29.62	752.3	29.76	755.9	37	2.8	90	Calm	0	0	.....	.....	10n	.....	Calm	0.39	9.9	Light rain	
Stockton, Texas	27.14	689.3	30.14	765.5	26	— 3.3	88	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.11	739.4	29.98	761.5	4	—15.6	74	E	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Thatcher's Island, Mass	29.68	753.9	29.74	755.4	34	1.1	100	N	12	5.4	.....	.....	10n	.....	NW	0.45	11.4	Light rain	
Toledo, Ohio	29.44	747.8	30 17	766.3	25	— 3.9	87	W	5	2.2	.....	0	0	.....	.....	0.29	7.4	Clear	
Tucson, Arizona	27.56	700.0	30.11	764.8	45	7.2	68	NW	1	0.4	.....	.....	8s	.....	W	0	0	Cloudy	
Umatilla, Oregon	29.92	760.0	30.46	773.7	18	— 7.8	92	NW	3	1.3	.....	0	5s	.....	NW	Inap.	Inap.	Fair	
Uvalde, Texas	29.30	744.2	30.18	766.6	36	2.2	71	N	4	1.8	.....	2c	0	Calm	.....	0	0	Clear	
Vicksburg, Mississippi	29.96	761.0	30.23	767.8	45	7.2	92	N	16	7.2	.....	.....	10n	.....	NW	0.16	4.1	Light rain	
Visalia, California	29.87	758.7	30.26	768.6	44	6.7	84	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	29.69	754.1	29.80	759.9	41	5.0	91	NW	4	1.8	.....	2ck	2s	SW	SW	1.05	26.7	Clearing	
Wickenburg, Arizona	.....	.....	.....	.....	34	1.1	70	W	.....	.....	1	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	29.93	760.2	29.98	761.5	64	17.8	94	SW	20	8.9	.....	.....	10s	.....	Calm	0.10	2.5	Cloudy	
Winnemucca, Nevada	25.73	653.5	30.09	764.3	30	— 1.1	78	SW	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass	29.63	752.6	29.67	753.6	41	5.0	91	NW	7	3.1	.....	.....	10n	.....	NW	1.55	39.4	Light rain	
Yankton, Dakota	28.71	729.2	30.16	766.1	— 1	—18.3	68	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Yuma, Arizona	29.94	760.5	30.09	764.3	51	10.6	59	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.07	560.6	.....	.....	52.5	11.4	79	Calm	0	0	.....	2cs	0	.....	.....	0	0	Fair	Thomas Herman.
Buff Bay Town, Jamaica.‡	29.89	759.2	30.21	767.3	68	20.0	90	E	.....	.....	.....	2k	5k	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	30.08	764.0	30.13	765.3	71	21.7	79	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	Charles Hasselbrink.
Jakobshavn, Greenland	29.46	748.2	29.52	749.7	— 3.6	—19.8	.....	NW	.....	.....	6	.....	3	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I.	30.07	763.8	30.08	764.0	70.9	21.6	77	Calm	0	0	.....	0	2s	.....	E	0.08	2.0	.....	Robert Johnstone
Navassa, W. I.	29.98	761.5	30.06	763.5	73	22.8	72	E	15	6.7	.....	.....	10s	.....	NE	Inap.	Inap.	Raining	F. M. Everett.
Paramaribo, S. A.	29.95	760.7	29.95	760.7	79	26.1	78	E	.....	.....	2	3c	4k	.....	.....	0	0	Clear	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	746.2	29.94	760.5	79	26.1	85	Calm	.....	.....	0	0	5s	.....	Calm	0	0	Hazy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	73.4	23	.....	E	.....	.....	3	0	7ks	.....	E	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.08	764.0	30.11	764.8	74	23.3	72	NNE	6	2.7	.....	0	0	.....	.....	0	0	Clear	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	29.45	748.0	29.51	749.0	—12.3	—24.6	.....	Calm	.....	.....	0	.....	2	.....	.....	0	0	.....	K. Elberg.
York Factory, B. A.	29.98	761.5	30.03	762.7	—24.0	—31.1	.....	NW	14	6.3	.....	1c	0	NW	.....	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.08	764.0	62.5	16.9	83	E			3		6	E						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 28° 59′, E. 50° 50′	29.94	760.5	65	18.3	94	NW			4		9	NW				4	NW	D. clouds	Comm. G. Haud.
H. M. S. Bittern, Constantinople, Turkey			35	1.7		NE			2-3		8	NE				2	NE	D. clouds	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	30.12	765.0	74	23.3	81	SSW			1-2		10					2	SSW	Overcast	Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Nagasaki, Japan	30.05	763.3	49	9.4	85	N			2	ck	4							D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser, Syracuse, Sicily	30.15	765.8	57	13.9		ESE			1		3	ESE						D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa, Shanghai, China	30.11	764.8	50	10.0	93	NNW			2		10							Overcast	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.33	770.4	61	16.1	82	S			1-2		6	S						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 81° 34′ E. 81° 14′	29.91	759.7	81.5	27.5		NNE			1		3	N				1	NE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria																			Capt. W. H. Maxwell.
H. M. S. Emerald																			Comm. C. Johnstone.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.91	759.7	80	26.7	74	NW			3-4		0							Squally	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Bridgetown, Barbadoes	30.01	762.2	78	25.6		ENE			2		3	ENE				Sm'h		D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, N. 23° 05′, W. 69° 26′	30.17	766.3	78	25.6	78	E			3		2					2	E	D. clouds	Capt. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Panama, Panama	29.91	759.7	76	24.4	82	NW			4		3							Misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 50′, W. 58° 56′	29.74	755.4				S			1									Blue sky	Capt. L. F. Jones.
H. M. S. Griffon																			Capt. J. Inglis.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 14° 06′, E. 112° 27′	29.98	761.5	77	25.0	100	SE			1		0					Sm'h		Blue sky	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Africa	29.92	760.0	78	25.6	86	S			1		8	S						Raining	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 40′, E. 122° 30′	30.20	767.1	47.3	8.5	92	NNW			2-4		10			Blank		2	SE	Dense mist	Capt. R. H. Napier.
H. M. S. Malabar																			Capt. J. F. G. Grant.
H. M. S. Minataur, N. 42° 05′, W. 9° 00′	29.79	756.7	57.5	14.2	91	ESE			3		5	W				4	W	D. clouds	Capt. H. Rawson.
H. M. S. Modeste, N. 10° 17′, E. 103° 51′	29.94	760.5	82	27.8	79	E			2		2					2		D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Ayas Bay, Turkey, Asia	30.19	766.8	58	14.4	88	Calm			0		0					Sm'h		Blue sky	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Off Pt. Royal, Jamaica, W.I.	30.04	763.0				NW			1		0							Blue sky	Capt. E. Drummond.
H. M. S. Orontes, N. 48° 13′, W. 9° 10′	29.95	760.7	51.5	10.8	90	ESE			3		10					2	W	D. clouds	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, N. 4° 72′, W. 1° 29′	29.89	759.2	80	26.7	?	Calm			0		5	SE				Sm'h		D. clouds	Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.00	762.0	77	25.0	100	Calm			0		10							Raining	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	29.80	756.9	55	12.8	93	Calm			0		5							D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.59	751.6	79	26.1	91	E			1–2		1					1	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	29.97	761.2	70	21.1	92	SSE			2		8	NE				1	SW	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos, N 12° 03′, W. 61° 45′	30.01	762.2	78	25.6	78	ENE			1		3					1	N	D. clouds	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, N. 37° 03′, E. 15° 18′	30.16	766.1	59.5	15.3	94	ESE			3		9					3	ESE	Showery	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo Bay, Chili, S.A	29.95	760.7	61.5	16.4	91	NNW			1		10							Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I	30.02	762.5	73	22.8		Calm			0		0							Blue sky	Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, Palestine	30.11	764.8	62.5	16.9	47	N			1–2		2	N						D. clouds	Capt. F. Negham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, N. 11° 50′, W. 16° 30′	29.90	759 4	81.3	27.4	80	N			2		0					2		Blue sky	S. C. da Silva Costa, Comd't.
Sado. St. Paul de Loando, Africa	29.91	759.8	85.6	29.8	75	WNW			3		3		NW	¾	hour	1	NW	D' clouds	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡																			Com. Th. Ulner.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.21	767.3	56	13.3	81	NW	6	2.7			8		SW	0.16	4.1			Fair	
N. Yard, Portsmouth, N. H.	29.75	755.6	32	0.0	100	NW	2	0.9		10c		NW		0	0			Cloudy	
Naval Hospital, Yokohama, Japan	30.01	762.2	39.5	4.2	82	Calm			0		10		W	0.01	0.2			Raining	
Adams, Panama, Panama	29.94	760.5	77	25.0	86	NW			2		8		NW			Sm'h		Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.20	767 1	49	9.4	85	Calm			0		0			0	0			Clear	
Alert, Hong-Kong, China *	29.93	760.2	70	21.1	90	Calm			0		10		Calm	0	0			Hazy	
Alliance, New Orleans, La	30.12	765.0	60	15.6	88	NW			1		8		W	Light		Sm'h		Cloudy	
Ashuelot, Tientsin, China	30.30	769.6	27	— 2.8	100	SE			2		8		W					Fair	
Colorado, New York, N. Y	29.92	760.0	38	3.3	100	Calm	0	0			10			0.05	1.3			Snowing	
Constitution, N. Yard, League I'd., Pa	29.71	754.6	41	5.0	91	NW	1	0.4			10		W					Drizzling	
Franklin, Norfolk, Va	29.76	755.9	66	18.9	79	SW	17	7.6			10		W	0	0			Cloudy	
Galena, N. 37° 21′, E. 18° 26′	30.13	765.3	59	15.0	76	SE			3		2		SE			Mod.		Fair	
Independence, N. Yard, Mare I'd, Cal.	30.24	768.1	46	7.8	100	NW	6.0	2.7			0			0	0			Clear	
Jamestown, Sitka, Alaska *	29.78	756.4	38	3.3	90	SSE			2		10			0.32	8.1			Drizzling	
Kearsarge, New Orleans, La	30.08	764.0	61	16.1	77	NW			2		8		W			Sm'h		Hazy	
Marion, Sandy P't, Terra del Fuego	29.78	756.4	49	9.4	71	WNW			1		10		Calm			Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	30.04	763.0	22	— 5.6		N	5	2.2			10							Cloudy	
Minnesota, New York, N. Y	29.80	756.9	40	4.4	100	Calm			0		10							Overcast	
Monocacy, Shanghai, China	30.18	766.6	46	7.8	92	NNE			2		10		Calm					Overcast	
New Hampshire, Port Royal, S. C	30.07	763.8	58	14.4	88	S	12	5.4			8		SW	0	0			Cloudy	
Nipsic, Valencia, Spain	29.94	760.5	58	14.4	88	E			3		10		E			Sm'h		Overcast	
Onward, Callao, Peru †	29.91	759.7	70	21.1	95	SSE			2		8					Long	N;W	Cloudy	
Palos, Shanghai, China	30.25	768.3	46	7.8	92	NNE			1		10							Overcast	
Passaic, Washington, D. C	29.95	761.0	43	6.1	83	SW			1		10		Calm					Cloudy	
Pensacola, Panama, Panama	29.93	760.2	75	23.9	95	NW			2		5			0	0	Sm'h		Fair	
Powhatan, New York, N. Y	29.79	756.7	38	3.3	91	SSE			1		10							Rain & fog	
Quinnebaug, Villafranca, France	30.14	765.5	56	13.3	69	ESE			1		8		S			Sm'h		Cloudy	
Richmond, Hong-Kong, China	30.09	764.3	67	19.4	100	Calm			0		0			0	0			Misty	
Saratoga, Baltimore, Md	29.74	755.4	42	5.6	100	NNE			2		8		Calm	Heavy				Cloudy	
Shenandoah, Montevideo, Uruguay *	30.28	769.1	68	20.0	70	NNE			2		8		N			Sm'h		Fair	
St. Louis, League Island, Pa	29.89	759.2	39	3.9	100	Calm	0	0			10			1.875	47.63			Rain & fog	
Swatara, Nagasaki, Japan †	29.87	758.7	50	10.0	86	N			2		10		Calm			Sm'h		Raining	
Tennessee, New Orleans, La	30.23	767.8	59	15.0	88	NW	10	4.5			8		WSW	0.04	1.0	Sm'h		Cloudy	
Ticonderoga, N. Yard, Mare Id., Cal.	30.27	768.8	49	9.4	93	SSW			1		0			0	0			Clear	
Trenton, Toulon, France *	30.06	763.5	63	17.2	62	E			2		10			0	0			Cloudy	
Vandalia, St. John, Antiqua, W. I.	30.05	763.3	79	26.1	82	ENE			2		8		N					Fair	
Wabash, Boston, Massachusetts	29.78	756.4	39	3.9	82	NNW	6	2.7			10		Calm	0.87	22.1			Rain & fog	
Wachusetts, Panama, Panama *	29.57	751.1	76	24.4	91	NW			3		5		N			Sm'h		Fair	
Wyoming, Villafranca, France	30.16	766.1	56	13.3	69	ESE			1		10		Calm			Sm'h		Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-Swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
N. 2° 30′, W. 27° 15′	29.93	760.2	95°	35.0°	60	NNE			1		1							Blue sky	Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 17° 02′, W. 56° 18′	30.07	763.8	77.5	25.3	78	NE			5		6							D. clouds	Capt. A. J. Brown.
British Merchant, ‡																			Capt. E. J. Molony.
Chin Yang, ‡																			
N. 7° 24, W. 55° 26′	29.97	761.2	79.2	26.2	74	ENE			4		10							Showery	Capt. H. Youlden.
S. S. Cipero,																			
N. 25° 10′, W. 49° 30′ †	30.27	768.8	70	21.1		ENE			4		2					4	ENE	Blue sky	Capt W. N. Lailey.
City of Agra, ‡																			
S. 6° 02′, W. 31° 38′	29.96	761.0	85.3	29.6	80	ESE			4		3							D. clouds	Capt. T. Young.
Barque Commewyne, ‡																			
N. 42° 04′, W. 37° 50′	30.12	765.0	44.5	6.9	80	WNW			5		8							Hailing	Capt. W. Scott.
Barque Coppenname																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
S. 3° 15′, W. 20° 30′	29.94	760.5	80	26.7	82	SE			2		10							Overcast	Capt. H. Spalding.
Ship Ellen Stuart,																			
S. 0° 25′, E. 88° 00′	29.96	761.0	81.5	27.5	83	SSE			3		6							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia, ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope ‡																			Capt. Jas. Campbell.
Ship Iron Cross,																			
N. 49° 38′, W. 9°	30.01	762.2	49.5	9.7		E			5		9					6	NW	Gloomy	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 26° 58′, W. 68° 19′	30.26	768.6	69.5	20.8	92	ENE			6		9							Misty	Capt. H. W. Dyke.
Barque Merlola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Loe ‡																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven ‡																			Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton,																			
N. 11° 00′, E. 51° 50′	29.95	760.7	80	26.7	82	SE			2		2							Blue sky	Capt. R. J. Blacklin.
S. S. Yorkshire,																			
N. 30° 20′, W. 35° 00′	30.22	767.6	65	18.3	89	W			3		5					1.	NNE	D. clouds	
ALLAN LINE.																			
A. Schumacher & Co.																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE.																			
Ch. G. Francklyn.																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE.																			
Ismay, Imrie & Co.																			
S. S. Adriatic,																			
N. 48° 48′, W. 31° 58′ †	29.70	754.4	45	7.2		W			4		8		W			R'gh	SW	Showery	Capt. J. W. Jennings.
S. S. Baltic,																			
N. 51° 23′, W. 10° 02′ †	30.00	762.0	50	10.0	72	Var.			3		10					Swell	NW	Misty	Capt. H. Parsell.
S. S. Britanic																			Capt. H. Perry.
S. S. Celtic,																			
N. 41° 02′, W. 66° 42′ †	29.82	757.4	48	8.9		S			6		10		WSW	0	0	Mod.	NW	Overcast	Capt. Benj. Gleadell.
S. S. Germanic,																			
New York, N. Y. †	29.79	756.7	37	2.8		W			1		10		W	8 hours				Hazy	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen.																			
A. Schumacher & Co.																			
S. S. Hermann																			Capt. H. Baur.
S. S. Köln, ‡																			
N. 43° 35′, W 55° 40′	30.36	771.1	32	0.0		S			2		9		S	Sh'rs	light	Mod.	S	Cloudy	
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg,																			
N. 50° 03′, W. 4° 32′	30.10	754.5	46.4	8.0		E			4-5		10		ESE	0	0	Mod.	ENE	Hazy	
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			Capt. Albert Fredholm.
Ship Pern ‡																			Capt. O. F. Skötdelrand.

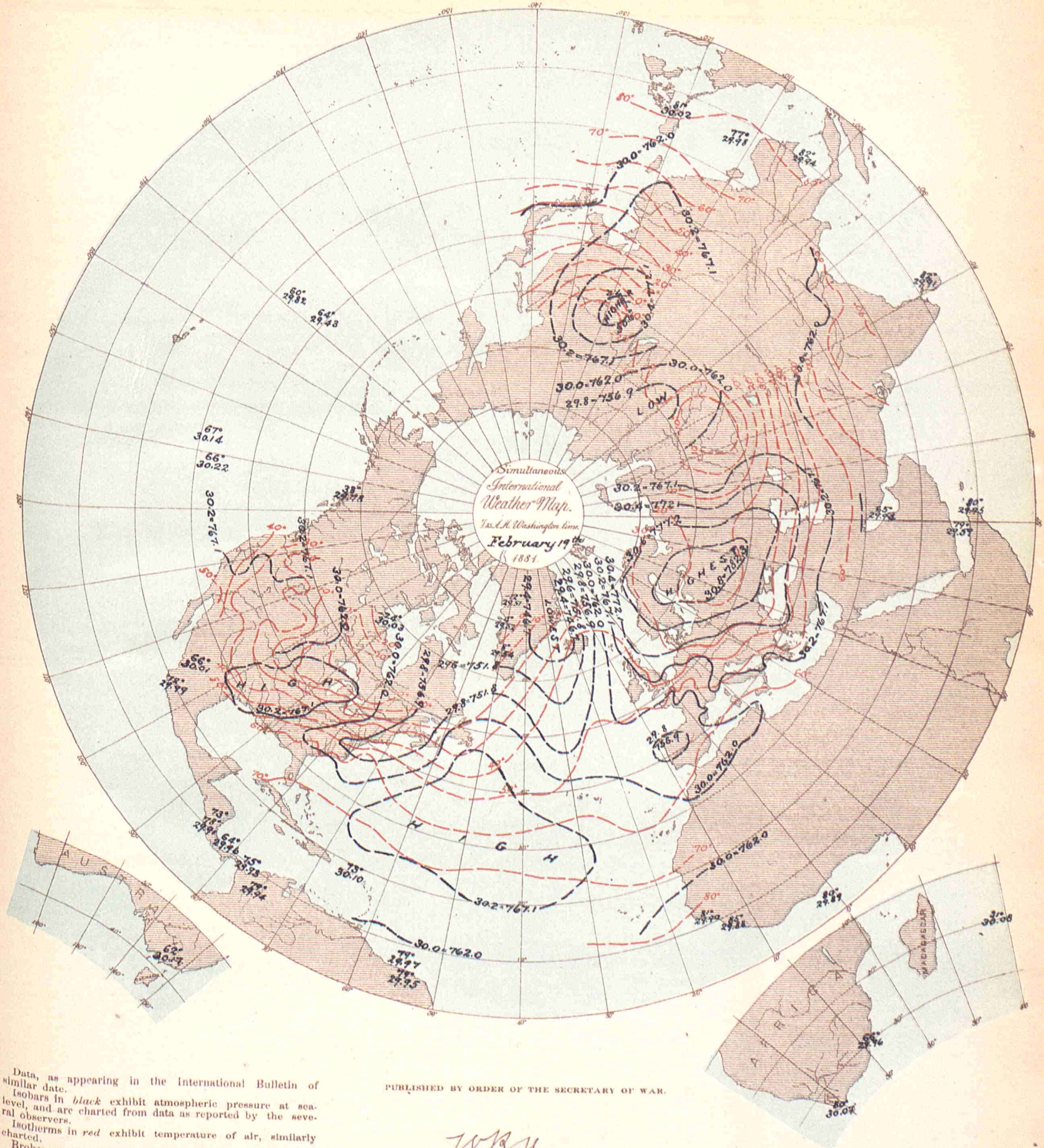
UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. ‡ Liverpool, England.....*	30.07	763.8	46	7.8	92	E			3		8		E					Cloudy.....	Capt. J. W. Shackford.
S. S. Indiana. ‡ Philadelphia, Pa.....†	30.28	769.1	42	5.6	83	SE			3		8		SE	0	0	Sm'h		Cloudy.....	Capt. R. W. Sargent.
S. S. Ohio, N. 50° 51′, W. 19° 57′...†*	29.90	759.4	50	10.0	93	S			6		5		S	Sho	wers	Mod.	S	Fair.....	Wm. Shakford, 1st Off'r
S. S. Pennsylvania, N. 43° 00′, W. 59° 17′....†	30.05	763.3	38	3.3	90	S			6		10		W	0.25	6.3	Sm'h	S	Cloudy.....	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, Mazatlan, Mexico.....†	29.98	761.5	65	18.3	94	N			1		5		N	0	0	Sm'll	WSW	Fair.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 38° 32′, W. 171° 40′ ....†	29.43	747.5	64	17.8	78	SW			3		8		WSW	Driz	zles	Mod.	W	Cloudy	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China.....*†	30.14	765.5	69	20.6	75	Calm			0		10		E					Overcast.....	Capt. W. H. Kidley.
S. S. Oceanic, N. 32° 18′, W. 171° 04′.....	29.82	757.4	60	15.6	88	SW			6		8		WSW	0.12	3.0	Con.	SW; WNW	Squally.....	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia.....																			Capt. Fred. Bolles.
S. S. Oregon, N. 38° 23′, W. 123° 20′....†	30.23	767.8	53.5	11.9	90	SE			2		5		SE					Fair	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, N. 33° 44′, W. 118° 26′....†	30.11	764.8	54	12.2	93	SE			2		0					Mod.	W	Clear.....	Capt. J. N. Ingalls.
S. S. Idaho, ‡ San Francisco, Cal.....†	30.24	768.1	46	7.8	100	N			1		0							Clear.....	C. E. Lyons, 1st Officer.
S. S. Orizaba.....																			
S. S. Senator, San Francisco, Cal.....†	30.34	770.6	49	9.4	93	SE			1		2		SE					Clear.....	Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	30.29	769.4	49	9.4	93	NE			2		8			0	0			Light fog....	Capt. G. Debney. J. C. Hunter, 1st Officer.
S. S. Victoria.																			
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 30° 02′, W. 142° 42′.....	30.14	765.5	67	19.4	95	SE			3		10					Sm'h	SE	Hazy.....	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.....†	29.95	761.0	76	24.4	91	Calm			0		0			0	0			Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Manzanillo, Mexico ....†	29.99	761.7	72	22.2	85	Calm			0		10		NW	0	0	Sm'll	W	Overcast....	Capt. D. S. Austin.
S. S. City of Peking, N. 24° 18′, E. 118° 46′.....†	30.18	766.6	61	16.1	61	E			2		10		SW	0	0	Sm'h		Cloudy.....	Capt. G. G. Berry.
S. S. City of Sidney, N. 31° 01′, W. 139° 35′....†	30.22	767.6	67	18.9	79	SE			3	5c		SE		0	0	Long	NW	Fair.....	Capt. H. C. Dearborn. A. L. Ritchie, 2d Officer.
S. S. City of Tokio.....																			
S. S. Colima, N. 9° 52′, W. 84° 48′.....†	29.91	759 7	78	25.6	73	WNW			2		9			0	0	Sm'll	SE	Clear.	Capt. R. R. Searle. Capt. D. E. Griffiths.
S. S. Dakota.....																			
S. S. Granada.....																			
S. S. Zealandia, Sydney, N. S. Wales.....	30.25	768.3	73	22.8	72	S			2		0							Fine.....	
RED STAR LINE. *Jas. A. Wright, President.*																			Capt. Sam'l Jackson.
S. S. Belgenland..... ‡																			Capt. S. Stokes.
S. S. Nederland..... ‡																			
S. S. Rhyland; ‡ N. 49° 04′, W. 37° 30′.....	29.83	757.7	46	7.8	.....	NNW			6		10		NNW	0.2	5.	Long	NW	Snowing.....	Capt. W. Geo. Randle.
S. S. Vaderland, N. 47° 36′ W. 38° 47′.....	30.04	763.0	.....	.....	.....	NNW			6		8		NW	Sn squ	ow alls	R'gh	NW	Cloudy.....	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, ‡ Jacksonville, Florida...†	30.04	763.0	65	18.3	.....	SW			1		0			0	0			Fine.....	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va.....	29.77	756.1	55	12.8	100	SW	20	8.9	.....		10n		SW	0.01	0.3			Threatening	Capt J. Jorgensen.
Sch'r Annie R. Lewis, Martinique, W. I..... ..†	29.97	761.2	74	23.3	.....	ENE			5		10		E	Sho	wers			Raining	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 37° 46′, W. 9° 03′.....†*	29.99	761.7	67	19.4	.....	Calm			0		5		W			R'gh	NW	Threatening	Capt. B. F. Woodbury.
Brigantine George, ‡ N. 37° 40′, W. 73° 15′.....†	30.03	762.7	65	18.3	.....	S			7		10		SW	0	0	Very h'vy	S	.....	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va.†	29.96	761.0	67	19.4	84	SSW	5	2.2	.....		10n			1.30	33.0			Raining	
Ship Jumna.....																			Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 23° 27′, W. 42° 58′.. ..†	30.22	767.6	74	23.3	100	E			6		5		ENE	Hea	vy	Mod.	NE	Fair.....	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 20, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.05	763.2	62.6	17.0	78	W			2		2			0.217	5.5	Fair	Dr. Ollive.
Nemours			29.80	757.0	60.3	15.7	91	N			4		0			0.055	1.4	Clear	Raynard.
Algiers			29.85	758.2	61.5	16.4	94	WNW			2		10			0.693	17.6	Covered	Nicolas.
La Calle			29.99	761.7	65.1	18.4	59	S			6		6			0	0	Cloudy	Fonfréde.
Tunis			30.02	762.6															Jacques.
Sfax			30.11	764.8															Gau.
Saida			29.89	759.2	45.3	7.4	85	W			4		10			0.276	7.0	Covered	Dumas.
Tebessa			30.04	763.1	54.3	12.4	61	SE			6		8			0.035	0.9	Very cloudy	Watrin.
Geriville																			Lonchamp.
Laghouat			29.92	759.9	46.0	7.8	81	ESE			2		6			0.969	24.6	Cloudy	Herbin.
Biskra																			Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.04	763.0	30.13	765.3	60.1	15.6	81	Calm	0	0			0			0	0	Very fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania																			Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.82	757.5	30.40	772.2	37.0	2.8	80	NE			1		10			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.65	753.0	30.47	773.8	28.4	—2.6	88	ENE	8.7	3.9			1			0	0		Dr. Wiersbicki.
Eperies	29.50	749.4	30.43	772.9	35.6	2.0	65	Calm			0		0			0	0		Julius Mikolik.
Gratz‡	29.08	738.7	30.41	772.3	32.9	0.5	78	SSW			1		10			0	0		Andreas Rospini.
Hermannstadt	28.96	735.5	30.49	774.4	29.7	—1.3	88	ESE			2		1			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.85	732.8	30.27	768.8	31.3	—0.4	92	ENE			3		10			0	0		The Staff.
Lemberg	29.50	749.4	30.58	776.6	21.4	—4.2	52	SE			2		2			0	0		Dr. T. Stanecki.
Pola	30.16	766.0	30.27	768.9	52.0	11.1	79	SW			1		10			0	0		I. R. HydrographicOffice.
Szathmar	30.01	762.2	30.47	773.9	33.4	0.8	81	W			2		0			0	0		Beicht Petér, S. J.
Szegedin	30.18	766.5	30.48	774.2	28.9	—1.7	94	S			2		10			0	0		Karl Stancel.
Trieste	30.21	767.3	30.31	769.9	50.7	10.4	65	Calm			0		10			0	0		P. Busin.
Vienna	29.61	752.2	30.37	771.4	31.8	—0.1	83	SE			4		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.92	760.0	30.13	765.3	42.3	5.7	87	NE			1		10			0.055	1.4	Light fog	Royal Observatory.
Furnes	30.09	764.2	30.11	764.8	39.7	4.3	89	NE			2		10			0.102	2.6		M. E. de Cae.
Maeseyck	30.00	762.0	30.13	765.2	45.2	7.2	75	ENE			2		7			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 21, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.35	770.9	30.45	773.4	34.1	1.2	83	SE	18	8.0			10			0.020	0.51	Snowing	W. Boswell.
Armagh, Observatory	30.05	763.3	30.29	769.4	38.0	3.3	89	E	9	4.0									S. Call.
Bidston, Liverpool Obs'y			30.27	768.8	37	2.8	79	E	22	9.8			10					Overcast	John Hartnup.
Bolton, Sharples	29.73	755.1	30.28	769.1	34.8	1.6	87	ENE	12	5.4			10					Overcast	Thomas Mackereth.
Bradford, Yorkshire																0.02	0.5		J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	83	28.3	60				2		3					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			30.20	767.1	36.4	2.4	98	NE			0.6		10					Foggy	John McLaren.
Chatham, School M. E.	30.05	763.3	30.18	766.6	39.1	3.9	93	SE			2		10			Bla	nk	Overcast	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.89	759.2	30.12	765.0	42.5	5.8	92	E			3		10					Foggy	The Staff.
Fort Napier, Natal	27.74	704.6	29.96	761.0	74.1	23.4	76	NE			1		6?					Overcast ?	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	87	30.6	88	W			1		3					D. clouds	C. E. Keane.
Galway, Queen's College								NE			1		10					Overcast	J. O'Donaghadue.
Gibraltar, Mediterranean	29.94	760.5	29.99	761.7	62.6	17.0	92	SSE			2		3					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.16	766.1	30.36	771.1	35.9	2.2	80	ENE			5		10k					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	30.01	762.2	30.19	766.8	38.0	3.3	99	NE			1		10					Overcast	The Staff.
Guernsey	29.84	757.9	30.07	763.8	45	7.2	92	NE			2		10					Misty	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.16	766.1	30.20	767.1	38.0	3.3	92	NNE	13	5.8			10					Drizzling	The Met'g'l Office.
Leicester, Museum	29.99	761.7	30.26	768.6	35.5	1.9	94	NE			2		10			Bla	nk	Overcast	J. E. Carryer.
Malta, Mediterranean	30.09	764.3	30.17	766.3	61.2	16.2	69	SE			3		7					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	30.10	764.5	30.15	765.8	71.0	21.7	95	SE			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.70	754.4	30.25	768.3	34.0	1.1	98	ENE			4		10					Snowing	Robert Pate.
Oxford, Radcliffe Obs'y	29.97	761.2	30.22	767.6	36.2	2.3	95	NNE			2		10					Raining	The Staff.
Plymouth	29.99	761.7	30.07	763.8	43.3	6.3	87	ENE			3		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.40	772.1	37.7	3.2	88	S	32	14.3			10					Misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.28	769.1	30.35	770.9	43.8	6.6	61	NE			3		7			Bla	nk	D. clouds	Serg't W. H. Lyne.
Sheffield	30.01	762.2	30.30	769.6	34.3	1.3	100	NE			1		10			0.01	0.3	Overcast	W. F. Cooper.
Silloth Rectory	30.31	769 9	30.34	770.6	37.0	2.8	78	E			6		10			0	0	Overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.30	769.6	35.1	1.7	82	E	14	6.3			10					Overcast	Rev. S. J. Perry.
Strathfield Turgiss	30.00	762.0	30.23	767.8	39.0	3.9	90	NE			2		10					Overcast	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	30.04	763.0	30.10	764.5	44	6.7	84	ENE			6		10					Gloomy	W. Newcombe.
Valencia, Observatory	30.14	765.5	30.16	766.1	44.2	6.8	78	E	13	5.8			10					Misty	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.25	768.3	30.30	769.6	10	—12.2	92	N	12	5.4		0	2s			0.330	8.38	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.30	769.6	30.37	771.4	— 6	—21.1	92	Calm	0	0		0	0			0.01	0.3	Clear	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.39	771.9	30.41	772.4	5	—15.0	83	N	8	3.6		0	0			0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.17	740.9	30.11	764.8	— 9	—22.8	91	SW	7	3.1			1cn			0	0	Cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.18	766.6	30.32	770.1	16	— 8.9	72	NW	8	3.6		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.01	762.2	30.38	771.6	7	—13.9	91	NE	4	1.8		5c	0	Calm		0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.24	768.1	30.47	773.9	4	—15.6	72	NE	8	3.6		10c	0			0	0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	29.52	749.8	30.29	769.4	8	—13.3	78	S	12	5.4		5ks	5ks	S	S	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.58	751.3	30.37	771.4	— 3	—19.4	100	Calm	0	0			Fg			0	0	Foggy	H. Morgan.
Port Stanley, Ontario	29.62	752.3	30.36	771.1	— 3	—19.4	100	E	5	2.2			Fg		E	0	0	Foggy	M. Payne.
Quebec, Quebec*	30.09	764.3	30.46	773.7	— 5	—20.6	63	W			1		Fg			0	0	Foggy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.87	758.7	30.40	772.1	7	—13.9	80	E	2	0.9		Hz	0			0	0	Hazy	K. Stewart.
Saugeen, Ontario*	29.46	748.3	30.24	768.1	11	—11.7	88	SE	15	6.7		2cs	0			0	0	Clear	W. H. McIntyre.
St. Andrews	30.34	770.6	30.39	771.9	6	—14.4	78	N	2	0.9		0	0			0.08	2.0	Clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.13	765.3	30.17	766.3	16	— 8.9	73	NW	4	1.8		0	0			0.54	13.7	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.94	760.5	30.37	771.4	9	—12.8	76	N	6	2.7		5cs	0			0	0	Fair	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.25	768.3	30.32	770.1	19	— 7.2	86	N	6	2.7		5k	0	N		0.53	13.5	Fair	Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. John's, Newfoundland	29.69	754.1	29.95	760.7	27	— 2.8	82	NW	1	0.4		2k	5s			0	0	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape St. Francis Lt. House	30.05	763.3			70.0	21.1	88	SE	5.3	2.4			0			0	0	Fine	John Duthie.
Cape Town, C. G. H. Obs'y	29.86	758.4	29.90	759.4	100	37.8	27	S	17.4	7.8		0	1s			0	0		The Staff, for D. Gill.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	30.10	764.5	30.12	765.1	44.2	6.8	94	ESE	1.3	0.6			0			0	0	Clear	M. Marc Dechevrens, S J

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.26	667.0	29.98	761.5	64.4	18.0	97	Calm			0	8d				0	0	Cloudy	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.43	773.0	30.48	774.2	27.1	—2.7	92	ESE	18	8			10					Snowing	Oversergent Fischer.
Fanöe	30.41	772.4	30.43	772.9	25.9	—3.4	80	ENE			6		10						Overloerer Lauridsen.
Godthaab, Greenland	29.48	748.9	29.53	750.0	18.3	—7.6	100	SSE			4		10					Snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.89	759.1	29.93	760.2	28.0	—2.2	79	W			4		2						A. O. Thorlacius.
Thorshavn	30.23	767.9	30.27	768.8	43.2	6.2	93	SSW	22	10			10					Raining	Overloerer Bergh.
Vestervig	30.43	773.0	30.53	775.4	25.7	—3.5		NE			6		9						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.32	744.6	29.96	761.0	59.0	15	75	SE			1		10n k	W	NW	0	0	Covered	M. Labroue, Director.
Alençon	29.51	749.6	30.06	763.6	45.3	7.4	84	NE			2		2k		NE	0	0	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.85	758.3	30.12	765.1	39.6	4.2	97	ENE	2		1		10					Light fog	M. Klein, Commandant.
Avignon, Normal School	30.03	762.7	30.11	764.7	54.9	12.7	74	SE			1		10		SE	0.063	1.6	Rainy	M. Giraud, Director.
Bar-sur-Seine	29.50	749.4	30.06	763.5	55.2	12.9	70	SSE			1		8kn			0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.85	758.1	30.12	765.1	45.5	7.5	89	E			1		10			0.030	0.75	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.22	742.2	30.13	765.2	52.2	11.2	80	SE			1		n		SW	0.008	0.2		M. Gobin, Director.
Bordeaux, Observatory	29.67	753.6	29.93	760.2	56.3	13.5	74	S			2		8		SE	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.47	748.5	30.02	762.5	54.7	12.6	72	ESE			2		kn		ESE	0.106	2.7		M. Postel, Director.
Brest, Naval Observatory	29.78	756.4	30.02	762.5	52.9	11.6	86	NE			2		4		NE	0.217	5.50		M. de Rermaree, Dir.
Caen, Normal School	29.94	760.4	30.02	762.4	47.1	8.4	97	NE			1		10			0	0	Covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.77	756.2	30.10	764.4	52.5	11.4	80	SE			1		5			0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.57	751.1	30.11	764.7	48.2	9.0	56	SE			1		Hz			0	0	Hazy	M. Grimard.
Clermont-Ferrand Obs'y	28.67	728.2	30.03	762.8	52.9	11.6	67	S			1		10			0.012	0.3	Covered	M. Alluard, Director.
Cluny, Normal School	29.24	742.6	30.10	764.5	51.1	10.6	78	S			3		7	S	S	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.24	742.8	30.14	765.5	47.8	8.8	84	E			4		km	E	E	0.004	0.1		Dr. Coulet, Director.
Gap, Normal School	27.51	698.8	30.15	765.8	35.6	2	64	S			1		5			0	0	½ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	29.02	737.0	30.16	766.0	50.5	10.3	74	SE			3		10		SE	0	0	Covered	M. Kina, Director.
Grenoble, Normal School	29.33	744.9	30.10	764.5	53.6	12	58	SW			1		ck			0	0		M. Ablard, Director.
Guéret, Normal School	28.47	723.2	30.07	763.8	50.2	10.1	86	NW			1		10		SE	0.331	8.4	Covered	M. Rivoir, Director.
Lamballe, Normal School	29.80	756.9	30.08	764.0	46.4	8	97	NNE			1		Fg		NNE	0	0	Foggy	M. Ollitrault, Director.
Lescar, Normal School	29.43	747.6	30.10	764.4	60.8	16	89	NE			1		2		N	0	0	Slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	29.92	760.0	30.02	762.6	55.0	12.8	79	ENE			2		10			0	0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.04	737.6	30.03	763.9	51.1	10.6	72	E			1		10		S	0	0	Covered	M. André, Director.
Mans, Normal School	29.75	755.6	30.06	763.6	49.5	9.7	82	E			1		2		E	0	0	Slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.81	757.2	30.08	764.1	56.1	13.4	72	ESE			2		10		ESE	0	0		M. Stephan, Director.
Montlouis l'Instituteur																			M. Cave, for Dr. Fines.
Montpellier, Normal School	29.97	761.3	30.08	764.1	50.0	10	97	N			2		8		E	0	0	Very cloudy	M. Galzin, Director.
Nancy, Normal School	29.36	745.7	30.15	765.8	42.8	6.0	91	NW			1		10n			0	0	Foggy	M. Hasse.
Nantes, Observatory	29.92	759.9	30.08	764.0	55.4	13	79	NE			1		6nk		WSW	0	0		M. Larocque, Director.
Nice	30.13	765.2	30.16	766.0	57.2	14.0	65	E			4		10	E	E			Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.87	758.8	29.98	761.5	53.8	12.1	91	SE	16.8	7.5			10		E	0.528	13.4		Dr. Fines.
Pic-du-Midi, Plantade	22.43	569.6			37.8	3.2							1		S	0	0	Clear	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.06	738.0	30.13	765.3	52.9	11.6	75	Calm			0		5		S	0	0	Cloudy	M. Taillieu.
Puy de Dôme Obs'y, Summit	25.13	638.3			35.6	2.0	100	S			3		10			0.016	0.4	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.94	760.4	30.01	762.2	57.2	14.0	73	S			1		8		S	0	0	¾ covered	Lt. E. Decaute, Director.
Roche-sur-Yon, N. School	29.80	757.0	30.02	762.5	56.1	13.4	77	E			1		5		W	0	0	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.87	707.9	30.04	763.0	48.9	9.4	73	E			2		8n		S	0	0		M. Richard, Director.
Rouen, Normal School	29.99	761.8	30.08	763.9	46.4	8	77	E			1		10		SW	0	0	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.89	759.1	30.04	763.1	44.1	6.7	97	NE			1		Fg			0	0	Foggy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.91	759.8	30.08	764.0	41.4	5.2	95	N			1		10		S	0	0	Foggy	M. Renou, Director.
Toulouse, Observatory	29.26	743.3	29.99	761.7	53.6	12.0	67	SSE			6		10			0.053	1.6	Covered	M. Baillard, Director.
Tours	29.83	757.6	30.02	762.6	55.4	13.0	75	SSE			1		2		W	0	0	Almost clear	M. de Tastes.
Versailles, Observatory	29.54	750.3	30.07	763.8	40.6	4.8	100	SE			1		10			0.069	1.74	Covered	Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.34	745.3	30.21	767.3	37.9	3.3	73	SE			3		5k	E		0	0		Prof. Dr. Hoh.
Berlin	30.16	766.1	30.34	770.7	33.8	1.0	85	SE			1		7			0	0		Prof. Dr. Arndt.
Breslau	29.87	758.6	30.41	772.3	25.7	—3.5	76	ESE			2		10			0	0		Royal University Obs'y.
Carlsruhe	29.73	755.2	30.17	766.4	41.0	5.0	90	E			0		10	SW		0	0		Albert Sena.
Cassel	29.59	751.6	30.21	767.2	34.9	1.6	91	E			2		10	E		0.118	3.00		Dr. H. Möhl.
Frankfort on the Main	29.90	759.4	30.28	769.1	39.4	4.1	97	NE			1		10			0.087	2.2	Raining	Physical Society.
Friedrichshafen	28.71	729.2	30.19	766.7	42.4	5.8	85	SW			2		10	SW		0	0		Chief Telegrapher Wilhelm.
Hamburg	30.30	769.5	30.37	771.3	25.7	—3.5	90	ENE			4		10			0	0		Dr. R. Kleeman.
Kiel	30.37	771.4	30.39	771.8	26.6	—3.0	86	ENE			5		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.84	757.9	30.28	769.1	38.7	3.7	69	ENE			2		2			0	0		Prof. Dr. Bruhns.
Magdeburg	30.07	763.7	30.30	769.6	30.7	—0.7	81	NE			2		10ks	NE				Snow and fog	Dr. Assmann.
Memel	30.72	780.4	30.77	781.6	26.4	—3.1	80	ESE			3-4		3cs						Reinbrecht & Issermann.
Munich	28.33	719.6	30.21	767.2	32.2	0.1	85	E			1		10			0	0	Hazy	Central Station.
Neufahrwasser	30.59	776.9	30.60	777.3	23.4	—4.8	67	SE			3		1			0	0		A Lothes.
Neustadt, Palatinate	29.57	751.1	30.10	764.6	46.4	8.0	98	W			2		10			0,08	2.		Dicknether.
Stuttgart	29.20	741.6	30.11	764.9	43.7	6.5	81	N			1		8	NW		0.024	0.6		Prof. Dr. Schoder.
Thorn	30.30	769.5	30.48	774.3	23.4	—4.8	64	SE			5		0			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	28.65	727.7	30.18	766.5	37.0	2.8	82	NE			4		10	SE		0	0		Prof. Kemlein.
Wustrow	30.39	771.8	30.41	772.5	26.8	—2.9	98	E			2		10s			0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.91	759.6	30.31	769.9	45.3	7.4		NE			3.0		5					½ clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.92	760.0	29.97	761.2	68.5	20.3	92	W	14.0	6.3			10		W	0.04	1.0	Drizzling	
Deesa	29.42	747.3	29.89	759.3	86.9	30.5	28	SW	6.0	2.7			2	N		0	0	D. clouds	
Bombay	29.90	759.4	29.94	760.4	81.5	27.5	70	WNW	14.0	6.3			0			0	0	Blue sky	
Poona, Yarrowda	28.04	712.2	29.87	758.7	87.3	30.7	18	SSW	14.0	6.3			3			0	0	D. clouds	
Belgaum	27.39	695.6	29.89	759.1	85.1	29.5	15	S	4.0	1.8			0			0	0	Blue sky	
Lahore	29.13	739.8	29.88	758.9	76.9	24.9	44	E	5.2	2.3			10			0	0	Overcast	
Roorkee	29.68	738.5	29.99	761.8	73.8	23.2	55	NE	3.0	1.3			7			0	0		
Agra	29.36	745.6	29.91	759.8	88.3	31.3	28	E	5.9	2.6			0			0	0		
Nagpur	28.88	733.6	29.91	759.7	89.7	32.1	24	SE	4.9	2.2			3	W		0	0	D. clouds	
Jubbulpore	28.59	726.2	29.96	761.0	79.7	26.5	42	E	3.0	1.3			9			0	0	Overcast	
Lucknow	29.59	751.7	29.97	761.2	84.2	29.0	36	NNW	2.8	1.2			0			0	0	Blue sky	
Allahabad	29.68	753.8	30.00	761.9	74.9	23.8	55	Calm	1.3	0.6			8	W		0	0	D. clouds	
Patna	29.81	757.3	30.00	762.0	76.9	24.9	57	W	0.7	0.3			1	W	W	0	0	Blue sky	
Hazaribagh	27.97	710.5	30.00	762.0	75.0	23.9	30	N	5.7	2.6			3			0	0	D. clouds	
Cuttack	29.88	759.0	29.96	761.0	86.6	30.3	42	SE	0.3	0.1			0			0	0	Blue sky	
Calcutta, Alipore	29.96	760.9	29.98	761.4	80.1	26.7	57	Calm	0	0			0			0	0	Blue sky	
Goalpara	29.58	751.2	29.98	761.6	76.7	24.8	46	N	3.8	1.7			0			0	0	Blue sky	
Chittagong	29.90	759.4	30.00	761.9	76.8	24.9	77	W	2.0	0.9			0			0	0	Blue sky	
Sibsagar	29.68	753.8	30.02	752.5	72.8	22.7	69	SE	1.3	0.6			0			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.89	759.1	30.31	769.8	48.4	9.1	53	E	0.7	0.3			9			0	0		Prof. Giovanni Clodig
Milan	29.74	755.5	30.28	769.1	47.3	8.5	77	WSW	0.7	0.3			10			0	0		Prof. Schiaparelli.
Padua	30.19	766.9	30.31	769.8	48.6	9.2	69	ESE	4.3	1.9			8	W		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.37	745.9	30.30	769.6	44.6	7.0	85	NNE	0.7	0.3			10			0	0		Prof. P. F. Denza.
Genoa	30.05	763.2	30.24	768.2	47.7	8.7	73	NE	8.7	3.9			10	S		0	0		Prof. G. M. Garibaldi.
Mondovi	28.32	719.4	30.30	769.7	43.5	6.4	76	W			2		10			0	0		Prof. D. C. Bruno.
Pesaro	30.21	767.2	30.26	768.5	46.0	7.8	86	NW	11.9	5.3			10			0	0		Prof. Luigi Guidi.
Florence	29.95	760.6	30.21	767.2	57.2	14.0	52	NE			2		10	SSE		0	0		Cav. F. Meucci.
Leghorn	30.10	764.4	30.18	766.6	55.0	12.8	68	NE	6.9	3.1			10			0	0		Prof. P. Monte.
Rome	30.01	762.3	30.19	766.8	60.4	15.8	52	SW	1.3	0.6			6			0	0		Prof. P. S. Ferrari.
Lecce	30.03	762.8	30.29	769.3	54.9	12.7	48	E	0.7	0.3			4			0	0		Prof. C. de Giorgi.
Cosenza	29.34	745.3	30.26	768.5	52.2	11.2	73	NNE	0.7	0.3			10	NE		0.051	1.3		Prof. D. Conti.
Cagliari	29.82	757.4	30.02	762.4	59.5	15.3	75	SE			4		10			0	0		Prof. A. Pacinotti.
Palermo	29.91	759.7	30.16	766.1	63.3	17.4	44	S	8.7	3.9			9			0	0		Prof. G. Ciacciatore.
Syracuse	30.16	766.0	30.20	767.1	58.6	14.8	77	ESE	7.4	3.3			10	E		0	0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R	29.67	753.5	30.19	766.9	57.7	14.3	68	W	0	0			9			0.012	0.3		Prof. F. Brioschi.
Stelvio	22.28	565.8			23.5	— 4.7	85	SW			2		ion		W	0	0	Misty	P. F. Denza.
Valdobbia	22.21	564.2			24.4	— 4.2	88	E			2		ion		W	0	0	Covered	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y	30.22	767.6	30.23	767.8	38.2	3.4	71	NNE	5.0	2.2			0			0	0	Clear	K. Sasaki.
Kioto	30.00	762.0	30.19	766.8	35.7	2.6	62						48;ck			0.004	0.10	Fair	M. Tojima.
Nagasaki, I. M. Obs'y	29.95	760.7	30.16	766.0	44.1	6.7	80	NNE	4.6	2.1			0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.94	760.5	30.01	762.2	37.9	3.3	59	NW	14.1	6.3		0	0			0.008	0.20	Clear	The Staff.
Wakayama	30.13	765.3	30.18	766.6	38.5	3.6	72	NNE	7.1	3.2			0			0	0	Clear	Y. Kuwamuea.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.84	757.9	30.02	762.6	81.0	27.2	64	E	11.0	4.9		2	3	E	E	0.02	0.5	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.49	622.0	30.23	767.7	56.2	13.4	80	SE			1	4c	0	SW		Inap.	Inap.	½ cloudy	Prof. M. Leal.
Mazatlan	29.77	756.2	30.04	762.9	63.0	17.2	78	NNW	1.6	0.8		1cs	0			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.12	587.2	30.30	769.5	48.2	9.0	68	Calm	0	0		0	0			0	0	Foggy	The Staff.
Pabellon, Aguascalientes	23.90	607.0	29.95	760.6	54.1	12.3	67	Calm	0	0		1c	6ks	SW	SW	0	0	Cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.43	595.2	30.37	771.4	42.8	6.0	38	Calm	0	0		0	0			0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.19	614.4	30.19	766.7	49.6	9.8	60	SW	0.9	0.4		4	2	W	SE	0	0	Fair	G. Barroeta, M. D.
Tlacotalpam	30.08	764.0	30.09	764.3	68.0	20.0	93	W	0.9	0.4		1	4.	S	SE	0	0	½ cloudy	Prof. M. Châzaro.
Zacatecas	22.60	574.0	30.33	770.3	49.1	9.5	62	Calm	0	0		7c	0	SSW		0	0	Cloudy	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.17	766.2	30.17	766.2	41.4	5.2		NE			3					0	0		
Groningen	30.23	767.8	30.28	769.2	35.8	2.1		E			3					0	0		
Helder	30.24	768.2	30.24	768 2	29.1	— 1.6		ENE			4					0	0		
Hellevoetsluis	30.17	766.3	30.17	766.3	40.5	4.7	87	ENE			3					0	0		
Utrecht	30.16	766.1	30.21	767.3	38.3	3.5	73	ENE			3		2			0	0	Lightly cl'y	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r p. sec	Force 0—10	Clouds. Amount and kind Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																		
Bergen	30.52	775.3	30.59	775.9	29.5	— 1.4	72	Calm	0	0		0			0	0		
Christiania	30.58	776.7	30.74	780.7	26.6	— 3.0	55	NE	11	5		0			0	0		
Gjæsvær	30.45	773.5	30.48	774.1	30.9	— 0.6		SE			2	10						
Lodingen	30.53	775.5	30.58	776.7	29.7	— 1.3	72	S			4	5			0.024	0.6		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																		
Angra, Azores																		Dr. J. A. Sampaio.
Campo Major	28.92	734.5	29.93	760.2	51.4	10.8	82	SSW	3.8	1.7		9	WNW		0.480	12.2		Dr. A. M. R. dos Santos
Funchal, Madeira	30.01	762.2	30.10	764.5	59.9	15.5	63	WSW	11.9	5.3		7			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.56	750.8	29.93	760.1	52.3	11.3	86	S	9.4	4.2		9	WSW		0.031	0.8		The Staff.
Ponta Delgada, Azores	30.06	763.4	30.13	765.2	51.8	11.0	63	NNW	19.2	8.6		4			0.370	9.4		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																		
Akmolinski	29.04	737.7	30.31	769.8	—21.8	—29.9	75	WSW	18	8		0						Capt. Lasarew.
Archangel	30.85	783.5	30.87	784.0	22.6	— 5.2	98	WNW	4	2		10						Capt. Sselliwerstow.
Astrakhan	30.73	780.5	30.65	778.4	21.0	— 6.1	41	N	2	1		0						Capt. Wieganow.
Barnaul	29.64	752.9	30.23	767.8	—22.0	—30.0	72	SW	4	2		4						Meteorological Obs'y.
Dorpat	30.69	779.4	30.96	786.3	7.0	—13.9	79	ESE	4	2		10						Obervatory.
Ekaterinburg	29.44	747.7	30.52	775.3	— 2.2	—19.0	51	NW	11	5		10					Light clouds	Meteorological Obs'y.
Kasan	30.41	772.4	30.70	779.8	24.6	— 4.1	67	N	2	1		90						Observatory.
Kertch	30.45	773.4	30.47	773.9	30.9	— 0.6	66	ENE	7	3		0						Lagorio.
Kieff	30.09	764.2	30.79	782.1	15.6	— 9.1	75	NE	7	3		0						Cand. Fatjanow.
Lugan	30.51	774.9	30.73	780.6	16.5	— 8.6	73	ENE	13	6		2			Blank			Meteorological Obs'y.
Moscow	30.32	770.0	30.93	785.5	17.2	— 8.2	85	W	7.8	3.5		10s						Meteorological Obs'y.
Nertchinsk	27.87	707.8	30.50	774.6	—12.6	—24.8	82	Calm	0	0		10					Light clouds	Meteorological Obs'y.
Nikolaiev	30.59	776.9	30.66	778.7	20.5	— 6.4	66	NE	18	8		0						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	30.01	762.3	30.14	765.5	10.4	—12.0	78	W	4	2		10n						Lieut. Iwanow.
Nukuss	30.36	771.2	30.58	776.7	22.6	— 5.2	90	Calm	0	0		10ks						Dr. Dobrochotow.
Pekin, China	30.06	763.6	30.21	767.2	29.1	— 1.6	48	Calm	0	0		0						Physical Observatory.
St. Petersburg	30.94	785.8	30.95	786.2	17.1	— 8.3	76	SSE	7	3		30s;s						Central Physical Obs'y.
Tashkend, Laboratory	28.76	730.6	30.45	773.3	28.0	— 2.2	81	NW	9	4		10						Teich, A. M.
Tiflis	29.08	738.7	30.58	776.8	35.1	1.7	70	SE	4	2		10					Light snow	Physical Observatory.
Warsaw	30.11	764.8	30.57	776.4	23.9	— 4.5	65	SE	16	7		70						Astronomical Obs'y.
Wilna	30.37	771.4	30.83	783.0	21.0	— 6.1	72	Calm	0	0		4					Light clouds	Berg, Assistant.
Yeniseisk	29.82	757.5	30.15	765.9	—19.7	—28.7	71	Calm	0	0		0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																		
Leith, Restalrig Park			30.40	772.1	37.0	2.8	82	E			2	10k			0.01	0.3	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides			30.33	770.4	41	5.0	92	SSE			3	10			0	0	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds			30.50	774.7				S			4	10			Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																		
Barcelona, Met. Obs'y	29.85	758.2	29.95	760.8	56.3	13.5	92	E	4.0	1.8		10			0.096	2.44	Covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.85	758.5	29.92	759.9	67.8	19.9	53	SE	4.7	2.1	2	0	NW		0.004	0.1	Almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.95	684.6			52.2	11.2	64	SE	5.4	2.4	0	7			0	0	Cloudy	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.67	702.8	29.94	760.4	46.2	7.9	91	N	1.8	0.8		10			0.366	9.3	Raining	The Staff.
Murcia, Met. Obs'y	29.72	754.9	29.87	758.7	66.2	19.0	64	WNW	2.0	0.9	5	5	NW		1.106	28.1	Raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.92	734.5	29.82	757.3	56.3	13.5	78	SW	0	0		7			0	0	Cloudy	R. Gil Villanueva, Dir.
Sub-Series.																		
Havana, Cuba, W. I	30.05	763.3	30.12	765.0	68.7	20.4	91	Calm	0	0	0	0	W		0	0	Clear	Benito Vines, S. J.
Manilla, Phillippine Islands	29.98	761.4	30.03	762.7	82.1	27.8	68	SE	7.3	3.3		18			0	0	Clear	Federico Faura, S. J
San Fernando, Naval Obs'y	29.92	760.0	30.02	762.5	57.4	14.1	67	WSW	6.3	2.8	0	7	W		0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.04	763.0	30.13	765.3	75.2	24.0	89	SE	5.3	2.35	3ck	4k	SE	SE	0.374	9.50	Cloudy	Enrique Gadea, Chief Engineer.
Tugnegarao, Philippine Ids	29.96	760.9	30.11	764.6	75.9	24.4	80	NW	5.7	2.6		s			0	0	Fair	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																		
Haparanda	30.83	783.1	30.87	784.1	6.4	—14.2	92	S			2	10			0	0		
Umea	30.81	782.5	30.86	783.8	19.4	— 7.0	94	SW			4	10			0.016	0.4		
Hernosand	30.84	783.2	30.89	784.5	18.1	— 7.7	92	S			2	10			0.008	0.2		
Stockholm	30.63	778.1	30.81	782.6	16.9	— 8.4	94	NE			2	0			0	0		
Wisby	30.58	776.7	30.64	778.2	28.0	— 2.2	75	SE			2	0			0	0		
Sub-Series.																		
Upsala	29.73	780.6	30.82	782.8	14.5	— 9.7	92	NE	5.4	2.4		0			0.016	0.04		Nils Ekholm.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																		
Geneva	28.70	729.0	30.16	766.0	45.0	7.2	71	N			1	10			0.012	0.3	Covered	The Observatory.
Zurich	28.50	724.0	30.18	766.6	42.4	5.8	83	W			1	10			0.004	0.1	Foggy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. +3.0 mm.; Ther. +3°.0 cent.; Hum. +1 per cent.																		
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																		
Constantinople			30.40	772.2	40.6	4.8	66	NE	19	8.5		7		NE	0	0		The Observatory.
Valona			30.21	767.3	58.6	14.8		W			1	5			0	0	Cloudy	A. Bertrand.
Sub-Series.																		
Beirut, Lee Obs'y, Syria			29.92	760.0	63.1	17.3	60	NE			1	10os		SW	0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instru'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES.																			
By authority of the Secretary of War.																			
Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	30.36	771.1	30.45	773.4	24	— 4.4	74	NE	3	1.3		0	0			0.05	1.3	Clear	
Alpena, Michigan	29.50	749.3	30.20	767.1	15	— 9.4	82	S	8	3.6		0	5s		Calm	0	0	Fair	
Atlanta, Georgia	29.00	736.6	30.20	767.1	36	— 2.2	80	N	6	2.7			10s		Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.40	772.1	30.42	772.7	27	— 2.8	76	NE	8	3.6		2c	0	W		0.07	1.8	Clear	
Atton Id., Alaska ‡	29.26	743.2			34	1.1	100	N	16	7.2			10n		N	0.10	2.5	Cloudy	
Augusta, Georgia	30.03	762.7	30.24	768.1	49	9.4	71	NE	5	2.2		0	8s		E	0.26	6.6	Fair	
Baltimore, Maryland	30.39	771.9	30.44	773.2	32	0.0	59	NW	5	2.2		3c;cs	0	C;N		0	0	Clear	
Barnegat, New Jersey	30.38	771.6	30.40	772.1	29	— 1.7	78	NE	19	8.5		2c	0	NW		0.12	3.0	Clear	
Benton, Montana	27.14	689.3			28	— 2.2	77	SW	15	6.7			10s		Calm	0	0	Cloudy	
Bismarck, Dakota	28.28	718.3	30.14	765.5	— 1	—18.3	84	W	3	1.3		0	0			0.01	0.3	Clear	
Boise City, Idaho	27.40	696.0	30.36	771.1	34	1.1	79	E	4	1.8			10s		Calm	0	0	Cloudy	
Boston, Massachusetts	30.25	768.3	30.42	772.7	21	— 6.1	86	NW	7	3.1		0	0			0.09	2.3	Clear	
Brackettville, Texas	28.98	736.1	30.06	763.5	47	8.3	48	SE	1	0.4		10ck	0	SE		0	0	Cloudy	
Brownsville, Texas	30.06	763.5	30.10	764.5	53	11.7	93	N	2	0.9		2cs	8s	Calm	Calm	0	0	Cloudy	
Buffalo, New York	29.58	751.3	30.37	771.4	6	—14.4	72	SW	5	2.2		0	1s		Calm	Inap.	Inap.	Clear	
Burlington, Vermont	30.15	765.8	30.48	774.2	10	—12.2	79	N	2	0.9		5ck	0	W		Inap.	Inap.	Fair	
Cairo, Illinois	29.88	758.9	30.30	769.6	33	0.6	89	Calm	0	0		5cs	Fg	Calm	Calm	0	0	Fair	
Campo, California	27.62	701.5	30.20	767.1	27	— 2.8	76	E	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.41	696.2			31	— 0.6	79	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.31	769.9	30.33	770.4	35	1.7	70	NE	18	8.0		0	0			0.60	15.2	Clear	
Cape May, New Jersey																			
Castroville, Texas	29.35	745.5	30.08	764.0	49	9.4	64	E	4	1.8			10s		S	0	0	Cloudy	
Cedar Keys, Florida	30.11	764.8	30.13	765.3	61	16.1	94	SW	3	1.3			Fg			Inap.	Inap.	Dense fog	
Champaign, Illinois	29.33	745.0	30.18	766.6	24	— 4.4	87	S	7	3.1		5c	5s	S	S	0	0	Cloudy	
Charleston, S. Carolina	30.16	766.1	30.22	767.6	50	10.0	79	NE	12	5.4			10s		Calm	Inap.	Inap.	Threatening	
Charlotte, N. Carolina	29.42	747.3	30.27	768.8	39	3.9	73	NE	13	5.8			10s		S	0.02	0.5	Cloudy	
Chattanooga, Tennessee	29.40	746.7	30.24	768.1	38	3.3	81	W	2	0.9		5cs	Fg	Calm	Calm	0	0	Fair	
Cheyenne, Wyoming	24.12	612.6	30.06	763.5	12	—11.1	61	NW	8	3.6		0	0			0.02	0.5	Clear	
Chicago, Illinois	29.41	747.0	30.15	765.8	19	— 7.2	54	S	3	1.3		2c	0	S		0	0	Clear	
Chincoteague, Virginia	30.36	771.1	30.38	771.6	30	— 1.1	78	NE	17	7.6		1k	0	Calm		0.31	7.9	Clear	
Cincinnati, Ohio	29.60	751.8	30.28	769.1	36	2.2	80	SE	3	1.3			10s		Calm	0	0	Cloudy	
Cleveland, Ohio	29.51	749.5	30.30	769.6	15	— 9.4	82	SE	9	4.0		5cs	0	W		0	0	Fair	
Coleman City, Texas	28.33	719.6	30.08	764.0	33	0.6	70	SW	4	1.8		0	0			0	0	Clear	
Columbus, Ohio	29.38	746.2	30.28	769.1	24	— 4.4	74	E	4	1.8			10s		S	0	0	Cloudy	
Concho, Texas	28.20	716.3	29.95	760.7	36	2.2	71	W	4	1.8		0	0			0	0	Clear	
Corsicana, Texas	29.76	755.9	30.26	768.6	38	3.3	81	S	1	0.4			10s		Calm	0	0	Cloudy	
Davenport, Iowa	29.45	748.0	30.14	765.5	15	— 9.4	82	SW	8	3.6		10cs	0	Calm		0	0	Cloudy	
Dayton, Washington T'y	28.33	719.6	30.05	763.3	36	2.2	90	S	8	3.6			10n		Calm	0.10	2.5	Light rain	
Deadwood, Dakota	25.41	645.4			20	— 6.7	70	S	7	3.1		0	0			Inap.	Inap.	Clear	
Decatur, Texas	28.93	734.8	30.16	766.1	36	2.2	80	SE	15	6.7		0	8ks		SE	0	0	Fair	
Delaware Breakwater, Del.	30.38	771.6	30.40	772.1	30	— 1.1	78	NE	19	8.5		0	0			0.02	0.5	Clear	
Denison, Texas	29.36	745.7	30.19	766.8	37	2.8	81	S	4	1.8		0	8ks		S	0	0	Fair	
Denver, Colorado	24.94	633.5	30.16	766.1	15	— 9.4	82	S	4	1.8		0	0			0.01	0.3	Clear	
Des Moines, Iowa	29.20	741.7	30.14	765.5	22	— 5.6	72	SW	2	0.9		0	0			0	0	Clear	
Detroit, Michigan	29.50	749.3	30.25	768.3	20	— 6.7	85	SE	3	1.3		0	0			0	0	Clear	
Dodge City, Kansas	27.53	699.2	29.94	760.5	28	— 2.2	77	NW	18	8.0		0	0			0	0	Clear	
Dubuque, Iowa	29.34	745.2	30.09	764.3	17	— 8.3	67	S	5	2.2			10s		Calm	0	0	Cloudy	
Duluth, Minnesota	29.21	741.9	29.93	760.2	17	— 8.3	83	SE	1	0.4			10s		Calm	0.03	0.8	Cloudy	
Eagle Pass, Texas	29.38	746.2	30.13	765.3	51	10.6	59	SE	3	1.3		2ck	0	S		0	0	Fair	
Eagle Rock, Idaho	25.44	646.2	30.10	764.5	5	—15.0	100	Calm	0	0			10s		Calm	0	0	Cloudy	
Eastport, Maine	30.32	770.1	30.40	772.1	9	—12.8	57	N	14	6.3		0	0			0.04	1.0	Clear	
Edinburg, Texas																			
El Paso, Texas	26.35	669.3			39	3.9	55	W	12	5.4		0	0			0	0	Clear	
Erie, Pennsylvania	29.53	750.0	30.30	769.6	20	— 6.7	85	SE	5	2.2		0	0			0	0	Clear	
Escanaba, Michigan	29.30	744.2	30.00	762.0	12	—11.1	80	S	4	1.8		2c	2s	Calm	Calm	0	0	Fair	
Florence, Arizona	28.70	729.0	30.30	769.6	36	2.2	61	NE	1	0.4		0	0			0	0	Clear	
Fort Apache, New Mexico	25.18	639.6	30.63	778.0	24	— 4.4	61	NE	3	1.3		0	0			0	0	Clear	
Fort Assiniboine, Montana	27.12	688.8			19	— 7.2	69	SW	16	7.2			10ks		SW	0	0	Cloudy	
Fort Bennett, Dakota																			
Fort Buford, Dakota	28.04	712.2	30.11	764.8	5	—15.0	63	SW	2	0.9		0	0			0.10	2.5	Clear	
Fort Custer, Montana	26.93	684.0			11	—11.7	79	SW	12	5.4		0	0			0	0	Clear	
Fort Davis, Texas	25.25	641.3	30.21	767.3	37	2.8	71	NE	3	1.3		0	0			0	0	Clear	
Fort Elliott, Texas	27.38	695.4	29.80	756.9	23	— 5.0	47	NW	32	14.3		5c	0	NW		0	0	Fair	
Fort Gibson, Indian T'y	29.60	751.8	30.17	766.3	32	0.0	89	SE	6	2.7			10s		Calm	0	0	Cloudy	
Fort Grant, Arizona	25.22	640.6	30.02	762.5	42	5.6	42	NW	8	3.6		0	0			0	0	Clear	
Fort Griffin, Texas	28.75	730.2	30.07	763.8	36	2.2	71	S	9	4.0		0	0			0	0	Clear	
Fort Keogh, Montana	27.56	700.0			2	—16.7	72	Calm	0	0		0	0			0	0	Clear	
Fort McKavett, Texas	27.86	707.6	29.86	758.4	35	1.7	70	SW	8	3.6		0	0			0	0	Clear	
Fort Macon, North Carolina	30.22	767.6	30.24	768.1	39	3.9	82	N	18	8.0		5c	Hz	Calm	Calm	0.67	17.0	Fair	
Fort St. Michaels	30.00	752.0	30.05	763.3	— 1	—18.3	100	E	1	0.4		0	0						
Fort Missoula, Montana	26.80	680.7			22	— 5.6	86	Calm	0	0			10ks		Calm	0	0	Cloudy	
Fort Shaw, Montana	26.30	668.0			29	— 1.7	78	SW	28	12.5		10cs	0	Calm		0	0	Cloudy	
Fort Sill, Indian Territory	28.81	731.8	29.97	761.2	31	— 0.6	79	S	12	5.4		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.25	717.5			— 7	—21.7	80	Calm	0	0		0	0			0.02	0.5	Clear	
Fort Verde, Arizona					25	— 3.9	35	W			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.39	721.1	30.00	762.0	40	4.4	82	Calm	0	0		9k	0	W		0	0	Cloudy	
Galveston, Texas	30.15	765.8	30.20	767.1	47	8.3	85	NE	5	2.2			10s		Calm	0	0	Cloudy	
Grand Haven, Michigan	29.45	748.0	30.14	765.5	22	— 5.6	88	S	14	6.3			10s		Calm	0	0	Cloudy	
Hatteras, North Carolina	30.24	768.1	30.26	768.6	41	5.0	91	W	23	10.3		0	Hz		Calm	0.55	14.0	Clear	
Helena, Montana	25.90	657.8			18	— 7.8	22	Calm	0	0		0	0			0	0	Clear	
Henrietta, Texas	29.08	738.6	30.07	763.8	33	0.6	70	SE	4	1.8		0	0			0	0	Clear	
Indianapolis, Indiana	29.38	746.2	30.20	767.1	32.5	0.3	79	S	4	1.8			10s		S	0	0	Cloudy	
Indianola, Texas	30.13	765.3	30.16	766.1	52	11.1	79	NE	9	4.0			10s		Calm	0	0	Cloudy	
Jacksboro, Texas	28.94	735.1	30.12	765.0	35	1.7	80	S	6	2.7		1cs	0	Calm		0	0	Clear	
Jacksonville, Florida	30.14	765.5	30.18	766.6	58	14.4	76	N	6	2.7		2cs	8s	Calm	N	0.05	1.3	Cloudy	
Keokuk, Iowa	29.45	748.0	30.15	765.8	20	— 6.7	78	S	5	2.2		1cs	5s	Calm	Calm	0	0	Fair	
Key West, Florida	30.12	765.0	30.15	765.8	72	22.2	85	E	4	1.8		0	0			0	0	Clear	
Kittyhawk, North Carolina	30.28	769.1	30.31	769.9	37	2.8	81	NE	25	11.2		8cs	0	Calm		0.40	10.2	Cloudy	
Knoxville, Tennessee	29.20	741.7	30.24	768.1	38	3.3	85	Calm	0	0			10s		Calm	0	0	Cloudy	
La Crosse, Wisconsin	29.25	742.9	30.04	763.0	17	— 8.3	67	S	7	3.1		0	0			0	0	Clear	
La Mesilla, New Mexico	25.23	666.2	30.38	771.6	29	— 1.7	56	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.73	755.1	30.08	764.0	50	10.0	93	NE	1	0.4			10s		Calm	0	0	Cloudy	
Leavenworth, Kansas	29.27	743.4	30.18	766.6	15	— 9.4	82	Calm	0	0		0	0			0	0	Clear	
Lewiston, Idaho	29.31	744.5	29.98	761.5	35	1.7	100	NE	8	3.6			10n		Calm	Inap.	Inap.	Light rain	
Little Rock, Arkansas	29.92	760.0	30.25	768.3	33	0.6	89	Calm	0	0			10ks		W	0	0	Cloudy	
Los Angeles, California	29.84	757.9	30.22	767.6	49	9.4	64	Calm	0	0		0	0			0	0	Clear	
Louisville, Kentucky	29.65	753.1	30.24	768.1	37	2.8	71	S	4	1.8			10s		Calm	0	0	Cloudy	
Lynchburg, Virginia	29.67	753.6	30.40	772.1	32	0.0	79	Calm	0	0		0	0			0	0	Clear	
Madison, Wisconsin	29.00	736.6	30.05	763.3	16	— 8.9	83	S	10	4.5		8c	0	Calm		0	0	Fair	
Marquette, Michigan	29.19	741.4	29.95	760.7	17	— 8.3	67	SW	7	3.1		0	5s		W	0	0	Fair	
Mason, Texas	28.50	723.9	30.31	769.9	44	6.7	70	S	4	1.8		0	0			0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.91	759.7	30.27	768.8	33	0.6	79	Calm	0	0	.....	Hz	Fg	Calm	Calm	0	0	Light haze..	
Milwaukee, Wisconsin	29.32	744.7	30.09	764.3	24	— 4.4	87	S	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy.....	
Mobile, Alabama	30.15	765.8	30.23	767.8	43	6.1	83	N	8	3.6	.....	.....	10s	.....	NW	0	0	Cloudy.....	
Montgomery, Alabama	30.02	762.5	30.27	768.8	41	5.0	82	N	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy.....	
Moorhead, Minnesota	29.05	737.9	30.13	765.3	— 5	—20.6	63	NW	10	4.5	.....	0	0	.....	.....	0.05	1.3	Clear.....	
Morgantown, W. Virginia	29.26	743.2	30.31	769.9	28	— 2.2	77	Calm	0	0	.....	5c	Hz	NW	.....	0.04	1.0	Fair.....	
Mt. Washington, N. H.	23.74	603 0	30.10	764.5	2	—16.7	44	NW	36	16.1	.....	0	0	.....	.....	0.06	1.5	Clear.....	
Nashville, Tennessee	29.72	754.9	30.29	769.4	36	2.2	71	SE	1	0.4	.....	10cs	0	Calm	.....	Inap	Inap.	Cloudy	
New Haven, Connecticut	30.30	769.6	30.43	772.9	21	— 6.1	86	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	
New London, Connecticut	30.38	771.6	30.44	773.2	26	— 3.3	63	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	
New Orleans, Louisiana	30.15	765.8	30.21	767.3	50	10.0	72	NE	6	2.7	.....	.....	10s	.....	NE	0	0	Cloudy.....	
Newport, Rhode Island	30.35	770.9	30.40	772.1	25	— 3.9	75	N	8	3.6	.....	0	0	.....	.....	0.84	21.3	Clear.....	
New River, N. Carolina	.....	.....	.....	.....	47	8.3	85	NE	.....	.....	4	8cs	0	.....	.....	.....	.....	Cloudy.....	
New Shoreham, Rhode I'd	30.37	771.4	30.40	772.1	26	— 3.3	63	N	21	9.4	.....	0	0	.....	.....	0.04	1.0	Clear.....	
New York, New York	30.25	768.3	30.44	773 2	27	— 2.8	76	NE	8	3.6	.....	5cs	0	Calm	.....	0.01	0.3	Fair.....	
Norfolk, Virginia	30.30	769.6	30.36	771.1	33	0.6	79	N	8	3.6	.....	2c	Hz	Calm	Calm	0.77	19.6	Fair.....	
North Platte, Nebraska	27.25	692.1	30.06	763.5	12	—11.1	80	NW	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Olympia, Washington T'y	29.98	761.5	30.01	762.2	45.5	7.5	88	S	10	4.5	.....	.....	10n	.....	W	0.74	18.8	Light rain...	
Omaha, Nebraska	28.98	736.1	30.17	766.3	19	— 7.2	85	NW	4	1.8	.....	0	5s	.....	Calm	0	0	Fair.....	
Oswego, New York	30.02	762.5	30.37	771.4	17	— 8.3	75	S	5	2.2	.....	0	0	.....	.....	0	0	Clear.....	
Pensacola, Florida	30.20	767.1	30.23	767.8	47	8.3	77	N	4	1.8	.....	.....	10s	.....	N	0	0	Cloudy.....	
Philadelphia, Pa	30.38	771.6	30.43	772.9	26	— 3.3	75	NE	8	3.6	.....	1c	0	Calm	.....	0	0	Clear	
Phœnix, Arizona	29.14	740.1	31.15	791.2	38	3.3	63	E	1	0.4	.....	0	0	.....	.....	0	0	Clear.....	
Pike's Peak, Colorado	17.15	435.6	29.72	754.9	—15	—26.1	42	W	52	23.2	.....	0	0	.....	.....	0	0	Clear.....	
Pilot Point, Texas	29.38	746.2	30.28	769.1	33	0.6	79	SE	4	1.8	.....	0	0	.....	.....	0	0	Fair.....	
Ploche, Nevada	24.19	614.4	29.96	761.0	29	— 1.7	56	NW	2	0.9	.....	4c	0	Calm	.....	0	0	Fair.....	
Pittsburg, Pennsylvania	29.45	748.0	30.32	770.1	25	— 3.9	75	NE	4	1.8	.....	2c	0	Calm	.....	0	0	Fair.....	
Port Huron, Michigan	29.54	750.3	30.27	768.8	13	—10.6	81	S	7	3.1	.....	8c	0	Calm	.....	0.05	1.3	Clear.....	
Portland, Maine	30.35	770.9	30.41	772.4	20	— 6.7	70	NW	1	0.4	.....	0	0	.....	.....	0	0	Fair.....	
Portland, Oregon	30.07	763.8	30.15	765.8	48.5	9.2	89	S	15	6.7	.....	0	Fg	.....	.....	0.04	1.0	Clear.....	
Portsmouth, N. Carolina	.....	.....	.....	.....	38	3.3	63	NE	29	13.0	.....	2k	0	W	SW	0.35	8.9	Fair.....	
Prescott, Arizona	.....	.....	.....	.....	38	3.3	63	NE	29	13.0	.....	2k	0	W	.....	0.36	9.1	Clear.....	
Punta Rassa, Florida	24.94	633.5	30.39	769.6	23	— 5.0	60	N	2	0.9	.....	0	0	.....	.....	0	0	Clear.....	
Red Bluff, California	30.11	764.8	30.13	765.3	67	19.4	89	E	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy.....	
Rio Grande City, Texas	30.01	762.2	30.37	771.4	49.0	9.4	89	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Rochester, New York	30.03	762.7	30.26	768.6	50	10.0	100	N	5	2.2	.....	.....	10n	.....	Calm	0.01	0.3	Light rain....	
Roseburg, Oregon	29.71	754.6	30.39	771.9	11	—11.7	80	SW	4	1.8	.....	0	Hz	.....	.....	Inap.	Inap.	Clear.....	
Sacramento, California	29.71	754.6	30.29	769.4	48	8.9	85	SW	1	0.4	.....	.....	10ks	.....	W	0.02	0.5	Cloudy	
St. Louis, Missouri	30.29	769.4	30.37	771.4	46	7.8	92	SE	4	1.8	.....	5k	0	Calm	.....	0	0	Fair.....	
St. Paul, Minnesota	29.60	751.8	30.21	767.3	27	— 2.8	88	S	1	0.4	.....	8cs	0	Calm	.....	0	0	Fair.....	
Salt Lake City, Utah	29.11	739.4	30.00	762.0	12	—11.1	80	SW	10	4.5	.....	.....	10s	.....	SW	0.01	0.3	Cloudy.....	
San Antonio, Texas	25.86	656.8	30.19	766.8	31	— 0.6	48	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	
San Diego, California	29.48	748.8	30.20	767.1	48	8.9	78	E	1	0.4	.....	4cs	0	S	.....	0	0	Fair.....	
Sandusky, Ohio	30.16	766.1	30.24	768.1	46	7.8	77	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	
Sandy Hook, New Jersey	29.54	750.3	30.26	768.6	22	— 5.6	72	SE	10	4.5	.....	0	5s	.....	Calm	0	0	Fair.....	
San Francisco, California	30.40	772.1	30.44	773.2	28	— 2.2	77	NE	12	5.4	.....	0	0	.....	.....	Inap.	Inap.	Clear.....	
Santa Fé, New Mexico	30.30	769.6	30.36	771.1	49	9.4	93	SE	1	0.4	.....	4cs	Fg	NW	Calm	0	0	Fair.....	
Savannah, Georgia	23.35	593.1	29.89	759.2	28	— 2.2	66	NE	8	3.6	.....	0	0	.....	.....	0	0	Clear.....	
Shreveport, Louisiana	30.10	764.5	30.20	767.1	51	10.6	79	NE	5	2.2	.....	.....	10s	.....	Calm	Inap.	Inap.	Threatening	
Silver City, New Mexico	30.01	762.2	30.27	768.8	37	2.8	81	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy.....	
Smithville, North Carolina	24.37	619.0	30.76	781.3	33	0.6	61	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Socorro, New Mexico	30.21	767.3	30.25	768.3	42	5.6	83	N	8	3.6	.....	.....	10s	.....	Calm	0.14	3.6	Cloudy.....	
Springfield, Illinois	25.54	648.7	29.60	751.8	25	— 3.9	75	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear.....	
Springfield, Massachusetts	29.48	748.8	30.19	766.8	25	— 3.9	75	S	7	3.1	.....	Hz	1s	Calm	Calm	0	0	Dense haze..	
Stockton, Texas	30.29	769.4	30.44	773.2	20	— 6.7	56	Calm	0	0	.....	0	0	.....	.....	0.10	2.5	Clear	
St. Vincent, Minnesota	27.06	687.3	30.06	763.5	38	3.3	72	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	
Thatcher's Island, Mass	29.18	741.2	30.07	763.8	— 6	—21.1	100	NW	3	1.3	.....	.....	10s	.....	Calm	0.04	1.0	Cloudy	
Toledo, Ohio	30.35	770.9	30.41	772.4	29	— 1.7	67	NE	7	3.1	.....	2k	0	NW	.....	0.09	2.3	Clear.....	
Tucson, Arizona	29.50	749.3	30.24	768.1	16	— 8.9	83	Calm	0	0	.....	10cs	Fg	Calm	Calm	0	0	Cloudy.....	
Umatilla, Oregon	27.72	704.1	30.27	768.8	39	3.9	64	SE	5	2.2	.....	0	0	.....	.....	0	0	Clear.....	
Uvalde, Texas	29.83	757.7	30.30	771.1	26	— 3.3	94	NW	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy.....	
Vicksburg, Mississippi	29.19	741.4	30.03	762.7	50	10.0	61	SE	1	0.4	.....	.....	10s	.....	SW	0	0	Cloudy.....	
Visalia, California	29.99	761.7	30.20	768.0	40	4.4	82	NE	3	1.3	.....	2c	8s	NE	NE	Inap.	Inap.	Cloudy.....	
Washington, D. C	29.94	760.5	30.33	770.4	43	6.1	92	SE	3	1.3	.....	0	0	.....	.....	0	0	Clear.....	
Wickenburg, Arizona	30.30	769.6	30.42	772.7	27	— 2.8	88	NE	2	0.9	.....	2cs	Fg	Calm	Calm	Inap.	Inap.	Clear.....	
Wilmington, N. Carolina	.....	.....	.....	.....	36	2.2	62	W	.....	.....	1	0	0	.....	.....	0	0	Clear	
Winnemucca, Nevada	30.21	767.3	30.27	768.8	42	5.6	74	NE	6	2.7	.....	5cs	1s	Calm	Calm	0.39	9.9	Fair	
Wood's Holl, Mass	25.78	654.8	30.14	765.5	36	2.2	61	SW	8	3.6	.....	0	8ks	.....	SW	0	0	Cloudy..	
Yankton, Dakota	30.34	770.6	30.39	771.9	25	— 3.9	75	N	13	5.8	.....	1k	0	E	.....	0.27	6.9	Clear	
Yuma, Arizona	28.89	733.8	30.32	770.1	11	—11.7	80	W	7	3.1	.....	0	0	.....	.....	0	0	Clear.....	
Sub-Series.	30.05	763.3	30.20	767.1	48	8.9	43	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	
Bogota, U. S. Columbia	22.08	560.8	.....	.....	52.5	11.4	79	Calm	0	0	.....	2cs	0	.....	.....	0.05	1.3	Fair.....	Thomas Herman.
Buff Bay Town, Jam ica.‡	29.88	758.9	30.19	766.8	71	21.7	90	E	.....	.....	.....	0	0	.....	.....	.....	.....	.....	
Havana, Cuba, W. I	30.08	764.0	30.13	765.3	72	22.2	81	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	Charles Hasselbrink.
Jakobshavn, Greenland	29.62	752.3	29.68	753.8	1.0	—17.2	.....	W	.....	.....	7	.....	2	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I	30.07	763.8	30.08	764.0	67.7	19.8	80	Calm	0	0	.....	0	0	.....	.....	0	0	Fine.....	Robert Johnstone
Navassa, W. I	29.98	761.5	30.06	763.5	73.5	23.1	72	N	6	2.7	.....	5k	2s	NE	N	0	0	Fair.....	F. M. Everett.
Paramaribo, S. A	29.99	761.7	29.99	761.7	78	25.6	82	E	.....	.....	2	5k	4s	.....	.....	0	0	½ cloudy....	Dr. C. J. Hering.
Puerto Berrio, U. S. Columbia	29.40	746.7	29.96	761.0	81	27.2	76	Calm	.....	.....	0	0	2k	.....	Calm	0	0	Hazy.....	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Earl Flint.
Santiago de Cuba, W. I	30.09	764.3	30.12	765.0	74	23.3	76	NNE	6	2.7	.....	0	0	.....	.....	0	0	Clear.....	Robert Mason.
St. Thomas, W. I	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	29.75	755.7	29.82	757.3	— 9.8	—23.2	.....	W	.....	.....	6	.....	0	.....	.....	0	0	.....	K. Elberg.
York Factory, B. A	29.93	760.2	29.99	761.7	—21.0	—29.4	.....	NW	8	3.6	.....	2k	0	SW	.....	0	0	Fair.....	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.18	766.6	61	16.1	82	ESE			4		8	SSE						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 29° 16′, E 49° 49′	30.04	763.0	63	17.2	62	NW			4–5		0					4–5	NW	Blue sky	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			40	4.4		NE			2–4		10					2	N	Snowing	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	30.08	764.0	75	23.9	77	E			2–3		1					2	E	Blue sky	Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 32° 44′, E 129° 51′	30.16	766.1	45.5	7.5	84	NNE			1		0							Blue sky	Capt. J. W. East.
H. M. S. Condor																			
N. 36° 08′, E. 17° 48′	30.22	767.6	58.5	14.7	62	E			2		8ck					4–5	SE	D. clouds	Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, Syracuse, Sicily	30.22	767.6	61	16.1		Calm			0		1	E						Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa, Shanghai, China	30.00	762.0	52	11.1	79	Calm			0		0							Blue sky	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.14	765.5	64	17.8	89	SSW			1–2		9	SW						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 34′, E. 81° 14′	29.87	758.7	81	27.2		NE			1		4	NNE				1	NE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St. J. Garforin.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.87	758.7	80	26.7	74	W			3		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 14° 10′, W. 60° 23′	30.11	764.8	78	25.6		NE			3–4		2	NE				3	E	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, N. 20° 42′, W. 71° 45′	30.12	765.0	78	25.6	86	ESE			2–3		2	NE				3	E	D. clouds	Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Panama, Panama	29.95	760.7	74	23.3	86	NW			2		1							Blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 50′, W. 58° 56′	29.66	753.4				NNW			4									Squally	Capt. L. F. Jones.
H. M. S. Griffon																			Capt. J. Inglis.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 12° 00′, E. 110° 50′	30.01	762.2	79	26.1	95	Calm			0		0					Sm'h		Blue sky	Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Zanzibar, Africa	29.90	759.4	78	25.6	86	Calm			0		7							Raining	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 40′ E. 122° 30′	30.13	765.3	50.4	10.2	86	SE			1		0					2	SE	Blue sky	Capt. R. H. Napier.
H. M. S. Malabar																			Capt. J. F. G. Grant.
H. M. S. Minatour, N. 42° 14′, W. 8° 40′	29.86	758.4	55	12.8	90	NE			1		10	N						Overcast	Capt. H. Rawson.
H. M. S. Modeste, N. 1° 17′, E. 103° 51′	29.89	759.2	81	27.2	87	Var.			1–3		0							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch, Ayas Bay, Turkey, Asia	30.06	763.5	56	13.3	?	ESE			2		8	E				Sm'h		D. clouds	Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Pt. Royal, Jamaica, W.I.	30.04	763.0	73	22.8	81	NW			1		0							Blue sky	Capt. J. A. Fisher.
H. M. S. Orontes, N. 43° 59′, W. 9° 43′	29.88	758.9	56.5	13.6	84	E			1–2		7	E				1	WNW	D. clouds	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, Elmina, Gold Coast, Africa.	29.86	758.4	82	27.8	91	SW			2		2					1	SE	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.92	760.0	79	26.1	91	Calm			0		10							Raining	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Spain	29.89	759.2	55	12.8	87	S			2		7							Showery	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.50	749.3	81	27.2	83	ESE			1	10						1	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	30.04	763.0	72	22.2	90	SE			2		4	SE				2	SW	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 12° 03′, W. 61° 45	30.05	763.3	78.5	25.8	75	ENE			1		1					1	N	D. clouds	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, N. 37° 03′, E. 15° 18′	30.23	767.8	59.5	15.3	88	SE			2		7					2	SE	D. clouds	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo Bay, Chili, S.A.	30.04	763.0	63	17.2	91	Calm			0		10							Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, Palestine	30.07	763.8	62.5	16.9	42	NW			3-4		2	NW						D. clouds	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, N. 12° 30′, W. 18° 30′	29.93	760.3	77.0	25.0	87	NE			4		3					4		D. clouds	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando, Africa	29.89	759.1	85.5	29.7	74	NW			3		2					1	NW	D. clouds	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Mahmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.28	769.1	53	11.7	80	SW	4	1.8		10			SW	0	0			Cloudy	
N. Yard, Portsmouth, N. H.	30.47	773.9	12	—11.1	?	Calm	0	0		0				0	0			Clear	
Naval Hospital, Yokohama, Japan	29.82	757.4	38.5	3.6	59	NW			4		0			Slight				Clear	
Adams, Panama, Panama	29.98	761.5	75	23.9	86	NW			1		2		NW			Sm'h		Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.30	769.6	49	9.4	85	Calm			0		0			0	0			Clear	
Alert, Hong-Kong, China *.	29.98	761.5	70	21.1	85	W			1		0			0	0			Hazy	
Alliance, New Orleans, La			52	11.1	79	NE			1		8		W	0	0	Sm'h		Cloudy	
Ashuelot, Tientsin, China	30.22	767.6	29	— 1.7	79	SE			1		0							Clear	
Colorado, New York, N. Y.	30.43	772.9	28	— 2.2	88	NW	1	0.4			8?			0	0			Clear?	
Constitution, N. Yard, League I'd., Pa	30.37	771.4	27	— 2.8		NE	2	0.9			2							Clear	
Franklin, Norfolk, Va	30.26	768.6	34	1.1	89	NE	6	2.7			2		W	0.71	18.0			Fair	
Galena, N. 36° 15′, E. 21° 50′	30.21	767.3	53	11.7	80	E			4		2		ESE			Mod.	E	Fair	
Independence, N. Yard, Mare I'd, Cal.	30.30	769.6	47	8.3	100	NE	9.6	4.3			1		NE	0	0			Clear	
Jamestown, Sitka, Alaska *	29.49	749.0	29	— 1.7		Calm			0		8			0.50	12.7			Cloudy	
Kearsarge, New Orleans, La	30.17	766.3	61	16.1	72	N			2		10					Sm'h		Cloudy	
Marion, Sandy P't, Terra del Fuego	29.68	753.9	50	10.0	79	Var.			0–1		2		WSW			Sm'h		Fair	
Michigan, Erie, Pennsylvania	30.19	766.8	18	— 7.8		SW	2	0.9			0							Clear	
Minnesota, New York, N. Y.	30.46	773.7	28	— 2.2	88	E			1		2			0	0			Fair	
Monocacy, Shanghai, China	30.13	765.3	47	8.3	92	SSE			1		0							Clear	
New Hampshire, Port Royal, S. C.	30.17	766.3	53	11.7	86	NE	16	7.2			10		NE	0	0			Cloudy	
Nipsic, Valencia, Spain	29.92	760.0	59	15.0	82	NE			3		10					Sm'h		Hazy	
Onward, Callao, Peru †	29.95	760.7	72	22.2	90	SSE			2		5					Long	N;W	Fair	
Palos, Shanghai, China	30.16	766.1	46	7.8	84	SSE			1		0							Clear	
Passaic, Washington, D. C.	30.44	773.2	29	— 1.7	89	NE			1		0							Clear	
Pensacola, Panama, Panama	29.94	760.5	74	23.3	85	NNW			4		0			0	0	Sm'h		Clear	
Powhatan, New York, N. Y.	30.42	772.7	27	— 2.8	100	NE			2		5							Cloudy	
Quinnebaug, Villafranca, France	30.15	765.8	57	13.9	69	ENE			2		10		NE			Sm'h		Rainy	
Richmond, Hong-Kong, China	30.13	765.3	67	19.4	95	ENE			2		10		ENE					Misty	
Saratoga, Baltimore, Md	30.35	770.9	29	— 1.7	86	NE			2		2		Calm	0	0			Clear	
Shenandoah, Montevideo, Uruguay *	30.26	768.6	68	20.0	79	NNE			3		5					Sm'h		Fair	
St. Louis, League Island, Pa	30.40	772.1	26	— 3.3	75	N	4	1.8			2			0	0			Clear	
Swatara, Nagasaki, Japan †	30.08	764.0	49	9.4	78	NNE			1		0					Sm'h		Blue sky	
Tennessee, New Orleans, La	30.29	769.4	50	10.0	93	E	7	3.1			10		Calm	0	0	Sm'h		Cloudy	
Ticonderoga, N. Yard, Mare Id., Cal.	30.32	770.1	50	10.0	93	Calm			0		2		Calm	0	0			Clear	
Trenton, Toulon, France *.	30.09	764.3	58	14.4	55	E			4		10			3 h'rs	light	Sm'h		Cloudy	
Vandalia, St. John, Antiqua, W. I.	30.10	764.5	84	28.9	64	E			3		2		E					Fair	
Wabash, Boston, Massachusetts	30.43	772.9	20	— 6.7	70	NNW	5	2.2						0	0			Hazy	
Wachusetts, Panama, Panama *.	29.58	751.3	75	23.9	90	NW			3		2		N			Sm'h		Fair	
Wyoming, Villafranca, France	30.16	766.1	57	13.9	75	S			1		10		Calm			Sm'h		Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.							
										Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡ N. 3° 35′, W. 27° 40′	29.94	760.5	76.7	24.8	99	NNE			3		10							Raining	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 16° 48′, W. 58° 44′	30.10	764.5	77.5	25.3	78	ENE			4		2							D. clouds	Capt. A. J. Brown.
British Merchant ‡																			Capt. E. J. Molony.
Chin Yang, N. 7° 12′, W. 57° 18′	29.99	761.7	79.7	26.5	74	ENE			3		3							D. clouds	Capt. N. Youlden.
S. S. Otpero, N. 27° 50′, W. 48° 15′	30.38	771.6	68	20.0		ENE			5		2					4	ENE	Blue sky	Capt. W. N. Lailey.
City of Agra, ‡ S. 3° 59′, W. 31° 40′	29.94	760.5	80.9	27.2	91	SE			4		6							Raining	Capt. T. Young.
Barque Commewyne, ‡ N. 43° 45′, W. 34° 21′	30.31	769.9	49.6	9.8	64	NNW			4		3							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra, ‡ S. 2° 24′, W. 21° 49′	29.96	761.0	85	29.4	72	SE			3		10							Overcast	Capt. H. Spalding.
Ship Ellen Stuart, S. 1° 05′, E. 87° 55′	29.93	760.2	82.5	28.1	79	SSW			2		4							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle ‡																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams
Barquentine Hope, S. 11° 47′, W. 33° 50′ ‡	29.98	761.5	81.6	27.5	91	NE			4	5cs						Of'd	sE;sW	D. clouds	Capt. Jas. Campbell.
Ship Iron Cross, N. 47° 28′, W. 12° 20′	29.96	761.0	52.8	11.6		ESE			4		8					6	WNW	D. clouds	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania ‡																			Capt. C. A. F. Powell.
Majastic																			Capt. W. Ellery.
Barque Markland, N. 28° 48′, W. 70° 03′ ‡	30.22	767.6	71.1	21.7	92	SW			3		5					3	SE	Misty	Capt. H. W. Dyke.
Barque Mertola																			Capt E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart
Barque Shun Lee, S. 1° 34′, W. 28° 53′ ‡	29.93	760.2	81.2	27.3	93	SE			3		4					Sm'h		D. clouds	Capt. John M. Gray.
S. S. Soine																			Capt. H. Manning.
S. S. Strathleven																			Capt. C. W. Pearson.
Schr. Traveller ‡																			Capt. A. Simpson.
S. S. Wyberton, N. 9° 30′, E. 55° 18′ ‡	29.96	761.0	80.5	26.9	80	ENE			1		5							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire, N. 30° 20′, W. 39° 05′	30.41	772.4	62	16.7	67	NNE			3		7					3	NNE	D. clouds	
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 46° 35′, W. 39° 43′ †	29.80	756.9				SW			6		10		W			H'vy	NW	Cloudy	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britanic																			Capt. H. Perry.
S. S. Celtic, N. 40° 25′, W. 73° 15′ †	30.34	770.6	38	3.3		NW			3		2		NW	0	0	Sm'h		Fair	Capt. Benj. Gleadell.
S. S. Germanic, N. 40° 41′, W. 67° 30′ †	30.36	771.1	35	1.7		NNE			4		5		NE	0	0	Mod.	NE	Clear	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann ‡																			
S. S. Köln, N. 42° 15′, W. 60° 08′	30.22	767.6	31.1	— 0.5		NNW			5		10		NNW	4 h Mod	ours erate	R'gh	NNW	Cloudy	Capt. H. Baur.
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg, N. 49° 45′, W. 11° 23′	30.07	763.8	52.7	11.5		E			4		10		SE	3 ho	urs	Mod.	E	Drizzling	
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm ‡																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdebrand.

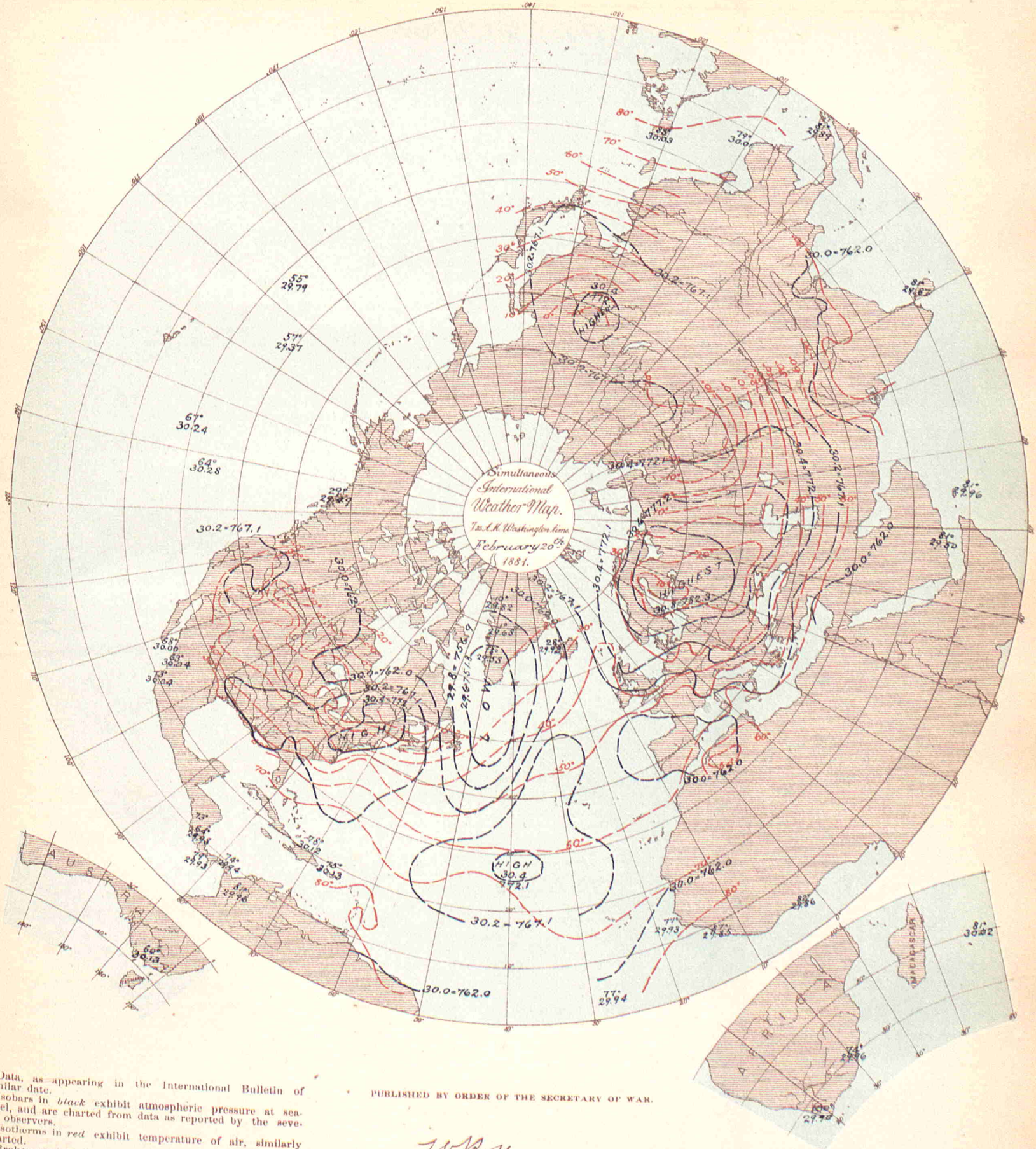
UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Amount and kind.		Direction.				Character.	Dir'n from.		
								Force	Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																		
S. S. Illinois, Liverpool, England	30.16	766.1	38	3.3	90	ENE			2		8		E				Cloudy	Capt. J. W. Shackford.
S. S. Indiana, ‡ Philadelphia, Pa. §†	30.23	767.8	26	— 3.3	52	E			4		2		E	0	0	Sm'h	Clear	Capt. R. W. Sargent.
S. S. Ohio, ‡ N. 51° 22′, W. 11° 45′ *†	30.20	767.1	47	8.3	92	ESE			4		10		ESE	0	0	L'ge irreg.	W;SE Cloudy	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, N. 44° 42′, W. 53° 05′ ††	29.81	757.2	32	0.0	79	NW			5		8		NW	0	0	Mod.	W&W Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																		
S. S. Newbern, N. 22° 56′, W. 108° 59′ ††	30.00	762.0	68	20.0	70	WNW			5		0			0	0	Mod.	NNW Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																		
S. S. Belgic, ‡ N. 38° 39′, W. 165° 33′ ††	29.37	745.0	57	13.9	87	SSW			4		10		WSW	Drizzles		High	Overcast	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China †*	30.22	767.6	65	18.3	89	E			2		10		E				Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 32° 21′, W. 174° 21′	29.79	756.7	55	12.8	74	W			6		5		W	0.11	2.8	High	W Squally	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																		
S. S. Columbia																		Capt. Fred. Bolles
S. S. Oregon																		Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																		
S. S. Ancon, San Diego, Cal. †	30.18	766.6	50	10.0	72	E			2		0						Clear	Capt. J. N. Ingalls.
S. S. Idaho, N. 38° 36′, W. 123° 50′ †	30.36	771.1	52	11.1	93	NW			1		0						Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba																		
S. S. Senator, San Francisco, Cal. †	30.44	773.2	48	8.9	92	SE			1		2		SE				Clear	Thos. Wallace.
S. S. State of California, San Francisco, Cal. †	30.38	771.6	49	9.4	100	Calm			0		2			0	0		Clear	Capt. G. Debney.
S. S. Victoria																		J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																		
S. S. Australia, N. 32° 28′, W. 137° 29′	30.28	769.1	64	17.8	100	SE			2		10					Sm'h	SE Hazy	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W. †	30.23	767.8	74	23.3	90	SE			2		10		SE	0	0		Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 20° 58′, W. 105° 29′ †	30.04	763.0	73	22.8	95	NW			6		10		SE	0	0	R'gh	NW Overcast	Capt. D. S. Austin.
S. S. City of Peking, N. 26° 27′, E. 122° 57′ *†	30.25	768.3	64	17.8	73	NE			3		0			0	0	Sm'h	Clear	Capt. G. G. Berry.
S. S. City of Sidney, N. 28° 41′, W. 144° 16′ †	30.24	768.1	67	19.4	84	SE			2	8c		SE		0	0	High	NW Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio																		A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ N. 7° 12′, W. 81° 57′ †	29.93	760.2	79	26.1	74	Calm			0		5		S	0	0	Sm'll	SSE Clear	Capt. R. R. Searle.
S. S. Dakota																		Capt. D. E. Griffiths.
S. S. Granada																		
S. S. Zealandia, Sydney, N. S. W.	30.22	767.6	73	22.8	81	NNE			3		8		NE				Overcast	
RED STAR LINE. *Jas. A. Wright, President.*																		
S. S. Belgenland ‡																		Capt. Sam'l Jackson.
S. S. Nederland																		Capt. S. Stokes.
S. S. Rhyland, ‡ N. 47° 43′, W. 43° 21′	29.53	750.0	45	7.2		SW			7		10		SW	0.4	10.	High	SW Rainy	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 48° 21′, W. 32° 29′	30.27	768.8				NE			4		2		NE	0	0	Long	NW Fair	Capt. J. C. Jamison.
MISCELLANEOUS.																		
Sch'r Abby K. Bentley, Jacksonville, Florida †	30.11	764.8	65	18.3		NE			2		0			0	0		Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, Norfolk, Va	30.32	770.1	38	3.3	81	Calm	0	0			0			0.41	10.4		Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, Martinique, W. I. †	30.02	762.5	80	26.7		ENE			5		2		ENE	Showers			Clear	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 38° 03′, W. 10° 18′ †*	30.05	763.3	60	15.6		WSW			4		8		W			R'gh	NW Raining	Capt B. F. Woodbury.
Brigantine George, ‡ N. 38° 20′, W. 72° 50′ †	30.53	775.4	50	10.0		NE			5		8		E	Heavy		R'gh	NE	Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	30.33	770.4	36	2.2	70	NE	2	0.9		2s	2s			0	0		Clear	
Ship Jumna																		Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 23° 22′, W. 46° 58′ †	30.27	768.8	74	23.3	100	ENE			6		5		ENE	0	0	Mod.	ENE Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 21, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instru'm'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.98	761.4	63.3	17.4	68	SW			1		3			0	0	Pretty fair.	Dr. Ollive.
Nemours			29.94	760.5	61.2	16.2	85	SSW			4		1			0	0	Very fair	Raynard.
Algiers			29.87	758.6	59.0	15.0	85	W			5		10			1.055	26.8	Covered.	Nicolas.
La Calle			29.93	760.2	57.2	14.0	90	ENE			1		5			0.787	20.0	Cloudy	Fonfréde.
Tunis			29.99	761.7															Jacques.
Sfax			30.04	763.1															Gau.
Saida			29.96	761.0	57.4	14.1	57	W			2		2			0	0	Fair	Dumas.
Tebessa			30.00	762.0	52.2	11.2	41	Calm			0		6			0.390	9.9	Cloudy	Watrin.
Geriville																			Lonchamp.
Laghouat			29.91	759.6	56.8	13.8	55	N			1		0			0	0	Clear	Herbin.
Biskra																			Baudassé.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.85	758.2	29.94	760.5	79.8	26.6	38	NNE	6	2.7			0			0	0		R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania																			Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.90	759.5	30.49	774.4	34.5	1.4	95	NE			1		10			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.71	754.6	30.52	775.3	31.3	— 0.4	89	NE	2.5	1.1			1			0	0		Dr. Wiersbicki.
Eperies	29.60	751.8	30.53	775.4	35.8	2.1	65	SE			2		0			0	0		Julius Mikolik.
Gratz‡	29.18	741.2	30.50	774.8	33.4	0.8	75	S			1		10			0.004	0.1		Andreas Rospini.
Hermannstadt	29.05	737.8	30.60	777.1	26.6	— 3.0	83	SE			2		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.92	734.6	30.34	770.6	31.5	— 0.3	90	ENE			1		10			0	0		The Staff.
Lemberg	29.58	751.2	30.63	778.1	29.8	— 1.2	40	SE			1		0			0	0		Dr. T. Stanecki.
Pola	30.18	766.6	30.30	769.5	50.4	10.2	50	E			3		0			0	0		I. R. Hydrographic Office.
Szathmar	29.69	754.2	30.15	765.8	39.2	4.0	62	E			2		0			0	0		Beicht Peter, S. J.
Szegedin	30.26	768.6	30.56	776.2	32.5	0.3	80	E			1		3			0	0		Karl Stancel.
Trieste	30.25	768.4	30.35	771.0	47.1	8.4	52	ENE			3		2			0	0	Clear	P. Busin.
Vienna	29.70	754.3	30.46	773.6	33.6	0.9	65	SE			4		3			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.95	760.6	30.16	766.0	34.5	1.4	98	NE			1	4		WSW		0.409	10.4	Foggy	Royal Observatory.
Furnes	30.15	765.8	30.17	766.4	36.0	2.2	90	NNE			4		10			0.016	0.4		M. E. de Cae.
Maeseyck	30.04	763.0	30.17	766.2	41.5	5.3	88	ENE			2		10			0.071	1.8	Raining	M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 21, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.45	773.4	30.55	776.0	34.3	1.3	76	E	15	6.7			10					Snowing... ..	W. Boswell.
Armagh, Observatory	30.24	768.1	30.48	774.2	35.0	1.7	80	ENE	7	3.1			10					Overcast....	S. Call.
Bidston, Liverpool Obs'y			30.40	772.1	35.3	2.8	64	ENE	11	4.9			10					Overcast....	John Hartnup.
Bolton, Sharples	29.81	757.2	30.37	771.4	34.0	1.1	86	ENE	7	3.1			10					Overcast....	Thomas Mackereth.
Bradford, Yorkshire	29.95	760.7	30.35	770.9	34.7	1.5	79	NE			3		5			0.04	1.0	D. clouds....	J McLandsborough, F.R.S
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	82	27.8	67				3		4					D. clouds....	Pvt. J. Surgenor, A. H. C.
Cardington			30.28	769.1	34.6	1.4	83	NE			0.6		10					Snowing	John McLaren.
Chatham, School M. E.	30.12	765.0	30.25	768.3	34.2	1.2	92	NE			1		10			Blank		Overcast....	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	30.04	763.0	30.27	768.8	39.8	4.3	75	NE			2		10					Overcast	The Staff.
Fort Napier, Natal	27.68	703.1	30.00	762.0	77.3	25.2	68	NE			0		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.62	752.3	29.86	758.4	86	30.0	88	W			1		2					D. clouds....	C. E. Keane.
Galway, Queen's College			30.34	770.6				NE			1		10					Overcast	J. O'Donaghadue.
Gibraltar, Mediterranean	29.87	758.7	29.92	760.0	62.9	17.2	93	NE			3		6					D. clouds....	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.28	769.1	30.48	774.2	35.9	2.2	70	NE			3		10k					Overcast....	D. G. MacLean.
Greenwich, Royal Obs'y	30.09	764.3	30.28	769.1	33.7	0.9	93	NNE			1		10					Snowing.....	The Staff.
Guernsey	29.94	760.5	30.16	766.1	42.5	5.8	91	NE			2		10					Misty.....	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.25	768.3	30.49	769.4	33.8	1.0	83	NNE	18	8.0			10					Gloomy.....	The Met'g'l Office.
Leicester, Museum	30.04	763.0	30.31	769.9	34.5	1.4	85	NE			2		8			Blank		D. clouds....	J. E. Carryer.
Malta, Mediterranean	29.94	760.5	30.02	762.5	59.2	15.1	81	SE			4		8					Overcast....	F. S. Vine, A. H. C.
Nassau, Bahamas	30.11	764.8	30.15	765.8	72.0	22.2	85	S			1		4					D. clouds....	C. S. Duncombe.
Oscott, St. Mary's College	29.80	756.9	30.36	771.1	33.0	0.6	84	NNE			3		10					Overcast....	Robert Pate.
Oxford, Radcliffe Obs'y	30.07	763.8	30.33	770.4	33.3	0.7	86	NNE			3		10					Snowing.....	The Staff.
Plymouth	30.17	766.3	30.25	768.3	40.5	4.7	82	NE			2		10					Overcast....	John Merrifield.
Sandwick Manse, Orkneys			30.59	777.0	35	1.7	90	SSE	11	4.9			10					Misty.....	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.25	768.3	30.32	770.1	38.0	3.3	88	NE			2		10					Raining	Serg't W. H. Lyne.
Sheffield	30.07	763.8	30.37	771.4	34.6	1.4	83	NE			1		8			0.22	5.6	Overcast....	W. F. Cooper.
Silloth Rectory	30.39	771.9	30.42	772.7	37.5	3.1	73	E			5		6			0	0	D. clouds....	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.39	771.9	34.4	1.3	75	ENE	7	3.1			7					D. clouds....	Rev. S. J. Perry.
Strathfield Turgiss	30.06	763.5	30.29	769.4	34.2	1.2	90	NE			3		10					Snowing.....	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	30.19	766.8	30.25	768.3	42	5.6	83	NE			4		10					Gloomy.....	W. Newcombe.
Valencia, Observatory	30.31	769.9	30.33	770.4	44.4	6.9	72	E	19	8.5			10					Misty.....	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.44	773.2	30.49	774.4	0	—17.8	100	Calm	0	0			10s			0	0	Cloudy.....	H. J. Cundall, C. E.
Chatham, N. B.*	30.38	771.6	30.45	773.4	— 4	—20.0	96	Calm	0	0			10n		Calm	0	0	Cloudy.....	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	30.20	767.1	30.22	767.6	12	—11.1	80	SW	1	0.4		0	2n		Calm	0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.06	738.1	30.00	762.0	—12	—24.4	100	SE	2	0.9		5cs	2ks	SE	SE	Inap.	Inap.	Fair...	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.33	770.4	30.47	773.9	16	— 8.9	96	NE	5	2.2			10ks?			0	0	Clear ?	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.64	752.8	30.00	762.0	27	— 2.8	94	S	8	3.6			10n			0.01	0.3	Light snow.	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	29.82	757.4	30.04	763.0	15	— 9.4	84	S	9	4.0			10n			Inap.	Inap.	Light snow.	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	29.25	742.9	29.98	761.5	22	— 5.6	86	W	9	4.0		2k	5ks	W	W	0.04	1.0	Fair.....	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.34	745.2	30.06	763.5	29	— 1.7	100	SW	8	3.6			10n			0.10	2.5	Threatening	H. Morgan.
Port Stanley, Ontario	29.40	746.7	30.08	764.0	29	— 1.7	86	W	9	4.0			10n		W	0.02	0.5	Cloudy.....	M. Payne.
Quebec, Quebec*	29.83	757.7	30.18	766.6	17	— 8.3	100	NE			3		10s?		NE	0	0	Clear ?.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.51	749.5	30.00	762.0	13	—10.6	85	E	2	0.9			10n			0.04	1.0	Light snow..	K. Stewart.
Saugeen, Ontario*	29.31	744.5	30.06	763.5	23	— 5.0	89	NW	10	4.5			10ks			0.05	1.3	Cloudy.....	W. H. McIntyre.
St. Andrews	30.24	768.1	30.30	769.6	25	— 3.9	82	S	3	1.3			10n			0	0	Cloudy.....	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.53	775.4	30.58	776.7	— 4	—20.0	89	Calm	0	0			8c	0		0	0	Fair...	T. C. Hill, C. E.
Toronto, Ontario*	29.66	753.4	30.04	763.0	27	— 2.8	94	Calm	0	0			10n			0.10	2.5	Cloudy.....	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.24	768.1	30.30	769.6	25	— 3.9	82	E	5	2.2		Hz	10s		S	0	0	Fair...	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	30.42	772.7	30.70	779.8	6	—14.4	76	SE	0	0		0	0			0	0	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape St. Francis Lt. House	29.93	760.2			69.8	21.0	84	ESE	6.5	2.9			0			0	0	Blue sky.....	John Duthie.
Cape Town, C. G. H. Obs'y	29.73	755.1	29.77	756.1	74.8	23.8	70	W	5.0	2.2		0	1k			0	0	.....	The Staff, for D. Gill.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.04	763.1	30.07	763.7	51.6	10.9	93	ESE	9.6	4.3			0			0	0	Clear.....	M. Marc Dechevrens, S J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.25	666.7	29.97	761.2	60.4	15.8	87	SE			2	0				0	0	Clear.	Federico Maison.

DANISH SERIES.

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

Copenhagen	30.44	773.2	30.49	774.4	30.4	—0.9	78	ESE	20	9			9						Oversergent Fischer.
Fanöe	30.40	772.1	30.42	772.6	28.4	—2.0	92	ENE			6		10						Overloerer Lauridsen.
Godthaab, Greenland	29.65	753.2	29.70	754.3	8.1	—13.3	100	NNE			6		9						S. Kleinschmidt.
Stykkisholm, Iceland	30.25	768.4	30.30	769.5	27.3	—2.6	87	E			4		2						A. O. Thorlacius.
Thorshavn	30.48	774.2	30.52	775.1	41.2	5.1	95	Calm	0	0			10					Raining	Overloerer Bergh.
Vestervig	30.41	772.3	30.50	774.7	26.4	—3.1		NE			6		10						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.35	745.6	30.00	762.0	57.2	14	78	SSE			3	c	kn	NW	W	0	0		M. Labroue, Director.
Alençon	29.61	752.2	30.17	766.2	45.7	7.6	94	NE			3		8kn		NE	0	0	Very cloudy	M. Nicot, Director.
Arras, Engineer School	29.91	759.8	30.19	766.7	36.0	2.2	95	N			1		10					Covered	M. Klein, Commandan
Avignon, Normal School	30.09	764.2	30.17	766.2	60.8	16	58	ESE			1		8		ESE.	0.110	2.8	Very cloudy	M. Giraud, Director.
Bar-sur-Seine	29.58	751.2	30.13	765.4	54.9	12.7	78	S			1		8kn		SW	0.004	0.10	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.89	759.3	30.17	766.3	42.8	6	88	N			1		10			0.08	2.	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.25	743.0	30.15	765.9	54 7	12.6	72	SW			1		cn		SW	0.051	1.3		M. Gobin, Director.
Bordeaux, Observatory	29.70	754.4	29.96	761.0	57.9	14.4	73	SSE			2		10			0	0	Covered	M. Rayet, Director.
Bourges, Normal School	29.56	750.7	30.11	764.9	50.0	10	92	SSE			2		10n		SSE			Raining	M. Postel, Director.
Brest, Naval Observatory	29.93	760.3	30.18	766.5	44.6	7.0	91	NE			2		10		NE	0	0	Misty	M. de Rermaree, Dir.
Caen, Normal School	30.00	762.0	30.08	763.9	46.0	7.8	100	N			1		10			0	0	Covered	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.83	757.6	30.15	765.7	53.6	12.0	76	S			1		10			0.047	1.2	Covered	M. Jadot, Director.
Charleville, Normal School	29.60	751.7	30.15	765.8	45.0	7.2	80	ESE			1		Mist			0	0	Misty	M. Grimard.
Clermont-Ferrand Obs'y	28.72	729.4	30.07	763.8	55.6	13.1	62	SE			1		10		S	0.094	2.4	Covered	M. Alluard, Director.
Cluny, Normal School	29.29	744.0	30.15	765.9	53.6	12	72	SE			3		6	SE	SE	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.28	743.7	30.17	766.3	49.6	9.8	89	E			4		kn	E	E	0.012	0.3		Dr. Coulet, Director.
Gap, Normal School	27.70	703.6	30.28	769.1	47.3	8.5	59	S			2		5		S	0.098	2.5	½ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	29.09	738.8	30.23	767.8	54.1	12.3	74	E			3		10		SE	0	0	Covered	M. Kina, Director.
Grenoble, Normal School	29.37	745.9	30.14	765.5	54.7	12.6	59	NE			1	ck				0	0		M. Ablard, Director.
Guéret, Normal School	28.52	724.3	30.11	764.9	50.4	10.2	92	SE			1		10		NW	0.47	12.	Covered	M. Rivoir, Director.
Lamballe, Normal School	29.89	759.2	30.17	766.4	44.2	6.8	94	E			1		Fg		E	0	0	Foggy	M. Ollitrault, Director.
Lescar, Normal School	29.39	746.4	30.06	763.4	57.9	14.4	84	NE			1		5		W	0	0	Cloudy	M Chauvin, Director.
Lorient, Naval Observatory	30.05	763.3	30.15	765.9	47.8	8.8	86	NNE			4		10	Calm	N	0	0	Covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	29.09	738.8	30.11	764.8	55.4	13.0	66	SE			1		8cn	SE	W	0.079	2.0	Very cloudy	M. André, Director.
Mans, Normal School	29.83	757.7	30.15	765.7	46.0	7.8	91	NE			4		8		E	0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.87	758.7	30.14	765.6	59.0	15.0	65	E			3		8		SE	0	0		M. Stephan, Director.
Montlouis l'instituteur																			M. Cave, for Dr. Fines.
Montpellier, Normal School	30.04	763.1	30.15	765.9	54.7	12.6	88	SE			2		8		SE	0.661	16.8	Raining	M. Galzin, Director.
Nancy, Normal School	29.39	746.6	30.19	766.7	45.0	7.2	94	W			1		10			0	0	Misty	M. Tallieu.
Nantes, Observatory	29.95	760.9	30.12	765.0	49.6	9.8	89	NE			1		10			0.016	0.4	Gloomy	M. Hasse.
Nice	30.17	766.4	30.21	767.3	56.5	13.6	86	NE			3		10	NE	NE	0.173	4.4	Light rain	M. Larocque, Director.
Perpignan, Observatory	29.98	761.5	30.09	764.2	55.2	12.9	82	SE	16.8	7.5			10		E	0.614	15.6		Capt. Boissière, Director.
Pic-du-Midi, Plantade	22.44	570.1			31.3	0.4							10		S	0.370	9.4	Snowy	Dr. Fines.
Privas, Normal School	29.11	739.3	30.18	766.5	55.8	13.2	66	SE			1		5		SE	0.20	5.	Cloudy	M. Baylac, for Gen'l de Nansouty.
Puy de Dôme Obs'y, Summit	25.18	639.5			37.0	2.8	97	SSE			3		10		SSE	0.055	1.4	Covered	M. Tallieu.
Rochefort, Naval Obs'y	29.99	761.7	30.02	762.5	55.4	13.0	71	E			1		10			0	0	Covered	M. Alluard, Director.
Roche-sur-Yon, N. School	29.84	758.0	30.05	763.5	54.7	12.6	83	ENE			1		5		S	0	0	Cloudy	Lt. E. Decante, Director.
Rodez, Normal School	27.93	709.3	30.08	764.0	51.4	10.8	68	E			4	7ck			S	0	0		M. Moullot, Director.
Rouen, Normal School	30.08	764.0	30.17	766.2	44.6	7.	85	N			1		10			0.098	2.5	Foggy	M. Richard, Director.
Saint Lô, Normal School	30.00	762.1	30.16	766.1	43.5	6.4	84	N			1		Fg			0	0	Foggy	M. Plâtrier, Director.
Saint Maur, Observatory	29.98	761.4	30.14	765.6	45.3	7.4	96	NNE			1		10			0.035	0.9	Foggy	M. Delaplanche, Dir.
Toulouse, Observatory	29.31	744.4	30.03	762.8	56.1	13.4	75	SSE			6		10	SSE		0	0	Covered	M. Renou, Director.
Tours	29.90	759.5	30.10	764.5	48.7	9.3	92	SE			1		10			0	0	Misty	M. Bailland, Director.
Versailles, Observatory	29.64	752.8	30.13	765.4	45.0	7.2	97	NW			1		10			0.298	7.57	Covered	M. de Tastes.
Sub-Series.																			Dr. A. Bérigny, Director
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

GERMAN SERIES.

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

Bamberg	29.38	746.3	30.25	768.4	39.2	4.0	66	SE			3		5ks	S		0.008	0.2		Prof. Dr. Hoh.
Berlin	30.19	766.7	30.37	771.3	35.8	2.1	64	E			3		6			0	0		Prof. Dr. Arndt.
Breslau	29.90	759.4	30.44	773.1	37.4	3.0	56	SE			2		2			0	0		Royal University Obs'y.
Carlsruhe	29.75	755.7	30.19	766.8	47.8	8.8	76	NE			0		9	SW		0	0		Albert Senz.
Cassel	29.65	753.2	30.19	766.8	42.1	5.6	72	E			2		2	E		0	0		Dr. H. Möhl.
Frankfort on the Main	29.93	760.3	30.32	770.0	42.4	5.8	69	ESE			1		9			0	0		Physical Society.
Friedrichshafen	28.74	729.9	30.22	767.5	42.1	5.6	85	SW			3		5	SW		0	0		Chief Telegrapher Wilhelm.
Hamburg	30.29	769.3	30.36	771.1	36.1	2.3	75	E			3		4			0	0		Dr. R. Kleeman.
Kiel	30.36	771.2	30.38	771.6	30.6	—0.8	82	E			4		5			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.89	759.1	30.33	770.3	39.6	4.2	70	ESE			1		9			0	0		Prof. Dr. Bruhns.
Magdeburg	30.09	764.3	30.38	770.2	37.4	3.0	78	E			1		10ks	SSE		0.039	1.0	Light fog	Dr. Assmann.
Memel	30.06	778.8	30.71	780.0	26.4	—3.1	74	SE			3	8c							Reinbrecht & Issermann.
Munich	28.40	721.3	30.28	769.0	33.3	0.7	82	E			1		8	E		0	0	Hazy	Central Station.
Neufahrwasser	30.58	776.8	30.60	777.2	25.2	—3.8	69	SE			2		8			0	0		A Lothes.
Neustadt, Palatinate	29.63	752.7	30.16	766.1	43.2	6.2	88						10			0	0	Light fog	Dicknether.
Stuttgart	29.22	742.1	30.12	765.1	50.4	10.2	70	NE			1		5	W		0	0		Prof. Dr. Schoder.
Thorn	30.31	769.9	30.50	774.8	30.9	—0.6	62	E			3		3			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	28.70	728.9	30.22	767.7	35.2	1.8	85	SE			2		7	W		0	0		Prof. Kemlein.
Wustrow	30.41	772.5	30.44	773.2	30.9	—0.6	96	E			2		10s						Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Tempera-ture of the Air.		Rel. Hum.	Wind. Direc-tion.	Wind. Velocity.		Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.93	760.3	30.34	770.6	44.4	6.9		NE			3.5		5					½ Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.92	760.0	29.97	761.3	76.9	24.9	63	SW	28.0	12.5			1	W		0.02	0.5	D. clouds	
Deesa	29.44	747.9	29.92	759.9	83.8	28.8	39	WSW	8.6	3.8			5	SW		0	0	D. clouds	
Bombay	29.94	760.6	29.98	761.6	82.4	28.0	60	WNW	10.0	4.5			0			0	0	Blue sky	
Poona, Yarrowda	28.08	713.2	29.92	759.8	82.8	28.2	24	WSW	22.0	9.8			0			0	0	Blue sky	
Belgaum	27.39	695.8	29.89	759.2	85.5	29.7	12	E	2.0	0.9			0			0	0	Blue sky	
Lahore	29.18	741.1	29.94	760.4	70.1	21.2	73	E	4.8	2.2			8			0.90	22.9	Gloomy	
Roorkee	29.07	738.5	30.00	762.1	65.2	18.4	87	NE	4.5	2.0			9			0.08	2.0	Thn'd & L'tg	
Agra	29.38	746.3	29.96	760.9	74.8	23.8	40		7.6	3.4			0			0	0		
Nagpur	29.00	736.5	29.92	760.1	90.0	32.2	24	SW	5.6	2.5			7		SW	0	0	D. clouds	
Jubbulpore	28.56	725.3	29.93	760.1	79.2	26.2	50	Calm	2.7	1.2			10			0.08	2.0	Overcast	
Lucknow	29.61	752.0	29.99	761.7	76.8	24.9	87	SE	2.9	1.3			10	SE		0	0	Overcast	
Allahabad	29.66	753.4	29.98	761.6	70.8	21.6	68	NE	2.4	1.1			9	NW		0	0	D. clouds	
Patna	29.77	756.2	29.96	760.9	77.7	25.4	61	W	1.0	0.4			5	W	W	0	0	D. clouds	
Hazaribagh	27.93	709.3	29.94	760.5	78.8	26.0	35	WNW	4.2	1.9			1			0	0		
Cuttack	29.85	758.2	29.93	760.3	87.1	30.6	44	Calm	0.3	0.1			0			0	0	Blue sky	
Calcutta, Alipore	29.92	759.9	29.94	760.5	83.0	28.3	43	W	4.0	1.8			0			0	0	Blue sky	
Goalpara	29.54	750.2	29.94	760.6	77.3	25.2	49	Calm	1.2	0.5			1			0	0	D. clouds	
Chittagong	29.99	761.6	30.08	764.0	77.6	25.3	70	WSW	2.5	1.1			0			0	0	Blue sky	
Sibsagar	29.64	752.8	29.98	761.5	71.8	22.1	69	W	1.9	0.8			0			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.93	760.2	30.35	770.9	48.6	9.2	69	E	4.3	1.9			0			0	0		Prof. Giovanni Clodig
Milan	29.80	756.8	30.33	770.3	48.9	9.4	80	SE	1.8	0.8			10			0	0		Prof. Schiaparelli.
Padua	30.24	768.0	30.35	770.9	46.8	8.2	66	NE	5.6	2.5			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.38	746.3	30.31	769.8	48.2	9.0	81	ESE	3.1	1.4			7	ENE		0	0		Prof. P. F. Denza.
Genoa	30.08	763.9	30.27	768.9	49.6	9.8	74	NE	10.5	4.7			10	E		0.067	1.7		Prof. G. M. Garibaldi.
Mondovi	28.36	720.4	30.35	770.9	44.4	6.9	77	N			2		9			0	0		Prof. D. C. Bruno.
Pesaro	30.27	768.8	30.32	770.1	49.5	9.7	85	NW	7.4	3.3			10	SW		0	0		Prof. Luigi Guidi.
Florence	29.97	761.3	30.23	767.9	56.7	13.7	52	NE			2		8	N		0	0		Cav. F. Meucci.
Leghorn																			Prof. P. Monte.
Rome	30.02	762.4	30.19	766.9	58.3	14.6	52	ESE	1.3	0.6			9			0.012	0.3		Prof. P. S. Ferrari.
Lecce	30.01	762.2	30.27	768.8	54.0	12.2	60	W	4.9	2.2			6	W		0	0		Prof. C. de Giorgi.
Cosenza	29.31	744.4	30.22	767.5	52.2	11.2	71	WNW	8.1	3.6			10	NW		0	0		Prof. D. Conti.
Cagliari	29.80	756.8	29.99	761.7	63.0	17.2	53	ESE			4		7	E		0	0		Prof. A. Pacinotti.
Palermo	29.85	758.1	30.10	764.5	58.5	14.7	59	E	3.8	1.7			10						Prof. G. Ciaccatore.
Syracuse	30.10	764.5	30.14	765.6	56.5	13.6	67	ESE	9.8	4.4			10	ESE		0	0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R	29.63	752.7	30.16	766.1	56.8	13.8	59	ENE	4.3	1.9			5			0	0		Prof. F. Brioschi
Stelvio	22.28	566.0			27.9	— 2.3	83	SSW			1		8s	S		0	0	Misty	P. F. Denza.
Valdobbia	22.27	565.7			28.4	— 2.0	88	SE			2		10			0	0	Covered	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.27	768.8	30.29	769.3	38.3	3.5	86	NNE	8.2	3.7			0			0	0	Clear	K. Sasaki.
Kioto	30.13	765.3	30.31	769.9	36.3	2.4	77						4s;ks		NW	0	0	Fair	M. Tojima.
Nagasaki, I. M. Obs'y	30.03	762.7	30.24	768.1	43.4	6.3	85	Calm	0	0			0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	30.12	765.0	30.19	766.8	33.8	1.0	50	N	14.6	6.5		0	0			0	0	Clear	The Staff.
Wakayama	30.25	768.3	30.31	769.9	37.4	3.0	74	NNE	6.7	3.0			0			0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.83	757.7	30.01	762.3	81.9	27.7	67	ENE	13.5	6.0		0	3		E	0.01	0.3	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.51	622.8	30.28	769.2	54.0	12.2	88	SW			2	0	0			0	0	Fine	Prof. M. Leal.
Mazatlan	29.75	755.7	30.02	762.4	63.8	17.7	81	E	1.8	0.8		6cs	0	WSW		0	0	¼ cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.21	589.6	30.36	771.2	49.1	9.5	78	Calm	0	0		0	6kn			0	0	Foggy	The Staff.
Pabellon, Aguascalientes	23.99	609.3	30.04	762.8	55.6	13.1	79	Calm				0	0			0	0	Fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.43	595.2	30.34	770.5	43.0	6.1	50	Calm	0	0		0	0			0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.17	614.0	30.10	764.5	61.2	16.2	61	ESE	0.9	0.4		0	5		E	0	0	Fair	G. Barroeta, M. D.
Tlacotalpam	30.17	766.4	30.19	766.7	69.8	21.0	90	N	15.5	6.9			10		NW	0.225	5.7	Covered	Prof. M. Cházaro.
Zacatecas	22.64	575.0	30.39	772.0	46.4	8.0	89	E	5.1	2.3		0	9ks		E	0	0	Very cloudy	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.19	766.8	30.19	766.8	34.0	1.1		NNE			4					0.051	1.3		
Groningen	30.22	767.6	30.28	769.0	34.9	1.6		ENE			2					0	0		
Helder	30.25	768.3	30.25	768.3	31.8	— 0.1		NE			4					0.181	4.6		
Hellevoetsluis	30.18	766.5	30.18	766.5	32.0	0.0	91	NE			3					0	0		
Utrecht	30.17	766.4	30.22	767.6	34.0	1.1	91	NE			2		10			0.165	4.2	Dull	H. van der Brink

NORWEGIAN SERIES.

Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.

STATIONS.	Barometer: Corrected for instrum'tal error and temperature. Inch.	Barometer: Corrected for instrum'tal error and temperature. Mill	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Bergen	30.52	775.2	30.58	776.8	32.4	0.2	54	Calm	0	0			0			0	0		
Christiania	30.58	775.7	30.74	780.7	28.4	— 2.0	54	NNE	7	3			4			0	0		
Gjæsvær	30.20	767.0	30.22	767.6	36.9	2.7		WSW			7		10						
Lodingen	30.49	774.4	30.54	775.6	33.4	0.8	84	W			6		10			0.354	9.0	Snowing	

PORTUGUESE SERIES.

Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

STATIONS.	Barometer: Corrected for instrum'tal error and temperature. Inch.	Barometer: Corrected for instrum'tal error and temperature. Mill	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Angra, Azores																			Dr. J. A. Sampaio.
Campo Major	28.94	735.1	29.96	761.0	50.0	10.0	95	SSW	1.3	0.6			10			0.583	14.8		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.01	762.3	30.10	764.5	57.4	14.1	66	SE	3.1	1.4			10			0.484	12.3		Capt. D. A. de Cunha.
Lisbon, Observatory	29.60	751.9	29.97	761.2	52.3	11.3	79		0.7	0.3			6	WSW		0.008	0.2		The Staff.
Ponta Delgada, Azores	30.16	766.0	30.23	767.8	54.7	12.6	61	NNE	19.2	8.6			4			0.362	9.2		

RUSSIAN SERIES.

Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.

STATIONS.	Barometer: Corrected for instrum'tal error and temperature. Inch.	Barometer: Corrected for instrum'tal error and temperature. Mill	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Akmolinski	29.34	745.1	30.61	777.5	—22.4	—30.2	70	SW	13	6			0						Capt. Lasarew.
Archangel	30.65	778.6	30.67	779.1	11.8	—11.2	82	Calm	0	0			0						Capt. Sseliwerstow.
Astrakhan	30.79	782.0	30.71	779.9	22.1	— 5.5	58	ENE	11	5			0						Capt. Wisganow.
Barnaul	30.06	763.6	30.66	778.7	—21.3	—29.6	71	SW	9	4			10					Light clouds	Meteorological Obs'y.
Dorpat	30.68	779.2	30.95	786.1	13.3	—10.4	74	ESE	4	2			0						Obervatory.
Ekaterinburg	29.26	743.2	30.29	769.4	20.3	— 6.5	58	NNW	4	2			18						Meteorological Obs'y.
Kasan	30.29	769.3	30.58	776.6	28.6	— 1.9	79	N	7	3			10						Observatory.
Kertch	30.44	773.2	30.46	773.7	25.2	— 3.8	82	ENE	13	6			10						Lagorio.
Kieff	30.14	765.6	30.85	783.7	15.6	— 9.1	78	E	4	2			10n					Snowing	Cand. Fatjanow.
Lugan	30.50	774.8	30.72	780.4	23.7	— 4.6	70	ENE	34	15			6			Blank		Light clouds	Meteorological Obs'y.
Moscow	30.38	771.7	30.99	787.1	19.0	— 7.2	78	S	7.8	3.5			10s						Meteorological Obs'y.
Nertchinsk	27.61	701.3	30.10	764.5	7.3	—13.7	96	Calm	0	0			10					Snowing	Meteorological Obs'y.
Nikolaiev	30.63	778.1	30.71	779.9	19.0	— 7.2	78	ENE	45	20			10ks;n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	30.08	764.1	30.17	766.3	1.4	—17.0	84	Calm	0	0			0						Lieut. Iwanow.
Nukuss	30.37	771.5	30.63	777.9	27.3	— 2.6	74	Calm	0	0			5k						Dr. Dobrochotow.
Pekin, China	29.93	760.1	30.07	763.7	29.5	— 1.4	57	SE	4	2			0						Physical Observatory.
St. Petersburg	30.92	785.4	30.94	785.8	20.3	— 6.5	85	SSE	2	1			0						Central Physical Obs'y.
Tashkend, Laboratory	28.90	734.1	30.59	777.0	29.3	— 1.5	90						4						Teich, A. M.
Tiflis	28.96	735.5	30.45	773.4	36.0	2.2	62	SE	4	2			10						Physical Observatory.
Warsaw	30.15	765.9	30.61	777.5	25.3	— 3.7	56	SE	13	6		4c							Astronomical Obs'y.
Wilna	30.40	772.2	30.86	783.8	23.5	— 4.7	71	SSE	2	1			3					Light clouds	Berg, Assistant.
Yeniseisk	30.15	765.9	30.49	774.5	—18.8	—28.2	74	Calm	0	0			0						M. O. Marks.

SCOTTISH SERIES.

Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.

STATIONS.	Barometer: Corrected for instrum'tal error and temperature. Inch.	Barometer: Corrected for instrum'tal error and temperature. Mill	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Leith, Restalrig Park			30.51	774.9	37.0	2.8	73	E			3		10k			0.19	4.8	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides			30.52	775.2	39	3.9	91	SSE			4		10			0	0	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds			30.63	778.0				S			2		10			0	0		Robert Burnet.

SPANISH SERIES.

Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.

STATIONS.	Barometer: Corrected for instrum'tal error and temperature. Inch.	Barometer: Corrected for instrum'tal error and temperature. Mill	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Barcelona, Met. Obs'y	29.95	760.7	30.06	763.4	55.9	13.3	92	ENE	4.9	2.2			10			0.132	3.36	Covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.98	761.0	30.02	762.4	58.6	14.8	78	S	1.8	0.8			10			0	0	Covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.98	685.4			44.2	6.8	81	SE	3.1	1.4			10			0.157	4.0	Misty	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.74	704.7	30.00	762.0	50.9	10.5	72	SE	1.3	0.6			10			0.276	7.0	Raining	The Staff.
Murcia, Met. Obs'y	29.82	757.3	29.97	761.1	64.4	18.0	56	W	2.5	1.1		0	2			0	0	Almost clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.01	736.9	29.91	759.7	54.7	12.6	80	NE	6.3	2.8			9			0.087	2.2	Almost cov'd	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.08	764.0	30.15	765.7	69.5	20.8	89	Calm	0	0		6ck	2s	N		0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.99	761.8	30.04	763.1	80.8	27.1	62	E	8.9	4.0						0	0	Fair	Federico Faura, S. J
San Fernando, Naval Obs'y	29.89	759.1	29.99	761.7	57.6	14.2	78	ESE	5.1	2.3		2	7	W	SE	0.024	0.6		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.04	762.9	30.13	765.2	74.8	23.8	85	SE	10.2	4.54		0	9kn		SE	0.236	6.00	Raining	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.96	760.9	30.10	764.6	77.6	25.3	80	NNW	3.6	1.6			1k		SE	0	0	Fair	José L. Fastovra.

SWEDISH SERIES.

Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.

STATIONS.	Barometer: Corrected for instrum'tal error and temperature. Inch.	Barometer: Corrected for instrum'tal error and temperature. Mill	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Haparanda	30.71	779.9	30.74	780.9	7.9	—13.4	92	S			2		0			0	0		
Umea	30.72	780.4	30.78	781.7	18.3	— 7.6	100	SW			2		0			0	0		
Hernosand	30.82	782.9	30.87	784.2	9.5	—12.5	81	Calm			0		0			0	0		
Stockholm	30.60	777.1	30.77	781.6	23.0	— 5.0	95	E			2		9			0	0		
Wisby	30.54	775.6	30.60	777.1	29.1	— 1.6	76	ESE			4		3			0	0		
Sub-Series.																			
Upsala	30.69	779.4	30.77	781.6	15.6	— 9.1	97	NE	6.9	3.1			10			0	0		Nils Ekholm

SWISS SERIES.

Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.

STATIONS.	Barometer: Corrected for instrum'tal error and temperature. Inch.	Barometer: Corrected for instrum'tal error and temperature. Mill	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Geneva	28.75	730.3	30.19	766.7	51.1	10.6	68	NE			1		8			0	0	Vapory	The Observatory.
Zurich	28.54	724.9	30.21	767.2	45.3	7.4	81	W			2		4			0.012	0.3	Slightly cl'dy	The Observatory.

At Geneva the corresponding departures from the normal values are: Bar. +4.4 mm.; Ther. +5°.0 cent.; Hum. —1 per cent.

TURKISH SERIES.

Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.

STATIONS.	Barometer: Corrected for instrum'tal error and temperature. Inch.	Barometer: Corrected for instrum'tal error and temperature. Mill	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Constantinople			30.36	771.1	36.7	2.6	96	NNW	14	6.5			10		N			Snowing	The Observatory.
Valona			30.23	767.8	56.8	13.8		W			1		2			0	0	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.95	760.6	57.0	13.9	63	N			3	c	8n		W	0.41	10.4		Prof. C. V. A. van Dyck.

STATIONS.	BAROMETER.				TEMPERATURE OF THE AIR.		REL. HUM.	WIND.				CLOUDS.				RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Corrected for instrum'tal error and temperature.		Reduced to sea-level.					Direction.	Velocity.		Force	Amount and kind.		Direction.					
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES.																			
By authority of the SECRETARY OF WAR.																			
Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	30.02	762.5	30.10	764.5	35	1.7	90	S	1	0.4			10n		Calm	Inap.	Inap.	Light snow.	
Alpena, Michigan	29.41	747.0	30.12	765.0	10	—12.2	79	NW	4	1.8		0	0			0.01	0.3	Clear.	
Atlanta, Georgia	29.01	736.8	30.20	767.1	39	3.9	72	NW	13	5.8		0	0			0	0	Clear.	
Atlantic City, New Jersey	29.94	760.5	29.96	761.0	38	3.3	100	N	14	6.3			10n		Calm	0.39	9.9	Light rain.	
Atton Id., Alaska ‡	29.34	745.2			36	2.2	100	NE	21	9.4			10n		N	0.84	21.3	Cloudy.	
Augusta, Georgia	29.98	761.5	30.19	766.8	45	7.2	92	W	2	0.9		0	8s;fg		SW;C	0	0	Fair.	
Baltimore, Maryland	30.01	762.2	30.06	763.5	37	2.8	81	N	6	2.7			10s		Calm	0.12	3.0	Cloudy.	
Barnegat, New Jersey	29.94	760.5	29.96	761.0	35	1.7	100	N	22	9.8			10n		N	0.35	8.9	Light rain.	
Benton, Montana	27.00	685.8			40	4.4	65	SW	27	12.1		0	0			0	0	Clear.	
Bismarck, Dakota	27.97	710.4	29.82	757.4	10	—12.2	89	Calm	0	0		5c	0	Calm		0	0	Fair	
Boise City, Idaho	27.50	698.5	30.46	773.7	37	2.8	75	N	4	1.8			10s		NW	Inap.	Inap.	Cloudy.	
Boston, Massachusetts	29.97	761.2	30.13	765.3	32	0.0	100	E	12	5.4			10s		Calm	Inap.	Inap.	Threatening	
Brackettville, Texas	29.25	742.9	30.39	771.9	32	0.0	79	N	3	1.3		0	0			0	0	Clear.	
Brownsville, Texas	30.33	770.4	30.37	771.4	53	11.7	93	N	4	1.8		10ck	0	Calm		0.21	5.3	Cloudy	
Buffalo, New York	29.30	744.2	30.04	763.0	28	— 2.2	88	SW	10	4.5			10n		Calm	0.02	0.5	Light snow.	
Burlington, Vermont	29.78	756.4	30.08	764.0	28	— 2.2	88	S	11	4.9			10n		S	Inap.	Inap.	Light snow.	
Cairo, Illinois	30.01	762.2	30.43	772.9	32	0.0	79	NE	6	2.7		0	0			Inap.	Inap.	Clear.	
Campo, California	27.65	702.3	30.22	767.6	28	— 2.2	66	E	4	1.8		0	0			0	0	Clear.	
Camp Thomas, Arizona	27.59	698.5			28	— 2.2	77	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	29.98	761.5	30.00	762.0	38	3.3	91	NW	16	7.2			10s		Calm	0.48	12.2	Cloudy.	
Cape May, New Jersey																			
Castroville, Texas	29.59	751.6	30.34	770.6	41	5.0	87	NW	3	1.3		0	0			0	0	Clear.	
Cedar Keys, Florida	30.14	765.5	30.16	766.1	57	13.9	81	NW	16	7.2		8ck	0	W		0	0	Fair.	
Champaign, Illinois	29.43	747.5	30.31	769.9	12	—11.1	61	W	8	3.6		0	0			0	0	Clear.	
Charleston, S. Carolina	30.09	764.3	30.15	765.8	51	10.6	79	W	3	1.3		0	8s		W	0	0	Cloudy.	
Charlotte, N. Carolina	29.25	742.9	30.09	764.3	40	4.4	73	W	2	0.9		0	Sk		Calm	0	0	Clear.	
Chattanooga, Tennessee	29.44	747.8	30.28	769.1	39	3.9	73	NW	8	3.6		2k	5ks	NW	NW	0	0	Fair.	
Cheyenne, Wyoming	24.03	610.4	29.97	761.2	32	0.0	59	NW	36	16.1			10s		Calm	0	0	Cloudy.	
Chicago, Illinois	29.48	748.8	30.24	768.1	10	—12.2	58	W	8	3.6		0	0			0	0	Clear.	
Chincoteague, Virginia	29.94	760.5	29.96	761.0	39	3.9	100	NW	19	8.5			10n		NW	0.71	18.0	Light rain.	
Cincinnati, Ohio	29.58	751.3	30.26	768.6	35	1.7	70	NW	6	3.6			10ks		N	0.02	0.5	Cloudy.	
Cleveland, Ohio	29.39	746.5	30.15	765.8	28	— 2.2	88	W	13	5.8			10n		W	0.04	1.0	Light snow.	
Coleman City, Texas	28.60	726.4	30.42	772.7	25	— 3.9	75	NW	4	1.8		0	0			0	0	Clear.	
Columbus, Ohio	29.29	744.0	30.17	766.3	32	0.0	89	W	13	5.8			10ks		NW	0.05	1.3	Cloudy.	
Concho, Texas	28.46	722.9	30.29	769.4	23	— 5.0	86	NW	3	1.3		0	0			0	0	Clear.	
Corsicana, Texas	30.00	762.0	30.50	774.7	32	0.0	79	N	4	1.8		0	0			0	0	Clear.	
Davenport, Iowa	29.56	750.8	30.28	769.1	3	—16.1	73	Calm	0	0		0	5s		W	0	0	Fair.	
Dayton, Washington T'y	28.44	722.4	30.13	765.3	44	6.7	75	S	8	3.6			10s		Calm	0.13	3.3	Cloudy.	
Deadwood, Dakota	25.29	642.4			34	1.1	79	SW	8	3.6			10s		Calm	0	0	Cloudy	
Decatur, Texas	29.20	741.7	30.46	773.7	32	0.0	79	N	6	2.7		0	0			0	0	Clear.	
Delaware Breakwater, Del.	29.96	761.0	29.98	761.5	34	1.1	100	N	24	10.7			10n		N	0.30	7.6	Light rain.	
Denison, Texas	29.60	751.8	30.45	773.4	32	0.0	79	N	1	0.4		0	0			0	0	Clear.	
Denver, Colorado	24.86	631.4	30.08	764.0	38	3.3	54	SE	4	1.8		0	2s		Calm	0	0	Fair.	
Des Moines, Iowa	29.22	742.2	30.17	766.3	18	— 7.8	84	SW	1	0.4		0	Fg			0	0	Clear.	
Detroit, Michigan	29.41	747.0	30.14	765.5	30	— 1.1	89	W	9	4.0			10s		Calm	0	0	Cloudy.	
Dodge City, Kansas	27.54	699.5	29.99	761.7	22	— 5.6	72	SW	5	2.2		0	0			0	0	Clear.	
Dubuque, Iowa	29.49	749.0	30.27	768.8	3	—16.1	73	S	3	1.3		0	5s;fg		Calm	0	0	Fair.	
Duluth, Minnesota	29.28	743.7	30.01	762.2	14	—10.0	82	SW	3	1.3		0	5s		SW	0	0	Fair.	
Eagle Pass, Texas	29.66	753.4	30.44	773.2	39	3.9	64	Calm	0	0		0	0			0	0	Clear.	
Eagle Rock, Idaho	25.47	646.9	30.12	765.0	23	— 5.0	86	SW	22	9.8			10s		Calm	0	0	Cloudy.	
Eastport, Maine	30.23	767.8	30.30	769.6	27	— 2.8	76	SE	16	7.2			10s		SE	0	0	Cloudy	
Edinburg, Texas																			
El Paso, Texas	26.48	672.6			39	3.9	38	Calm	6	0		0	0			0	0	Clear	
Erie, Pennsylvania	29.31	744.5	30.05	763.3	32	0.0	89	SW	11	4.9			10n		Calm	0.03	0.8	Light snow.	
Escanaba, Michigan	29.38	746.2	30.10	764.5	8	—13.3	78	S	3	1.3		0	8s		Calm	0	0	Cloudy.	
Florence, Arizona	28.72	729.5	30.32	770.1	42	5.6	50	NE	2	0.9		0	0			0	0	Clear.	
Fort Apache, New Mexico	25.26	641.6	30.70	779.8	24	— 4.4	48	NE	4	1.8		0	0			0	0	Clear.	
Fort Assinniboine, Montana	26.92	683.8			34	1.1	79	SW	32	14.3			10s		Calm	0	0	Cloudy.	
Fort Bennett, Dakota																			
Fort Buford, Dakota	27.78	705.6	29.69	754.1	21	— 6.1	86	SW	4	1.8		2cs	0	SW		0	0	Clear.	
Fort Custer, Montana	26.73	678.9			37	2.8	80	SW	18	8.0			10s		Calm	0	0	Cloudy	
Fort Davis, Texas	25.42	645.7	30.38	771.6	22	— 5.6	72	N	1	0.4		0	0			0	0	Clear.	
Fort Elliott, Texas	27.44	697.0	29.87	758.7	26	— 3.3	63	SE	4	1.8		0	0			0	0	Clear.	
Fort Gibson, Indian T'y	29.82	757.4	30.41	772.4	23	— 5.0	86	Calm	0	0		0	0			Inap.	Inap.	Clear	
Fort Grant, Arizona	25.40	645.2	30.20	767.1	43	6.1	21	NE	10	4.5		0	0			0	0	Clear	
Fort Griffin, Texas	29.01	736.8	30.38	771.6	29	— 1.7	67	Calm	0	0		0	0			0	0	Clear.	
Fort Keogh, Montana	27.35	694.7			31	— 0.6	78	SW	10	4.5		10cs	0	Calm		0	0	Cloudy.	
Fort McKavett, Texas	28.11	714.0	30.21	767.3	24	— 4.4	64	SW	4	1.8		0	0			0	0	Clear.	
Fort Macon, North Carolina	29.95	760.7	29.96	761.0	44	6.7	92	NW	10	4.5		8k	Hz	W	Calm	0	0	Cloudy.	
Fort St. Michaels	29.95	760.7	29.98	761.5	15	— 9.4	100	NE	5	2.2		0	0			0	0		
Fort Missoula, Montana	26.75	679.4			40	4.4	73	SW	1	0.4			10s		Calm	0.06	1.5	Cloudy.	
Fort Shaw, Montana	26.21	665.7			39	3.9	64	SW	19	8.5		0	5s		W	0	0	Fair.	
Fort Sill, Indian Territory	29.07	738.4	30.27	768.8	25	— 3.9	62	Calm	0	0		0	0			0	0	Clear.	
Fort Stevenson, Dakota	27.94	709.7			7	—13.9	88	Calm	0	0		0	0			0	0	Clear.	
Fort Verde, Arizona												0	0			0	0	Clear.	
Fredericksburg, Texas	28.65	727.7	30.33	770.4	33	0.6	51	NW			1	0	0			0	0	Clear.	
Galveston, Texas	30.36	771.1	30.41	772.4	32	0.0	89	Calm	0	0		0	0			0	0	Clear.	
Grand Haven, Michigan	29.46	748.3	30.15	765.8	45	7.2	76	NE	12	5.4		2ck	0	W		0.45	11.4	Clear.	
Hatteras, North Carolina	30.00	762.0	30.02	762.5	27	— 2.8	88	W	1	0.4		0	0				0	Clear.	
Helena, Montana	25.72	653.3			43	6.1	100	NW	20	8.9			10s		Calm	0.13	3.3	Threatening	
Henrietta, Texas	29.35	745.5	30.37	771.4	41	5.0	74	W	9	4.0		0	8s		Calm	0	0	Cloudy.	
Indianapolis, Indiana	29.44	747.8	30.28	769.1	29	— 1.7	56	SE	2	0.9		0	0			0	0	Clear.	
Indianola, Texas	30.35	770.9	30.38	771.6	20.5	— 6.4	78	NW	6	2.7		0	1s		NW	Inap.	Inap.	Clear.	
Jacksboro, Texas	29.21	741.9	30.43	772.9	48	8.9	78	N	28	12.5		5k	0	W		0.07	1.8	Fair	
Jacksonville, Florida	30.13	765.3	30.18	766.6	30	— 1.1	68	SE	4	1.8		0	0			0	0	Clear.	
Keokuk, Iowa	25.60	650.2	30.32	770.1	58	14.4	76	NW	7	3.1			10s		Calm	Inap.	Inap.	Cloudy.	
Key West, Florida	30.15	765.8	30.18	766.6	10	—12.2	79	SW	4	1.8		0	8s		Calm	0	0	Fair.	
Kittyhawk, North Carolina	30.00	762.0	30.03	762.7	69	20.6	95	N	9	4.0			Fg			0	0	Dense fog.	
Knoxville, Tennessee	29.22	742.2	30.28	769.1	41	5.0	100	NW	21	9.4			10s		Calm	0.08	2.0	Cloudy.	
La Crosse, Wisconsin	29.35	745.5	30.16	766.1	37	2.8	81	N	8	3.6			10s		Calm	0	0	Cloudy.	
La Mesilla, New Mexico	26.35	669.3	30.50	774.7	6	—14.4	76	S	12	5.4		0	2s		Calm	0	0	Fair.	
Laredo, Texas	29.97	761.2	30.32	770.1	27	— 2.8	53	NE	2	0.9		0	0			0	0	Clear.	
Leavenworth, Kansas	29.31	744.5	30.22	767.6	51	10.6	46	NE	4	1.8		5ck	0	SW		0	0	Fair.	
Lewiston, Idaho	29.35	745.5	30.02	762.5	20	— 6.7	70	S	3	1.3		0	0			0	0	Clear	
Little Rock, Arkansas	30.07	763.8	30.41	772.4	40	4.4	100	E	3	1.3			10n		Calm	0.14	3.6	Light rain.	
Los Angeles, California	29.82	757.4	30.20	767.1	34	1.1	79	NW	2	0.9		0	0			0	0	Clear.	
Louisville, Kentucky	29.69	754.1	30.28	769.1	51	10.6	59	N	8	3.6		0	0			0	0	Clear.	
Lynchburg, Virginia	29.36	745.7	30.07	763.8	34	1.1	70	W	6	2.7			10ks		Calm	Inap.	Inap.	Cloudy.	
Madison, Wisconsin	29.12	739.6	30.20	767.1	37	2.8	81	W	2	0.9		4c	0	W		0.03	0.8	Fair.	
Marquette, Michigan	29.28	743.7	30.04	763.0	8	—13.3	78	S	5	2.2		2cs	0	W		0	0	Fair.	
Mason, Texas	28.74	730 0	30.65	778.5	15	— 9.4	65	W	10	4.5		5k	5s	W	W	Inap.	Inap.	Cloudy.	
	27	— 2.8	76	NW	4	1.8		0	0							0	0	Clear.	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	30.05	763.3	30.43	772.9	33	0.6	89	Calm	0	0		0	0			0	0.	Clear	
Milwaukee, Wisconsin	29.41	747.0	30.20	767.1	14	—10.0	82	SW	8	3.6		1c	0	Calm		0	0	Clear	
Mobile, Alabama	30.23	767.8	30.30	769.6	45	7.2	76	NW	10	4.5		0	1s		Calm	0.01	0.3	Clear	
Montgomery, Alabama	30.06	763.5	30.31	769.9	42	5.6	83	NW	3	1.3		0	0			0	0	Clear	
Moorhead, Minnesota	28.87	733.3	29.91	759.7	6	—14.4	76	S	6	2.7			10s		S	0	0	Cloudy	
Morgantown, W. Virginia	29.12	739.6	30.15	765.8	38	3.3	72	SW	6	2.7			10n		Calm	0.02	0.5	Light snow	
Mt. Washington, N. H	23.59	599.2	29.95	760.7	8	—13.3	100	SW	36	16.1			Fg		SW	0	0	Dense fog	
Nashville, Tennessee	29.79	756.7	30.36	771.1	36	2.2	80	NW	4	1.8			10ks		NW	0.04	1.0	Cloudy	
New Haven, Connecticut	29.95	760.7	30.08	764.0	29	— 1.7	95	NE	10	4.5			10n;sk		Calm	0.01	0.3	Heavy snow	
New London, Connecticut	30.03	762.7	30.08	764.0	34	1.1	90	NE	5	2.2			10n		NE	0.02	0.5	Light sleet	
New Orleans, Louisiana	30.26	768.6	30.32	770.1	47	8.3	70	N	12	5.4		2c	0	W		0.08	2.0	Fair	
Newport, Rhode Island	30.03	762.7	30.08	764.0	34	1.1	100	NE	7	3.1			10n		Calm	0.12	3.0	Light rain	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.04	763.0	30.08	764.0	34	1.1	100	NE	20	8.9			10n		NE	0.34	8.6	Heavy rain	
New York, New York	29.87	758.7	30.05	763.3	33	0.6	89	NE	18	8.0			10n;fg		Calm	0.09	2.3	Sleeting	
Norfolk, Virginia	29.97	761.2	30.03	762.7	38	3.3	91	NW	16	7.2			10n		W	0.25	6.3	Light rain	
North Platte, Nebraska	27.15	689.6	29.92	760.0	15	— 9.4	74	W	10	4.5		8c	0	W		0	0	Fair	
Olympia, Washington T'y	30.13	765.3	30.17	766.3	49.5	9.7	93	S	11	4.9			10n		Calm	1.72	43.7	Light rain	
Omaha, Nebraska	28.90	734.0	30.06	763.5	23	— 5.0	86	S	12	5.4		0	2s		Calm	0	0	Clear	
Oswego, New York	29.69	754.1	30.02	762.5	33	0 6	70	SW	7	3.1			10n		Calm	Inap.	Inap.	Light snow	
Pensacola, Florida	30.26	768.6	30.29	769.4	48	8.9	78	N	10	4.5		4cs	Hz	W	Calm	0.01	0.3	Fair	
Philadelphia, Pa	29.97	761.2	30.03	762.7	34	1.1	100	N	12	5.4			10n		Calm	0.16	4.1	Light rain	
Phœnix, Arizona	29.10	739.1	31.00	787.4	39	3.9	55	NE	1	0.4		0	0			0	0	Clear	
Pike's Peak, Colorado	17.66	448.6	29.87	758.7	2	—16.7	44	W	44	19.7		0	0			0	0	Clear	
Pilot Point, Texas	29.64	752.8	30.55	776.0	31	— 0.6	79	NW	4	1.8		0	0			0	0	Clear	
Ploche, Nevada	24.27	616.4	30.04	763.0	32	0.0	40	NW	4	1.8		5c	0	Calm		0	0	Fair	
Pittsburg, Pennsylvania	29.28	743.7	30.12	765.0	33	0.6	89	SW	10	4.5			10n		SW	0.03	0.8	Light snow	
Port Huron, Michigan	29.40	746.7	30.10	764.5	26	— 3.3	100	W	8	3.6			10s		Calm	0.01	0.3	Cloudy	
Portland, Maine	30.14	765.5	30.19	766.8	35	1.7	80	SE	18	8.0			10s		Calm	0.01	0.3	Cloudy	
Portland, Oregon	30.27	768.8	30.34	770.6	51	10.6	76	S	12	5.4			9s		W	0.16	4.1	Cloudy	
Portsmouth, N. Carolina					42	5.6	83	NE	21	9.4		10k	0	Calm		0.24	6.1	Cloudy	
Prescott, Arizona	24.99	634.7	30.35	770.9	27	— 2.8	53	N	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	30.14	765.5	30.16	766.1	67	19.4	89	N	8	3.6		8ck	0	W		0	0	Fair	
Red Bluff, California	30.02	762.5	30.38	771.6	47.0	8.3	88	N	3	1.3		0	0			0	0	Clear	
Rio Grande City, Texas																			
Rochester, New York	29.39	746.5	30.03	762.7	31	— 0.6	89	W	3	1.3			10n		Calm	Inap.	Inap.	Light snow	
Roseburg, Oregon	29.88	758.9	30.47	773.9	41.5	5.3	91	Calm	0	0			Fg		Calm	0.02	0.5	Dense fog	
Sacramento, California	30.30	769.6	30.38	771.6	47	8.3	92	NW	5	2.2		0	2s		Calm	0	0	Clear	
St. Louis, Missouri	29.75	755.6	30.38	771.6	19	— 7.2	85	NW	7	3.1		0	0			0	0	Clear	
St. Paul, Minnesota	29.10	739.1	30.00	762.0	9	—12.8	78	SE	11	4.9		8k	0	W		0	0	Cloudy	
Salt Lake City, Utah	25.92	658.4	30.25	768.3	36	2.2	53	Calm	0	0		0	0			0	0	Clear	
San Antonio, Texas	29.73	755.1	30.47	773.9	42	5.6	58	N	3	1.3		0	0			0	0	Clear	
San Diego, California	30.14	765.5	30.21	767.3	47	8.3	70	N	2	0.9		0	0			0	0	Clear	
Sandusky, Ohio	29.45	748.0	30.16	766.1	30	— 1.1	89	SW	13	5.8			10s		Calm	0.02	0.5	Cloudy	
Sandy Hook, New Jersey	30.00	762.0	30.04	763.0	33	0.6	100	NE	12	5.4			10n		Calm	0.15	3.8	Light rain	
San Francisco, California	30.32	770.1	30.38	771.6	51	10.6	89	NW	1	0.4		0	Fg		Calm	0	0	Clear	
Santa Fé, New Mexico	23.43	595.1	29.97	761.2	34	1.1	70	N	8	3.6		0	0			0	0	Clear	
Savannah, Georgia	30.07	763.8	30.17	766.3	54	12.2	87	SW	1	0.4			10s		Calm	0	0	Cloudy	
Shreveport, Louisiana	30.18	766.6	30.45	773.4	36	2.2	80	Calm	0	0		0	0			0	0	Clear	
Silver City, New Mexico	24.47	621.5	30.99	787.1	26	— 3.3	63	Calm	0	0		0	0			0	0	Clear	
Smithville, North Carolina	30.09	764 3	30.13	765.3	45	7.2	76	NW	5	2.2		8k	1s	W	Calm	0	0	Cloudy	
Socorro, New Mexico	25.67	652.0	29.73	755.1	25	— 3.9	75	NW	2	0.9		0	0			0	0	Clear	
Springfield, Illinois	29.64	752.8	30.37	771.4	17	— 8.3	75	SW	4	1.8		0	0			0	0	Clear	
Springfield, Massachusetts	29.99	761.7	30.13	765.3	29	— 1.7	89	N	6	2.7			10s		Calm	0	0	Cloudy	
Stockton, Texas	27.29	693.2	30.29	769.4	31	— 0.6	69	SW	4	1.8		0	0			0	0	Clear	
St. Vincent, Minnesota	29.02	737.1	29.91	759.7	— 7	—21.7	100	SE	12	5.4		0	0			0	0	Clear	
Thatcher's Island, Mass	30.10	764.5	30.16	766.1	36	2.2	90	SE	20	8.9			10s		SE	0	0	Threatening	
Toledo, Ohio	29.45	748.0	30.17	766.3	31	— 0.6	89	W	9	4.0			10s		Calm	Inap.	Inap.	Cloudy	
Tucson, Arizona	27.73	704.3	30.28	769.1	41	5.0	21	S	4	1.8		0	0			0	0	Clear	
Umatilla, Oregon	29.90	759.4	30.41	772.4	40	4.4	82	W	5	2.2			10s		Calm	0	0	Cloudy	
Uvalde, Texas	29.45	748.0	30.34	770.6	34	1.1	79	NE	1	0.4		0	0			0	0	Clear	
Vicksburg, Mississippi	30.12	765.0	30.40	772.1	37	2.8	90	N	6	2.7		0	0			0	0	Clear	
Visalia, California	29.97	761.2	30.35	770.9	50	10.0	93	NW	3	1.3		0	8ks		Calm	0	0	Fair	
Washington, D. C	29.95	760.7	30.07	763.8	34	1.1	90	N	3	1.3			10s		SW	0.14	3.6	Cloudy	
Wickenburg, Arizona					40	4.4	39	W			1	0	0			0	0	Clear	
Wilmington, N. Carolina	30.02	762.5	30.08	764.0	46	7.8	77	NW	4	1.8			10s		W	0	0	Cloudy	
Winnemucca, Nevada	25.93	658.6	30.29	769.4	31	— 0.6	79	SW	4	1.8		0	0			0	0	Clear	
Wood's Holl, Mass	30.02	762.5	30.06	763.5	35	1.7	90	E	18	8.0			10n		NE	0.04	1.0	Light rain	
Yankton, Dakota	28.66	728.0	30.03	762.7	20	— 6.7	70	Calm	0	0		5k	0	W		0	0	Fair	
Yuma, Arizona	30.04	763.0	30.19	766.8	48	8.9	56	NE	2	0.9		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8			49.0	9.4	75	Calm	0	0		0	0			Inap.	Inap.	Clear	Thomas Herman.
Buff Bay Town, Jam ica.‡	29.90	759.4	30.22	767.6	66	18.9	83	SE					10k						
Havana, Cuba, W. I	30.10	764.5	30.15	765.8	74	23.3	76	Calm	0	0		8ck	0	Calm		0	0	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	29.88	758.9	29.94	760.4	— 6.5	- 21.4		Calm			0		4			0.016	0.4		K. V. Möller.
Kingston, Jamaica, W. I	30.06	763.5	30.07	763.8	71	21.7	80	N	3	1.3		0	2s		E	0.10	2.5		Robert Johnstone
Navassa, W. I	29.98	761.5	30.06	763.5	74	23.3	81	NE	6	2.7		5k	5s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A	30.00	762.0	30.00	762.0	77	25.0	91	E			2		8ks	E		0.570	14.48	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.43	747.5	29.99	761.7	80	26.7	85	Calm			0	0	2s		Calm	0	0	Hazy	Francesco J. Cisneros
Rivas, Nicaragua																			
Santiago de Cuba, W. I	30.09	764.3	30.11	764.8	73.4	23		SE			4	0	1ks		E	0	0		Earl Flint.
St. Thomas, W. I					70	21.1	76	NW				0	0			0	0	Clear	Robert Mason.
Upernavik, Greenland																			G. O. Gellich.
York Factory, B. A	29.97	761.3	30.04	762.9	—19.5	—28.6		Calm			0		5			0	0		K. Elberg.
	29.68	753.9	29.73	755.1	—24.0	—31.1		SW	4	1.8		3k	3s	W	SW	0	0	Threatening	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.07	763.8	59	15.0	88	ESE			6		10	ESE						Showery	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 30° 17′, E. 47° 55′	29.92	760.0	60	15.6	71	NNW			2		10	NW						Overcast	Comm. G. Hand.
H. M. S. Bittern, Constantinople, Turkey			37	2.8		NE			2-4		10					2	NE	Raining	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.94	760.5	79.5	26.4	74	SE			2		2	E				2	Conf	D. clouds	Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 33° 24′, E. 130° 23′	30.22	767.6	51	10.6	79	NNE			1		0					1	N	Blue sky	Capt. J. W. East.
H. M. S. Condor, N. 36° 14′, E. 20° 00′	30.23	767.8	53	11.7	100	SE			3-4		9k					6	SE	Showery	Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer, Syracuse, Sicily	30.17	766.3	57	13.9		ESE			6		9	SE						Squally	Capt. F. A. Wetherall.
H. M. S. Curacoa, Shanghai, China	29.98	761.5	55	12.8	87	SE			2		0							Blue sky	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.12	765.0	67	19.4	95	SW			1-2		4							D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 34′ E. 81° 14′	29.92	760.0	83	28.3		NNE			1		6	NE				2	NE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria																			Capt. W. H. Maxwell.
H. M. S. Emerald																			Comm. C. Johnstone.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Enryalus, Bombay, India	29.89	759.2	81	27.2	70	NNW			2		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 16° 06′, W. 61° 59′	30.08	764.0	78	25.6		ENE			4		7	NE				3	ENE	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, N. 18° 33′, W. 74° 51′	30.04	763.0	80	26.7	91	NE			2		2					1		D. clouds	Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Panama, Panama	29.94	760.5	75	23.9	81	NW			3		1							Blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 50′, W. 58° 56′	29.89	759.2				SW			4									D. clouds	Capt. L. F. Jones.
H. M. S. Griffon																			Capt. J. Inglis.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 9° 23′, E. 109° 00′	29.95	760.7	77	25.0	100	E			3-4		7	E				3	E	D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Africa	29.92	760.0	79	26.1	78	SW			3-4		6	SW				2	SW	Raining	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 30° 26′, E. 122° 06′	30.10	764.5	52.5	11.4	86	SSE			3		1					2	SE	Blue sky	Capt. R. H. Napier.
H. M. S. Malabar																			Capt. J. F. G. Grant.
H. M. S. Minataur, Vigo, Spain	29.92	760.0	56.5	13.6	87	N			1		9	N						D. clouds	Capt. H. Rawson.
H. M. S. Modeste, N. 1° 17′, E. 103° 51′	29.89	759.2	80	26.7	82	NE			2		2					2		D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Alexandretta, Turkey, Asia	29.95	760.7	55	12.8	68	SSW			1		5	SE				Sm'h		D. clouds	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Pt. Royal, Jamaica, W.I.	30.02	762.5	74	23.3	81	N			1		0							D. clouds	Capt. E. Drummond.
H. M. S. Orontes, Vigo, Spain	29.99	761.7	60.5	15.8	91	Calm			0		7	E						D. clouds	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, Elmina, Gold Coast, Africa.	29.87	758.7	81	27.2	96	SSW			2		2					1	SE	D. clouds	Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Capt. P. H. W. Mayow.
H. M. S. Rocket																			Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.95	760.7	79	26.1	100	S			2		10							Raining	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	29.95	760.7	60	15.6	76	E			1		5							D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.52	749.8	81	27.2	91	ESE			1	6ck						1	SE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	29.99	761.7	72.5	22.5	92	SSE			2		1	SE				1	SW	Blue sky	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos, N. 12° 03′, W. 61° 45′	30.08	764.0	76.5	24.7	79	ENE			4		9					1	N	Showery	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo Bay, Chili, S.A.	30.01	762.2	64	17.8	78	Calm			0		1							Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 12° 50′, E. 48° 30′	29.95	760.7	79	26.1		ENE			2		1					1	E	Blue sky	Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Busrah, Palestine	29.92	760.0	57.5	14.2	70	W			1		10							Overcast	Capt. F. Negham.
H. M. S. Zephys																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, N. 14° 20′, W. 20° 50′	29.97	761.3	76.6	24.8	87	NE			4		4					4	NE	D. clouds	S. C. da Silva Costa, Comd't.
Sado. St. Paul de Loando, Africa.	29.90	759.5	84.2	29.0	77	NW			3		3		NW			1		D' clouds	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.40	772.1	48	8.9	63	NE	5	2.2			0			0	0			Clear.	
N. Yard, Portsmouth, N. H.	30.19	766.8	34	1.1	79	NE	8	3.6		10c		Calm						Snowing.	
Naval Hospital, Yokohama, Japan	29.98	761.5	35	1.7	54	N			6		0			0.56	14.2			Clear.	
Adams, Panama, Panama	29.95	760.7	74	23.3	90	NW			2		2		NW			Sm'h		Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.30	769.6	51	10.6	86	Calm			0		0			0	0			Clear.	
Alert, Hong-Kong, China *.	29.97	761.2	69	20.6	85	WSW			1		0			0	0			Hazy	
Alliance, New Orleans, La			49	9.4	78	N			3		0			Light		Sm'h		Clear.	
Ashuelot, Tientsin, China	30.12	765.0	32	0.0	100	SSE			1		10							Cloudy.	
Colorado, New York, N. Y.	29.99	761.7	32	0.0		N	4	1.8			10		Calm					Snowy.	
Constitution, N. Yard, League I'd., Pa	29.98	761.5	35	1.7	100	NNE	2	0.9			10							Drizzling	
Franklin, Norfolk, Va	29.96	761.0	40	4.4	82	NW	14.4	6.4			10		NW	0.36	9.1			Cloudy.	
Galena, Off Milo I'd, Grecian Arch.	30.24	768.1	48	8.9	78	NNE			6		0					R'gh	NE	Clear.	
Independence, N. Yard, Mare I'd, Cal.	30.37	771.4	47	8.3	?	Calm	0	0			0			0	0			Clear.	
Jamestown, Sitka, Alaska *	29.71	754.6	27	— 2.8		ESE			1		2			0.01	0.3			Clear	
Kearsarge, New Orleans, La	30.29	769.4	50	10.0	79	NNW			3		5					Sm'h		Fair.	
Marion, Sandy P't, Terra del Fuego	30.08	764.0	48	8.9	63	WSW			2		2		Calm			Sm'h		Fair.	
Michigan, Erie, Pennsylvania	30.04	763.0	31	— 0.6		W	3	1.3			10							Snowing	
Minnesota, New York, N. Y.	30.06	763.5	34	1.1	90	NE			4		10			Little				Light snow.	
Monocacy, Shanghai, China	30.11	764.8	52	11.1	86	SSE			2		0							Clear.	
New Hampshire, Port Royal, S. C.	30.12	765.0	54	12.2	93	WNW	4	1.8			10		WNW	0	0			Overcast.	
Nipsic, Valencia, Spain	29.98	761.5	59	15.0	70	Calm			0		10					Sm'h		Hazy.	
Onward, Callao, Peru †	29.93	760.2	71	21.7	95	SSE			1		8					Long	N:W	Fair.	
Palos, Shanghai, China	30.12	765.0	52	11.1	93	SSE			3		0							Clear.	
Passaic, Washington, D. C.	30.17	766.3	36	2.2	90	NW			1		10		Calm					Rainy	
Pensacola, Panama, Panama	29.98	761.5	79	26.1	70	NNW			3		0			0	0	Sm'h		Clear.	
Powhatan, New York, N. Y.	30.08	764.0	33	0.6	100	NE			3		10							Sleeting	
Quinnebaug, Villafranca, France	30.20	767.1	58	14.4	94	Calm			0		10		Calm			Sm'h		Rainy	
Richmond, Hong-Kong, China	30.10	764.5	69	20.6	90	NE			1		0			0	0			Clear.	
Saratoga, Potomac River	29.99	761.7	36	2.2	100	NNW			4		10		Calm	Heavy				Raining	
Shenandoah, Montevideo, Uruguay *	30.15	765.8	70	21.1	80	W			3		0					Sm'h		Clear.	
St. Louis, League Island, Pa	30.14	765.5	33	0.6	79	NNE	8	3.6			10			0.27	6.9			Raining	
Swatara, Nagasaki, Japan †	30.16	766.1	51	10.6	72	NNE			1		0					Sm'h		Blue sky	
Tennessee, New Orleans, La *†	30.44	773.2	49	9.4	85	NNW	13	5.8			8		WSW	0.08	2.0	Sm'h		Fair.	
Ticonderoga, N. Yard, Mare Id., Cal.	30.37	771.4	50	10.0	100	SW			1		0			0	0			Clear.	
Trenton, N. 43° 10', E. 6° 42' *.	30.19	766.8	57	13.9	69	ENE			5		10			7 h'rs	mod	Mod.		Rainy	
Vandalia, St. John, Antigua, W. I.	30.12	765.0	78	25.6	91	E			3		5		ENE					Fair.	
Wabash, Boston, Massachusetts	30.16	766.1	34	1.1	90	E	4	1.8			10							Snowing	
Wachusetts, Panama, Panama *.	29.61	752.1	74	23.3	90	NW			3		2		N			Sm'h		Clear.	
Wyoming, Villafranca, France	30.21	767.3	57	13.9	75	Calm			0		10		Calm			Sm'h	WSW	Overcast.	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡ N. 4° 45′, W. 29° 20′	29.92	760.0	84	28.9	75	NNE			4		9							Overcast	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 16° 43′, W. 61° 08′	30.11	764.8	77.5	25.3	82	E			4		3							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang ‡																			Capt. H. Youlden.
S. S. Cipero, N. 30° 20′, W. 46° 55′	30.43	772.9	66	18.9		NE			1		8					1	ENE	Squally	W. N. Lailey.
City of Agra, ‡ S. 2° 26′, W. 32° 00′	29.94	760.5	87.5	30.8	76	SE			2		6							D. clouds	Capt. T. Young.
Barque Commewyne, ‡ N. 45° 11′, W. 32° 32′	29.97	761.2	55.5	13.1	84	SSW			5		10							Drizzling	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡ S. 1° 00′, W. 23° 02′	29.94	760.5	85	29.4	72	SE			2		7							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart, ‡ S. 1° 29′, E. 88° 03′	29.89	759.2	86.5	30.3	69	N			1		3							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 13° 32′, W. 34° 06′	29.98	761.5	81.7	27.6	91	NNE			4	7c		SE						D. clouds	Capt. Jas. Campbell.
Ship Iron Cross, N. 46° 05′, W. 13° 30′	30.14	765.5	53.2	11.8		E			2–3		6					Sw'll	WNW	D. clouds	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 30° 02′, W. 70° 42′	30.12	765.0	70.5	21.4	95	SW			4		7					3	Con.	D. clouds	Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine ‡																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 43° 53′, W. 9° 31′	29.94	760.5	54.5	12.5	87	NE			4		10							Overcast	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡ N. 7° 10′, E. 58° 53′	29.93	760.2	80.5	26.9	89	ENE			3		3							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire, N. 30° 35′, W. 43° 05′	30.42	772.7	62	16.7	72	Calm			0		5					2	NNE	D. clouds	
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			
S. S. Nova Scotian ‡																			Capt. F. Archer.
CUNARD LINE. *Ch. G. Francklyn.*																			Capt. Wm. Richardson.
S. S. Algeria																			
S. S. Bothnia																			Capt. W. Watson.
S. S. Scythia, N. 51° 04′, W. 15° 10′	30.05	763.3	52	11.1	100	SSE			5		10			Driz	zles	Mod.	E	Drizzling	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, ‡ N. 44° 26′, W. 45° 43′	30.35	770.9	31	— 0.6		N			6		10		N			Mod.	WSW	Cloudy	Capt. J. W. Jennings.
S. S. Baltic ‡																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, ‡ N. 41° 16′, W. 60° 26′ †	30.45	773.4	44	6.7		E			4		5?		E	0	0	Sm'h		Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Undütsch.
S. S. Hermann																			Capt. H. Maur.
S. S. Köln, N. 40° 18′, W. 65° 27′	30.17	766.3	45.5	7.5		ESE			4		9		ESE	0	0	Mod.	ESE	Cloudy	
S. S. Leipzig ‡																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg, N. 49° 12′, W. 17° 54′	30.14	765.5	53.6	12.0		ESE			1		8		SE	0	0	Light	W	Fair	
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolph Fredholm ‡																			Capt Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Sköterbrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. ‡ Liverpool, England.....*	30.33	770.4	36	2.2	90	E	.....	.....	2	.....	8	.....	E	.....	.....	.....	.....	Fair.....	Capt. J. W. Shackford.
S. S. Indiana, ‡ Philadelphia, Pa.....†	30.01	762.2	34	1.1	62	NE	.....	.....	4	.....	8	.....	NE	Mode	rate	Sm'h	.....	Cloudy.....	Capt. R. W. Sargent.
S. S. Ohio, N. 53° 12′, W. 5° 01′.....†*	30.42	772.7	37	2.8	100	ESE	.....	.....	4	.....	10	.....	ESE	0	0	Sm'h	.....	Cloudy.....	Wm. Shakford, 1st Off'r
S. S. Pennsylvania, N. 46° 22′, W. 46° 25′....†	30.36	771.1	27	— 2.8	88	NNW	.....	.....	5	.....	8	.....	NW	0	0	Mod.	N	Cloudy.....	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 24° 25′, W. 112° 17′....†	30.02	762.5	66	18.9	79	Calm	.....	.....	0	.....	5	.....	NW	0	0	Mod.	WNW	Fair.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 38° 39′, W. 159° 17′ ....†	29.63	752.6	54	12.2	93	SSW	.....	.....	6	.....	2	.....	SW	0	0	High	WSW	Clear	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China.....*†	30.20	767.1	67	19.4	60	E	.....	.....	2	.....	10	.....	E	.....	.....	.....	.....	Overcast.....	Capt. W. H. Kidley.
S. S. Oceanic, N. 32° 17′, W. 178° 20′.....†	29.84	757.9	60	15.6	88	WSW	.....	.....	5	.....	8	.....	SW	0.07	1.8	Con.	SW; WNW	Squally.....	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Fred. Bolles.
S. S. Oregon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Pedro, California..†	30.16	766.1	50	10.0	79	N	.....	.....	1	.....	0	.....	.....	.....	.....	Sm'h	.....	Clear.....	Capt. J. N. Ingalls.
S. S. Idaho, ‡ N. 42° 20′, W. 124° 50′.....†	30.42	772.7	51	10.6	93	SE	.....	.....	1	.....	0	.....	.....	.....	.....	Mod.	SW	Clear.....	C. E. Lyons, 1st Officer.
S. S. Orizaba.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Senator, San Francisco, Cal.....†	30.44	773.2	50	10.0	93	Calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	Thos. Wallace.
S. S. State of California, N. 40° 56′, W. 124° 24′....†	30.45	773.4	52	11.1	100	NW	.....	.....	2	.....	5	.....	.....	0	0	Long	W	Clear.....	Capt. G. Debney.
S. S. Victoria.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 34° 21′, W. 131° 58′.....	30.49	774.4	57	13.9	81	E	.....	.....	2	.....	8	.....	NE	.....	.....	Sm'h	NW	Cloudy	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.....†	30.07	763.8	80	26.7	74	NE	.....	.....	2	.....	10	.....	SE	0	0	.....	.....	Cloudy.....	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 21° 49′, W. 105° 38′....†	30.07	763.8	70	21.1	90	NW	.....	.....	2	.....	10	.....	NW	0	0	Mod.	NW	Overcast.....	Capt. D. S. Austin.
S. S. City of Peking, N. 28° 24′, E. 127° 37′....†	30.15	765.8	64	17.8	62	ENE	.....	.....	2	.....	5	.....	SW	0	0	Sm'h	.....	Fair	Capt. G. G. Berry.
S. S. City of Sidney, N. 26° 23′, W. 148° 41′....†	30.18	766.6	70	21.1	80	ESE	.....	.....	4	8c	.....	ESE	.....	0	0	High	WNW	Cloudy.....	Capt. H. C. Dearborn.
S. S. City of Tokio.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Ritchie, 2d Officer.
S. S. Colima, Panama, Panama .....†	29.93	760.2	73	22.8	85	WNW	.....	.....	2	.....	5	.....	NW	0	0	.....	.....	Fair.....	Capt. R. R. Searle.
S. S. Dakota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. D. E. Griffiths.
S. S. Granada.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Zealandia, Sydney, N. S. Wales.....	30.05	763.3	73	22.8	76	NE	.....	.....	4	.....	0	.....	.....	.....	.....	.....	.....	Fine.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland..... ‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Sam'l Jackson.
S. S. Nederland..... ‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. S. Stokes.
S. S. Rhynland, ‡ N. 45° 31′, W. 48° 25′.....	30.47	773.9	32	0.0	.....	W	.....	.....	5	.....	8	.....	WNW	0.1	3.	Mod.	W	Clearing.....	Capt. W. Geo. Randle.
S. S. Vaderland, N. 48° 51′ W. 26° 30′.....	30.09	764.3	.....	.....	.....	S	.....	.....	3	.....	2	.....	S	0	0	Sm'h	SW	Fair.....	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, ‡ Jacksonville, Florida...†	30.06	763.5	65	18.3	.....	Calm	.....	.....	0	.....	10	.....	.....	0	0	.....	.....	Threatening	Capt. A. Mehaffey.
Sch'r Addie Fuller, Newport News, Va.....	30.00	762.0	43	6.1	83	NW	13	5.8	.....	.....	10d	.....	NW	0.14	3.6	.....	.....	Threatening	Capt J. Jorgensen.
Sch'r Annie R. Lewis, Martinique, W. I..... ..†	30.03	762.7	80	26.7	.....	ENE	.....	.....	5	.....	8	.....	ENE	Sho	wers	.....	.....	Raining	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 39° 00′, W. 10° 48′....†*	30.10	764.5	61	16.1	.....	NE	.....	.....	3	.....	2	.....	NE	.....	.....	Long	NW	Fair.....	Capt. B. F. Woodbury.
Brigantine George, ‡ N. 39° 25′, W. 72° 55′.....†	30.14	765.5	46	7.8	.....	E	.....	.....	5	.....	10	.....	E	Mu	ch	Mod. Cross	SSE	Heavy rain.	Capt. W H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va.†	30.04	763.0	39	3.9	100	NW	2	0.9	.....	.....	10n	.....	.....	0.08	2.0	.....	.....	Cloudy.....	.....
Ship Jumna.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 23° 33′, W. 50° 52′....†	30.22	767.6	76	24.4	100	E	.....	.....	6	.....	5	.....	E	0	0	Mod.	ENE	Fair.....	Capt. Jos. Hand.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

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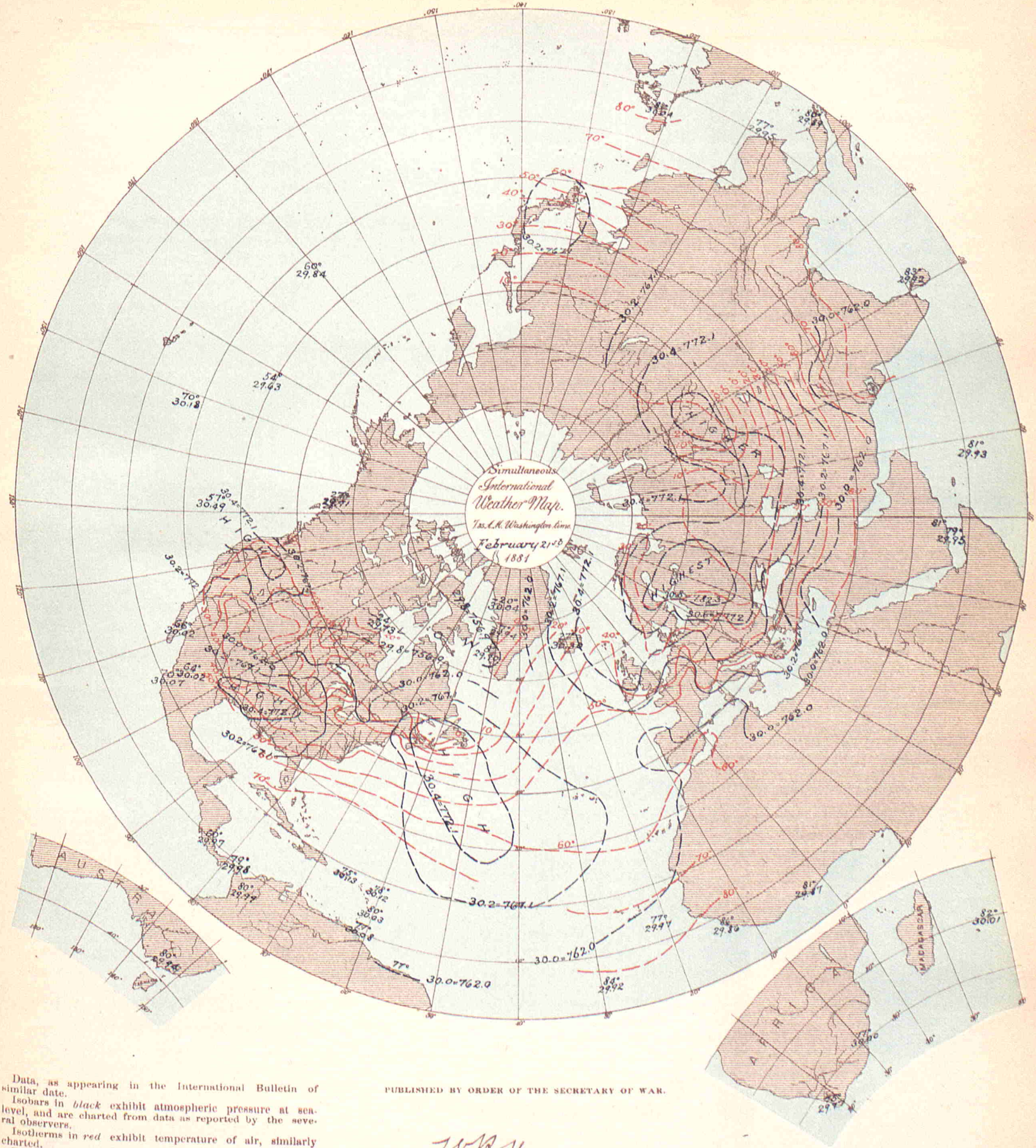
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 22, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	R'l'v. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.87	758.7	62.2	16.8	79	SE			1		6			0.236	6.0	Cloudy	Dr. Ollive.
Nemours			29.86	758.5	61.3	16.3	87	N			3		1			0	0	Very fair	Raynard.
Algiers			29.91	759.6	60.4	15.8	75	WSW			1		2			0.323	8.2	Fair	Nicolas.
La Calle			29.96	760.9	57.2	14.0	92	ENE			4		4					Cloudy	Fonfréde.
Tunis			29.95	760.8															Jacques.
Sfax			29.98	761.5															Gau.
Saida			29.94	760.4	56.1	13.4	57	SE			4		10			0	0	Covered	Dumas.
Tebessa			30.01	762.3	56.1	13.4	60	Calm			0		8			Inap.	Inap.	Very cloudy	Watrin.
Gertville																			Lonchamp.
Laghouat			30.05	763.3	58.6	14.8	45	N			1		1			0	0	Very fair	Herbin.
Biskra																			Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.03	763.3	30.14	765.5	61.9	16.6	71	SSE	11	4.9			10			0.02	0.5	Dull	R. L. J. Ellery.
SUB-SERIES.																			
Hobart Town, Tasmania																			Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.92	759.9	30.50	774.8	33.4	0.8	87	Calm			0		6			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.71	754.5	30.53	775.4	27.7	— 2.4	89	ENE	19.8	4.4			1			0	0		Dr. Wiersbicki.
Eperies	29.58	751.2	30.50	774.6	38.5	3.6	48	SE			2		0			0	0		Julius Mikolik.
Gratz‡	29.18	741.2	30.51	774.9	32.7	0.4	75	W			2		3			0	0		Andreas Rospini.
Hermannstadt	29.03	737.3	30.57	776.4	29.5	— 1.4	84	SE			3		2			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.84	732.6	30.25	768.3	34.0	1.1	75	ENE			1		2			0	0		The Staff.
Lemberg	29.57	751.1	30.64	778.3	25.2	— 3.8	60	SE			1		1			0	0		Dr. T. Stanecki.
Pola	30.20	767.0	30.31	769.9	49.1	9.5	62	WNW			1		0			0	0		I. R. Hydrographic Office.
Szathmar	30.07	763.7	30.53	775.4	38.1	3.4	44	E			2		0			0	0		Beicht Peter, S. J.
Szegedin	30.26	768.7	30.54	775.7	30.2	— 1.0	80	Calm			0		0			0	0		Karl Stancel.
Trieste	30.26	768.5	30.36	771.1	45.9	7.7	59	ENE			2		6			0	0		P. Busin.
Vienna	29.69	754.0	30.44	773.2	30.3	2.4	57	SE			4		2			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.93	760.2	30.14	765.6	37.2	2.9	95	NNW			1		10			0.118	3.0	H'y rain & f'g	Royal Observatory.
Furnes	30.11	764.7	30.13	765.3	39.6	4.2	88	ESE			2		10			0.193	4.9		M. E. de Cae.
Maeseyck	30.02	762.5	30.15	765.7	41.9	5.5	92	N			2		10			0.012	0.3	Foggy	M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 23, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.41	772.4	30.51	774.9	35.1	1.7	69	NNE	11	4.9			5			0.020	0.51	Blue sky	W. Boswell.
Armagh, Observatory	30.18	766.6	30.42	772.7	34.7	1.5	96	NE	12	5.4			10					Overcast	S. Call.
Bidston, Liverpool Obs'y			30.30	769.6	36.2	2.3	84	NNE	11	4.9			10					Overcast	John Hartnup.
Bolton, Sharples	29.71	754.6	30.27	768.8	36.1	2.3	78	NE	9	4.0			10					Overcast	Thomas Mackereth.
Bradford, Yorkshire	29.86	758.4	30.26	768.6	35.0	1.7	88	NE			3		9			0.07	1.8	Snowing	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	83	28.3	60				3		3					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			30.17	766.3	33.6	0.9	96	N			0.6		10					Snowing	John McLaren.
Chatham, School M. E.	30.03	762.7	30.17	766.3	34.2	1.2	92	Calm			0		10					Misty	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.97	761.2	30.20	767.1	37.6	3.1	70	NE			4		9					Overcast	The Staff.
Fort Napier, Natal	27.54	699.5	29.76	755.9	91.2	32 9	95	NW			1		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.63	752.6	29.87	758.7	85	29.4	87	NW			1		2					D. clouds	C. E. Keane.
Galway, Queen's College			30.32	770.1				NE			2		10					Overcast	J. O'Donaghadue.
Gibraltar, Mediterranean	29.82	757.4	29.88	758.9	60.0	15.6	96	E			2		8					Gloomy	2nd Opl. O. Baldwin.
Glasgow, Observatory	30.25	768.3	30.45	773.4	34.2	1.2	75	NNE			4		10					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.99	761.7	30.17	766.3	33.9	1.7	100	NNE			1		10					Overcast	The Staff.
Guernsey	29.90	759.4	30.13	765.3	39.5	4.2	64	NE			2		0					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.14	765.5	30.18	766.6	34.0	1.1	90	NNW	3	1.3			10					Misty	The Met'g'l Office.
Leicester, Museum	29.87	758.7	30.14	765.5	34.5	1.4	77	NE			3		10					Snowing	J. E. Carryer.
Malta, Mediterranean	29.96	761.0	30.03	762.7	58	14.4	82	SE			4		8			Blank		Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas	30.03	762.7	30.08	764.0	74.0	23.3	86	S			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.69	754.1	30.24	768.1	32.4	0.2	100	NNE			3		10					Snowing	Robert Pate.
Oxford, Radcliffe Obs'y	29.95	760.7	30.20	767.1	33.5	0.8	95	NNE			3		10					Threatening	The Staff.
Plymouth	30.11	764.8	30.18	766.6	36.7	2.6	64	NE			2		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.57	776.5	37.5	3.1	86	E	8	3.6			10					Misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.25	768.3	30.32	770.1	36.0	2.2	86	N			4		10					Snowing	Serg't W. H. Lyne.
Sheffield	29.99	761.7	30.28	769.1	34.3	1.3	97	NE			1		10			0.03	0.8	Threatening	W. F. Cooper.
Silloth Rectory	30.33	770.4	30.36	771.1	38.6	3.7	72	E			6		8			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.29	769.4	36.5	2.5	79	NE	15	6.7			10					Overcast	Rev. S. J. Perry.
Strathfield Turgiss	29.96	761.0	30.19	766.8	33.8	1.0	94	NE			1		10					Foggy	Rev.C.H. Griffith, F.M.S.
Truro, Royal Institution	30.12	765.0	30.19	766.8	40	4.4	82	E			4		10					Gloomy	W. Newcombe.
Valencia, Observatory	30.31	769.9	30.34	770.6	39.3	4.1	62	ENE	16	7.2			8					D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.66	753.4	29.70	754.4	24	— 4.4	97	N	22	9.8			10n			0.325	8.26	Light snow	H. J. Cundall, C. E.
Chatham, N. B.*	29.85	758.2	29.91	759.7	16	— 8.9	91	NE	4	1.8			10n		NW	0	0	Cloudy	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	29.98	761.5	30.00	762.0	19	— 7.2	79	SE	1	0.4			10n		Calm	0.04	1.0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.35	745.5	30.31	769.9	—14	—25.6	100	NW	5	2.2			10n			0	0	Cloudy	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.56	750.8	29.70	754.4	24	— 4.4	94	NW	20	8.9			10n			1.200	30.48	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.73	755.1	30.10	764.5	21	— 6.1	93	S	3	1.3		10cs	0	Calm		0.02	0.5	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	29.85	758.4	30.08	764.0	18	— 7.8	80	SW	12	5.4		0	5ks			0.09	2.3	Fair	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nuson.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	29.18	741.2	29.92	760.0	20	— 6.7	85	S	8	3.6		5k	5ks	SW	SW	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.34	745.2	30.09	764.3	19	— 7.2	85	S	6	2.7		8ck	0	SW		Inap.	Inap.	Fair	H. Morgan.
Port Stanley, Ontario	29.38	746.2	30.07	763.8	21	— 6.1	85	E	8	3.6			10ks		W	0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.69	754.1	30.03	762.8	16	— 8.9	100	NW			1		Fg		NW	0.10	2.5	Foggy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.50	749.3	30.02	762.5	— 1	—18.3	72	Calm	0	0		8ck	0	W		Inap.	Inap.	Fair	K. Stewart.
Saugeen, Ontario*	29.15	740.4	29.89	759.2	28	— 2.2	87	S	19	8.5			10ks			0.10	2.5	Cloudy	W. H. McIntyre.
St. Andrews	29.87	758.7	29.92	760.0	18	— 7.8	88	NW	4	1.8		0	0			0.06	1.5	Clear	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.37	746.0	29.41	747.0	25	— 3.9	100	NE	26	11.6			10n			0.40	10.2	Light snow	T. C. Hill, C. E.
Toronto, Ontario*	29.66	753.4	30.06	763.5	25	— 3.3	89	S	14	6.3		2k	8ks	W	W	0	0	Cloudy	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.82	757.4	29.89	759.2	26	— 3.3	83	N	10	4.5			10s		N	0.37	9.4	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.62	752.3	29.88	758.9	27	— 2.8	100	SE	3	1.3			10n					Stormy	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			John Duthie.
Cape St. Francis Lt. House	29.67	753.6			74.5	23.6	20	W	17.3	7.7			7ks			0.010	0.25	Rainy	The Staff, for D. Gill.
Cape Town, C. G. H. Obs'y	29.82	737.4	29.86	758.4	81.0	27.2	35	S	10.2	4.6		2ck	4ks			0	0		
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.86	758.5	29.89	759.1	58.1	14.5	89	SE	5.4	2.4			0			0	0		M. Marc Dechevrens, S J

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.24	666.5	29.96	761.0	61.2	16.2	91	SE			2	3d		NE		0	0	Fair	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.34	770.5	30.38	771.7	32.4	0.2	83	ESE	13	6		10							Oversergent Fischer.
Fanöe	30.25	768.3	30.27	768.8	29.5	—1.4	96	ENE			6	10							Overloerer Lauridsen.
Godthaab, Greenland	30.11	764.9	30.16	766.0	10.2	—12.1	96	Calm			0	10							S. Kleinschmidt.
Stykkisholm, Iceland	30.04	762.9	30.08	764.0	43.2	6.2	79	S			7	10						Raining	A. O. Thorlacius.
Thorshavn	30.63	778.0	30.67	778.9	41.4	5.2	80	Calm	0	0		7							Overloerer Bergh.
Vestervig	30.29	769.3	30.38	771.7	25.9	—3.4		NE			6	10						Snowing	Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.34	745.1	29.98	751.5	56.1	13.4	72	SE			3	ck			NW	0	0		M. Labroue, Director.
Alençon	29.55	750.6	30.10	764.6	39.9	4.4	93	NE			3		10		NE	0.094	2.4	Raining	M. Nicot, Director.
Arras, Engineer School	29.84	758.0	30.11	764.9	36.1	2.3	95	ENE			1		10					Raining	M. Klein, Commandan
Avignon, Normal School	30.09	764.3	30.17	766.3	62.2	16.8	50	SE			1		2		SE	0	0	Slightly cl'dy	M. Giraud, Director.
Bar-sur-Seine	29.52	749 9	30.08	764.0	57.9	14.4	57	S			1	2c				0	0	Slightly cl'dy	M. Saillard, Director.
Beauvais, Normal School	29.85	758.1	30.13	765.2	40.1	4.5	87	ENE			1		10		ENE	0.010	0.25	Raining	M. Frère Eugene Marie.
Besançon, Normal School	29.26	743.1	30.15	765.9	53.6	12	70	S			1		cn		SE	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.70	754.3	29.96	761.0	55.9	13.3	74	SSE			2		10		S	0.004	0.1	Covered	M. Rayet, Director.
Bourges, Normal School	29.48	748.7	30.03	762.8	55.8	13.2	66	ESE			1	c			ESE	0.795	20.2		M. Postel, Director.
Brest, Naval Observatory	29.91	759.4	30.15	765.7	39.9	4.4	70	NE			3		4		N	0	0		M. de Kernaree, Dir.
Caen, Normal School	30.01	762.2	30.09	764.2	40.6	4.8	100	NE			1		10			0	0	Covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.78	756.4	30.10	764.5	58.6	14.8	74	S			1		5		S	0.625	15.9	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.58	751.4	30.13	765.2	50.7	10.4	74	SSE			1		10			0.315	8.0	Covered	M. Grimard.
Clermont-Ferrand Obs'y	28.69	728.6	30.03	762.8	57.6	14.2	45	SSE			2		2			0	0	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.27	743.4	30.12	765.1	57.2	14	65	SE			3		0			0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.25	743.0	30.13	765.3	54.3	12.4	68	S			1		kn	S	S	0.024	0.6		Dr. Coulet, Director.
Gap, Normal School	27.61	701.4	30.17	766.2	50.9	10.5	30	S			2		5		S	0	0	½ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	29.09	738.8	30.23	767.8	58.8	14.9	50	SE			3		5		SE	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.37	746.0	30.14	765.5	55.4	13	55	ENE			1		0			0	0	Clear	M. Ablard, Director.
Guéret, Normal School	28.49	723.6	30.09	764.2	55.8	13.2	53	SE			1	cn		NW		0	0		M. Rivoir, Director.
Lamballe, Normal School	29.82	757.4	30.11	764.7	38.5	3.6	90	NNE			2		Fg		NNE	0	0	Foggy	M. Ollitrault, Director.
Lescar, Normal School	29.40	746.8	30.07	763.8	54.7	12.6	85	NE			1		8		SE	0	0	Very cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.97	761.2	30.07	763.8	42.1	5.6	88	NE			3		10			0	0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.06	738.0	30.08	763.9	58.3	14.6	48	SSE			4		Sk			0	0	Light smoke	M. André, Director.
Mans, Normal School	29.76	756.0	30.08	764.0	40.3	4.6	93	NE			3		10			0.110	2.8	Covered	M. Piboen, Director.
Marseille, Observatory	29.88	759.0	30.15	765.9	59.4	15.2	54	ESE			2		5		ESE	0	0		M. Stephan, Director.
Montlouis l'instituteur																			M. Cave, for Dr. Fines.
Montpellier, Normal School	30.05	763.2	30.16	766.0	56.5	13.6	78	SE			3		5		S	0	0	Cloudy	M. Galzin, Director.
Nancy, Normal School	29.35	745.6	30.12	765.1	56.5	13.6	57	WSW			2	2c		S		0	0	Slightly cl'dy	M. Hasse.
Nantes, Observatory	29.86	758.5	30.02	762.6	43.2	6.2	97	NNE			2		10			0.12	3.	Rainy	M. Larocque, Director.
Nice	30.17	766.2	30.20	767.1	58.3	14.6	57	E			4		5	E	E	0.102	2.6	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.99	761.7	30.10	764.4	54.5	12.5	80	SE	16.8	7.5			10		E	0.252	6.4		Dr. Fines.
Pic-du-Midi, Plantade	22.43	569.6			31.6	—0.2							10		S	0.055	1.4	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.10	739.2	30.17	766.4	55.0	12.8	57	SE			1		2		SE	0	0	Slightly cl'dy	M. Tallieu.
Puy de Dôme O. s'y, Summit	25.13	638.2			36.9	2.7	86	S			4		2k			0.031	0.8	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.97	761.3	30.00	762.1	56.8	13.8	78	E			1		10			0.20	5.	Covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.80	756.9	30.02	762.4	52.5	11.4	95	SE			1		10			0.39	10.	Covered	M. Mouillot, Director.
Rodez, Normal School	27.90	708.7	30.10	764.4	44.2	6.8	67	E			3		3n			0	0		M. Richard, Director.
Rouen, Normal School	30.02	762.6	30.11	764.6	39.2	4	83	NE			1		10		E			Raining	M. Platrier, Director.
Saint Lô, Normal School	29.93	760.3	30.09	764.3	38.3	3.5	89	ENE			1		10					Raining	M. Delaplanche, Dir.
Saint Maur, Observatory	29.92	760.0	30.09	764.2	41.9	5.5	94	NNE			1		10		S	0.256	6.5	Foggy	M. Renou, Director.
Toulouse, Observatory	29.28	743.7	30.00	762.1	55.6	13.1	69	SSE			6		8			0	0	Very cloudy	M. Baillard, Director.
Tours	29.84	757.8	30.03	762.8	55.8	13.2	73	S			1		8	Calm	SW	0.874	22.2	¼ covered	M. de Tastes.
Versailles, Observatory	29.59	751.6	30.08	764.1	39.2	4.0	100	NE			1					0.247	6.28		Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.37	746.1	30.24	768.2	39.9	4.4	66	E			2	2ck		S		0	0		Prof. Dr. Hoh.
Berlin	30.11	764.7	30.28	769.2	41.9	5.5	43	SE			4		3			0	0		Prof. Dr. Arndt.
Breslau	29.88	758.9	30.42	772.6	39.4	4.1	50	SE			3		3			0	0		Royal University Obs'y.
Carlsruhe	29.74	755.3	30.17	766.4	48.6	9.2	68	E			0		1	S		0	0		Albert Senx.
Cassel	29.57	751.0	30.18	766.5	47.8	8.8	65	SE			2		2	E		0	0		Dr. H. Möhl.
Frankfort on the Main	29.88	759.0	30.26	768.5	47.5	8.6	59	ESE			1		2			0	0		Physical Society.
Friedrichshafen	28.75	730.3	30.26	768.5	35.2	1.8	90	NE			2		10			0	0		Chief Telegrapher Wilhelm.
Hamburg	30.17	766.3	30.24	768.1	35.1	1.7	93	SE			4		10			0.063	1.6		Dr. R. Kleeman.
Kiel	30.24	768.0	30.25	768.4	32.5	0.3	84	E			3		10			0.016	0.40	Snowing	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.83	757.6	30.26	768.7	41.0	5.0	69	SSE			1		7			0	0		Prof. Dr. Bruhns.
Magdeburg	30.01	762.2	30.24	768.1	39.6	4.2	74	Calm			0		6cs	SW		0	0		Dr. Assmann.
Memel	30.62	777.7	30.67	778.9	20.3	—5.5	79	SE			3	2c							Reinbrecht & Issermann.
Munich	28.36	720.4	30.24	768.0	30.6	—0.8	87	N			1		10			0	0	Foggy	Central Station.
Neufahrwasser	30.53	775.5	30.55	775.9	27.7	—2.4	71	SSE			2		6			0	0		A Lothes.
Neustadt, Palatinate	29.61	752.1	30.14	765.5	47.7	8.7	70						10			0	0	Light fog	Dicknether.
Stuttgart	29.20	741.7	30.11	764.9	47.3	8.5	66	N			1		3	N		0	0		Prof. Dr. Schoder.
Thorn	30.28	769.2	30.48	774.1	27.0	—2.8	68	E			3		0			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	28.65	727.8	30.18	766.6	41.7	5.4	66	SE			4		8	W		0	0		Prof. Kemlein.
Wustrow	30.29	769.3	30.32	770.0	34.0	1.1	96	E			2		7s			0	0		Profs. Brandes & Reimer.

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

GREEK SERIES.

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

Athens	29.94	760.5	30.35	770.8	40.8	4.9		NE			4.0		10					Covered	Schmidt & Wourlisch.

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	29.92	759.9	29.97	761.2	77.5	25.3	48	WSW	18.0	8.0			6	SW		0	0	D. clouds	
Deesa	29.46	748.3	29.93	760.3	83.0	28.3	26	W					8	SW		0	0	D. clouds	
Bombay	29.92	759.9	29.96	760.8	81.7	27.6	68	NW	12.0	5.4			0			0	0	Blue sky	
Poona, Yarrowda	28.06	712.7	29.90	759.4	85.1	29.5	22	WSW	14.0	6.3			0			0	0	Blue sky	
Belgaum	27.38	695.6	29.88	758.8	86.9	30.5	14	WNW	2.0	0.9			0			0	0	Blue sky	
Lahore	29.21	741.8	29.97	761.2	69.7	20.9	66	NNE	3.6	1.6			8			0	0	Gloomy	
Roorkee	29.03	737.4	29.94	760.6	73.8	23.2	74	Calm	1.7	0.8			7			0	0		
Agra	29.36	745.7	29.93	760.2	77.8	25.4	30	E	4.6	2.1			10		E	0	0		
Nagpur	28.85	732.8	29.88	758.9	89.7	32.1	22	SW	4.2	1.9			6		W	0	0	D. clouds	
Jubbulpore	28.55	725.1	29.93	760.1	76.3	24.6	55	W	2.5	1.1			6		E	0.02	0.5	D. clouds	
Lucknow	29.57	751.0	29.95	760.7	74.2	23.4	61	N	1.8	0.8			10	SE		0.01	0.3	Overcast	
Allahabad	29.58	751.4	29.90	759.4	72.9	22.7	74	Calm	3.0	1.3			9		W	0.03	0.8	Overcast	
Patna	29.77	756.1	29.95	760.7	81.1	27.3	64	W	1.4	0.6			4	W	W	0.02	0.5	D. clouds	
Hazaribagh	27.88	708.1	29.89	759.2	79.3	26.3	39	NW	4.7	2.1			4			0	0		
Cuttack	29.81	757.2	29.89	759.3	86.8	30.4	41	S	0.3	0.1			0			0	0	Blue sky	
Calcutta, Alipore	29.87	758.8	29.90	759.3	81.3	27.4	50	SSW	3.0	1.3			5	W		0	0	D. clouds	
Goalpara	29.45	748.0	29.86	758.4	77.6	25.3	49	WNW	1.2	0.5			4		WNW	0	0	D. clouds	
Chittagong	29.84	758.0	29.93	760.3	78.0	25.6	78	SW	2.8	1.2			0			0	0	Blue sky	
Sibsagar	29.59	751.6	29.94	760.4	65.0	18.3	88	NE	2.0	0.9			10	W	W	0	0	Overcast	

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.93	760.2	30.35	770.9	44.6	7.0	43	E	1.3	0.6			5			0	0		Prof. Giovanni Clodig
Milan	29.80	756.9	30.33	770.4	44.1	6.7	65	ENE	0.9	1.4			7	SW		0	0		Prof. Schiaparelli.
Padua	30.24	768.2	30.36	771.1	44.4	6.9	64	NE	8.1	3.6			10	SSE		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.38	746.3	30.31	769.8	43.2	6.2	82	NNW	1.8	0.8			10			0	0		Prof. P. F. Denza.
Genoa	30.08	763.9	30.27	768.9	50.0	10.0	55	N	8.7	3.9			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.36	720.4	30.35	770.9	38.3	3.5	97	W			2		10			0	0		Prof. D. C. Bruno.
Pesaro	30.25	768.3	30.30	769.6	47.8	8.8	86	NE	15.4	6.9			10	SE		0.039	1.0		Prof. Luigi Guidi.
Florence	29.96	761.0	30.22	767.6	54.0	12.2	50	NE			4		10			0	0		Cav. F. Meucci.
Leghorn	30.13	765.2	30.21	767.4	54.7	12.6	52	NNE	8.1	3.6			4			0	0		Prof. P. Monte.
Rome	30.00	762.1	30.18	766.6	57.6	14.2	38	ESE	0.7	0.3			2			0.008	0.2		Prof. P. S. Ferrari.
Lecce	29.99	761.7	30.25	768.3	53.2	11.8	49	E	3.1	1.4			3			0	0		Prof. C. de Giorgi.
Cosenza	29.32	744.6	30.23	767.7	51.4	10.8	71	NNW	1.8	0.8			9	NW		0	0		Prof. D. Conti.
Cagliari	29.83	757.7	30.02	762.6	60.1	15.6	62	ESE			2		1	SE		0.315	8.0		Prof. A. Pacinotti.
Palermo	29.85	758.2	30.10	764.6	57.0	13.9	70	E	8.1	3.6			10			0.067	1.7		Prof. G. Ciacciatore.
Syracuse	30.08	764.1	30.13	765.2	56.8	13.8	72	ESE	10.5	4.7			10	ESE		0.094	2.4		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R	29.63	752.7	30.17	766.3	55.2	12.9	59	SE	0	0			4			0	0		Prof. F. Brioschi.
Stelvio	22.29	566.2			24.4	— 4.2	84	E			2		0			0	0	Misty	P. F. Denza.
Valdobbia	22.24	564.8			25.9	— 3.4	87	SE			2		10			0	0	Covered	

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	30.28	769.1	30.30	769.6	40.5	4.7	93	NNE	3.5	1.6			0			0	0	Clear	K. Sasaki.
Kioto	30.14	765.5	30.32	770.1	33.9	1.1	86						0			0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.01	762.2	30.21	767.3	56.1	13.4	64	SE	3.1	1.4			10s			0	0	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	30.28	769.1	30.35	770.9	28.0	— 2.2	68	ESE	3.3	1.5		0	0			0	0	Clear	The Staff.
Wakayama	30.25	768.3	30.30	769.6	38.0	3.3	80	NNE	1.9	0.8			0			0	0	Clear	Y. Kuwamuca.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.86	758.4	30.05	763.2	82.0	27.8	68	ENE	12.0	5.4		0	4		ENE	0.02	0.5	Fine	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Leon	24.56	623.7	30.34	770.5	54.2	12.3	85	W			1	7c	0	SW		0	0	Cloudy	Prof. M. Leal.
Mazatlan	29.80	757.0	30.06	763.6	66.0	18.9	94	ESE	1.6	0.8		10cs	0	WSW		0	0	Covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.21	589.4	30.36	771.0	48.2	9.0	79	Calm	0	0		10k				0	0	Covered	The Staff.
Pabellon, Aguascalientes	24.04	610.7	30.16	766.1	52.2	11.2	77	N			1	5c	4ks	SW	SW	0.02	0.6	Cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.43	595.2	30.35	770.9	44.1	6.7	50	Calm	0	0		0	4		E	0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.36	618.6	30.41	772.3	52.2	11.2	74	SSE	0.9	0.4		0	1		E	0	0	Clear	G. Barroeta, M. D.
Tlacotalpam	30.17	766.3	30.18	766.6	67.3	19.6	87	N	10.9	4.9		6	4	E	N	0	0	Covered	Prof. M. Cházaro.
Zacatecas	22.69	576.4	30.49	774.6	44.4	6.9	89	Calm	0	0		2c	5ks	E	E	0	0	Cloudy	J. A. Bonilla, M. E.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	30.15	765.9	30.15	765.9	40.8	4.9		ESE			2					0.307	7.8		
Groningen	30.13	765.3	30.19	766.7	36.7	2.6		E			2					0.087	2.2		
Helder	30.16	766.0	30.16	766.0	34.7	1.5		ENE			1					0.181	4.6		
Hellevoetsluis	30.16	766.0	30.16	766.0	41.0	5.0	89	Calm			0					0	0		
Utrecht	30.13	765.4	30.18	766.6	39.2	4.0	89	NE			1		10			0.142	3.6	Dull	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.43	772.8	30.49	774.4	31.3	— 0.4	55	Calm	0	0			0			0	0		
Christiania	30.48	774.1	30.63	778.1	25.2	— 3.2	63	E	2	1			8			0	0		
Gjæsvær	30.44	773.2	30.47	773.8	30.9	— 0.6		WNW			8		9						
Lodingen	30.67	779.1	30.72	780.3	32.0	0.0	62	W			2		8			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores																			Dr. J. A. Sampaio.
Campo Major	28.84	732.5	29.85	758.1	54.3	12.4	70	ENE	4.9	2.2			7			0.197	5.0		Dr. A. M. R. dos Santos
Funchal, Madeira	29.88	758.9	29.97	761.1	62.6	17.0	61	SW	3.8	1.7			6			0.122	3.1		Capt. D. A. de Cunha.
Lisbon, Observatory	29.54	750.2	29.90	759.4	54.1	12.3	72	NNE	4.2	1.9			2			0	0		The Staff.
Ponta Delgada, Azores	30.08	763.9	30.15	765.7	54.3	12.4	65	N	13.0	5.8			3			0.390	9.9		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.29	743.9	30.51	775.0	— 3.3	—19.6	75	SW	2	1			0						Capt. Lasarew.
Archangel	30.49	774.5	30.51	775.0	13.6	—10.2	90	WNW	9	4			10						Capt. Sseliwerstow.
Astrakhan	30.69	779.5	30.61	777.4	20.7	— 6.3	70	WNW	4	2			10n			Blank			Capt. Wisganow.
Barnaul	30.09	764.2	30.66	778.8	— 5.4	—20.8	66	SW	4	2			9					Light clouds	Meteorological Obs'y.
Dorpat	30.56	776.3	30.84	783.2	12.2	—11.0	75	E	4	2		7ck							Obervatory.
Ekaterinburg	29.18	741.1	30.20	767.1	23.2	— 4.9	95	W	4	2			10					Snowing	Meteorological Obs'y.
Kasan	30.20	767.1	30.49	774.5	21.7	— 5.7	65	W	2	1			1cs						Observatory.
Kertch	30.44	773.1	30.46	773.6	28.0	— 2.2	79	NE	11	5			2						Lagorio.
Kieff	30.13	765.2	30.84	783.2	18.7	— 7.4	83	NE	4	2		0	10cs;ts						Cand. Fatjanow.
Lugan	30.49	774.4	30.71	780.0	22.6	— 5.2	74	NE	9	4			6						Meteorological Obs'y.
Moscow	30.21	767.4	30.82	782.9	15.8	— 9.0	75	NE	4	2			0						Meteorological Obs'y.
Nertchinsk	27.88	708.2	30.45	773.4	— 1.7	—18.7	65	NW	2	1			0						Meteorological Obs'y.
Nikolaiev	30.63	777.9	30.70	779.7	20.5	— 6.4	76	NE	22	10			0						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	30.05	763.2	30.13	765.4	— 5.8	—21.0	85	Calm	0	0			0						Lieut. Iwanow.
Nukuss	30.29	769.3	30.54	775.7	28.8	— 1.8	60	ENE	5.6	2.5			4k						Dr. Dobrochotow.
Pekin, China	29.75	755.6	29.89	759.2	34.9	1.6	69	Calm	0	0			9u						Physical Observatory.
St. Petersburg	30.80	782.3	30.82	782.7	21.6	— 5.8	62	SSE	2	1			1cs						Central Physical Obs'y.
Tashkend, Laboratory	28.75	730.3	30.41	772.3	36.3	2.4	86	NW	2	1			1						Teich, A. M.
Tiflis	28.97	735.8	30.47	773.9	34.0	1.1	79	S	13	6			10					Light snow	Physical Observatory.
Warsaw	30.15	765.7	30.60	777.3	24.6	— 4.1	64	SE	13	6		4c							Astronomical Obs'y
Wilna	30.35	770.8	30.81	782.6	19.0	— 7.2	74	SE	4	2			4					Light clouds	Berg, Assistant.
Yeniseisk	30.37	771.5	30.72	780.2	—21.3	—29.6	74	SE	2	1			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.46	773.7	35.0	1.7	71	NE			6		10k			0.01	0.3	Snowy	Andrew Gibb.
Monach Lt. House, Hebrides			30.52	775.2	38	3.3	91	ESE			4		10			0	0	Overcast	J. Youngclause.
North Unst, Shetland Isl'ds			30.52	775.2				NE			4		10			0	0		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.95	760.7	30.06	763.4	56.3	13.5	87	E	6.3	2.8			10			0.059	0.15	Misty	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.89	759.3	29.95	760.8	59	15.0	67	S	1.3	0.6		1	8	S		0.024	0.6	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.95	684.6			45.5	7.5	93	SE	2.2	1.0			10			0.079	2.0	Covered	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.65	702.4	29.89	759.2	52.7	11.5	75	NE	2.7	1.2			10			0.035	0.9	Covered	The Staff.
Murcia, Met. Obs'y	29.72	755.0	29.88	758.9	60.1	15.6	82	NE	1.8	0.8		5	5	W		0.008	0.2	Misty	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.93	734.8	29.83	757.6	57.0	13.9	68	SE	0	0			4			0.358	9.1	Cloudy	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	30.08	764.0	30.15	765.7	72.5	22.5	72	NNE	5.6	2.5		0	2k		NNE	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.97	761.2	30.02	762.5	80.8	27.1	63	E	6.6	3.0						0	0	Fair	Federico Faura, S. J
San Fernando, Naval Obs'y	29.74	755.3	29.84	757.8	56.3	13.5	61	N	3.7	1.7						0	0		
San Juan de Porto Rico, W. I	30.07	763.8	30.16	766.1	74.8	23.8	87	SW	0	0			10		N	0	0		Capt. C. Pujazon, R. N., Dir.
Tuguegarao, Philippine Ids	29.92	760.0	30.07	763.7	79.3	26.3	76	S	3.6	1.6		2c	3k	SW	SW	0.039	1.00	Clear	Enrique Gadea, Chief Engineer.
													1s			0	0	Fair	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.69	779.6	30.73	780.6	10.4	—12.0	93	Calm			0		8			0	0		
Umea	30.65	778.6	30.71	779.9	17.2	— 8.2	94	SW			2		0			0	0		
Hernosand	30.74	780.7	30.79	782.0	10.2	—12.1	74	Calm			0		0			0	0		
Stockholm	30.47	774.0	30.65	778.5	21.6	— 5.8	85	NE			2		10			0	0		
Wisby	30.47	774.0	30.53	775.5	29.8	— 1.2	80	Calm			0		10			0	0		
SUB-SERIES.																			
Upsala	30.58	776.7	30.67	778.9	14.4	— 9.8	97	N	4.9	2.2			10			0	0		Nils Ekholm.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.72	729.5	30.17	756.2	48.6	9.2	64	N			1		1			0	0	Clear	The Observatory.
Zurich	28.54	724.8	30.24	768.0	36.1	2.3	98	W			2		7			0	0	Cloudy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. +3.6 mm.; Ther. +4°.5 cent.; Hum. —4 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.37	771.3	33.4	0.8	86	N	27	12.0			10		N	0.528	13.4		The Observatory.
Valona			30.19	766.8	56.1	13.4		W			1		0			0	0	Clear	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.85	758.3	53.1	11.7	80	SW			3		10n		SW	0.23	5.8		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	30.12	765.0	30.21	767.3	34	1.1	70	NE	3	1.3		0	8ks		N	0.04	1.0	Fair	
Alpena, Michigan	29.14	740.1	29.81	757.2	25	— 3.9	87	SW	10	4.5			8s		Calm	0	0	Cloudy	
Atlanta, Georgia	29.04	737.6	30.24	768.1	35	1.7	70	NW	9	4.0		0	0			0	0	Clear	
Atlantic City, New Jersey	30.26	768.6	30.28	769.1	28	— 2.2	66	NW	5	2.2		0	0			0.31	7.9	Clear	
Attou Id., Alaska	29.36	745.7			25	— 3.3	87	S	7	3.1		0	5s		N	0.27	6.9	Fair	
Augusta, Georgia	30.04	763.0	30.25	768.3	38	3.3	91	Calm	0	0			Fg		Calm	0	0	Dense fog	
Baltimore, Maryland	30.25	768.3	30.30	769.6	35	1.7	70	W	1	0.4		0	Fg		Calm	0.01	0.3	Clear	
Barnegat, New Jersey	30.22	767.6	30.24	768.1	29	— 1.7	78	NW	4	1.8		0	0			0.35	8.9	Clear	
Benton, Montana	27.46	697.5			8	—13.3	78	N	6	2.7			10s		Calm	0.01	0.3	Cloudy	
Bismarck, Dakota	28.35	720.1	30.21	767.3	8	—13.3	89	N	20	8.9			10s		Calm	0	0	Cloudy	
Boise City, Idaho	27.64	702.0	30.60	777.2	29	— 1.7	72	N	1	0.4		0	0			0	0	Clear	
Boston, Massachusetts	29.97	761.2	30.13	765.3	25	— 3.9	87	W	8	3.6		0	0			0.67	17.0	Clear	
Brackettville, Texas	29.09	738.9	30.09	764.3	41	5.0	65	Calm	0	0		0	0			0	0	Clear	
Brownsville, Texas	30.24	768.1	30.29	769.4	52	11.1	93	Calm	0	0		5ck	0	Calm		0	0	Fair	
Buffalo, New York	29.34	745.2	30.07	763.8	26	— 3.3	75	S	7	3.1			10s		Calm	0.01	0.3	Cloudy	
Burlington, Vermont	29.81	757.2	30.12	765.0	26	— 3.3	63	NW	7	3.1		0	0			0.08	2.0	Clear	
Cairo, Illinois	29.78	756.4	30.18	766.6	39	3.9	73	S	4	1.8		8ck	2s	Calm	Calm	0	0	Cloudy	
Campo, California	27.59	700.8	30.16	766.1	36	2.2	61	E	8	3.6		5c	0	W		0	0	Fair	
Camp Thomas, Arizona	27.51	698.7			32	0.0	69	E			2	0	0			0	0	Clear	
Cape Henry, Virginia	30.27	768.8	30.29	769.4	34	1.1	79	NW	2	0.9		0	0			0	0	Clear	
Cape May, New Jersey																			
Castroville, Texas	29.48	748.8	30.24	768.1	37	2.8	81	NW	4	1.8		0	0			0	0	Clear	
Cedar Keys, Florida	30.19	766.8	30.22	767.6	49	9.4	71	N	9	4.0		0	0			0	0	Clear	
Champaign, Illinois	29.16	740.7	29.99	761.7	34	1.1	69	SW	14	6.3			10s		SW	0	0	Cloudy	
Charleston, S. Carolina	30.17	766.3	30.23	767.8	49	9.4	78	N	2	0.9		0	0			0	0	Clear	
Charlotte, N. Carolina	29.38	746.2	30.23	767.8	35	1.7	70	E	4	1.8		0	Sk		Calm	0	0	Clear	
Chattanooga, Tennessee	29.43	747.5	30.27	768.8	33	0.6	79	W	4	1.8		5cs	Fg	W	Calm	0	0	Fair	
Cheyenne, Wyoming	24.14	613.1	30.08	764.0	35	1.7	53	NW	24	10.7		0	0			0	0	Clear	
Chicago, Illinois	29.18	741.2	29.90	759.4	30	— 1.1	78	SW	10	4.5		5ck	0	W		0	0	Fair	
Chincoteague, Virginia	30.28	769.1	30.30	769.6	31	— 0.6	79	NW	6	2.7		0	0			0.12	3.0	Clear	
Cincinnati, Ohio	29.49	749.0	30.17	766.3	36	2.2	80	S	3	1.3		7cs	Sk	N	Calm	0	0	Dense smoke	
Cleveland, Ohio	29.30	744.2	30.06	763.5	28	— 2.2	83	S	12	5.4		2ck	2s	W	Calm	Inap.	Inap.	Fair	
Coleman City, Texas	28.46	722.9	30.20	767.1	40	4.4	65	W	4	1.8		0	0			0	0	Clear	
Columbus, Ohio	29.25	742.9	30.13	765.3	30	— 1.1	78	S	8	3.6		0	0			0	0	Clear	
Concho, Texas	28.31	719.1	30.07	763.8	37	2.8	63	W	7	3.1		0	0			0	0	Clear	
Corsicana, Texas	29.83	757.7	30.32	770.1	41	5.0	65	S	4	1.8		0	0			0	0	Clear	
Davenport, Iowa	29.28	743.7	29.95	760.7	24	— 4.4	74	SW	7	3.1		0	0			0	0	Clear	
Dayton, Washington T'y	28.56	725.4	30.27	768.8	45	7.2	84	S	8	3.6			10n		Calm	0	0	Cloudy	
Deadwood, Dakota	25.37	644.4			44	6.7	76	W	6	2.7			10s		Calm	Inap.	Inap.	Cloudy	
Decatur, Texas	29.02	737.1	30.23	767.8	43	6.1	51	W	8	3.6		0	0			0	0	Clear	
Delaware Breakwater, Del.	30.24	768.1	30.27	768.8	32	0.0	79	NW	9	4.0		0	0			0.14	3.6	Clear	
Denison, Texas	29.42	747.3	30.24	768.1	42	5.6	83	SW	2	0.9		0	0			0	0	Clear	
Denver, Colorado	24.94	633.5	30.16	766.1	39	3.9	25	W	3	1.3		0	0			0	0	Clear	
Des Moines, Iowa	29.10	739.1	30.01	762.2	32	0.0	79	NW	12	5.4		0	0			0	0	Clear	
Detroit, Michigan	29.25	742.9	29.97	761.2	36	2.2	90	SE	15	6.7			10s		Calm	0	0	Cloudy	
Dodge City, Kansas	27.57	700.3	29.98	761.5	31	— 0.6	69	W	10	4.5		0	0			0	0	Clear	
Dubuque, Iowa	29.19	741.4	29.93	760.2	21	— 6.1	86	SW	3	1.3		5c	Fg	Calm	Calm	0	0	Fair	
Duluth, Minnesota	29.14	740.1	29.84	757.9	22	— 5.6	86	W	8	3.6		0	9s		Calm	0	0	Cloudy	
Eagle Pass, Texas	29.50	749.3	30.27	768.8	41	5.0	74	Calm	0	0		0	0			0	0	Clear	
Eagle Rock, Idaho	25.89	650.0	30.24	768.1	15	— 9.4	82	N	2	0.9			Fg			0	0	Foggy	
Eastport, Maine	29.87	758.7	29.94	760.5	21	— 6.1	57	N	12	5.4		2cs	0	N		0.08	2.0	Fair	
Edinburg, Texas																			
El Paso, Texas	26.47	672.3			36	2.2	29	NW	4	1.8		0	0			0	0	Clear	
Erie, Pennsylvania	29.32	744.7	30.06	763.5	30	— 1.1	78	S	16	7.2			10ks		SW	0.02	0.5	Cloudy	
Escanaba, Michigan	29.07	738.4	29.75	755.6	20	— 6.7	85	SW	9	4.0		2c	5s	S	S	0	0	Cloudy	
Florence, Arizona	28.67	728.2	30.27	768.8	45	7.2	31	Calm	0	0		0	0			0	0	Clear	
Fort Apache, New Mexico	25.25	641.6	30.71	780.0	28	— 2.2	66	E	6	2.7		0	0			0	0	Clear	
Fort Assiniboine, Montana	27.44	697.0			6	—14.4	76	NE	8	3.6			10s		Calm	0.02	0.5	Cloudy	
Fort Bennett, Dakota	28.60	726.4			12	—11.1	61	N	13	5.8			10n		Calm	Inap.	Inap.	Light snow	
Fort Buford, Dakota	28.28	718.3	30.35	770.9	4	—15.6	74	N	12	5.4		5cs	0	NW		0.10	2.5	Fair	
Fort Custer, Montana	26.99	685.5			17	— 8.3	83	N	30	13.4			10s		Calm	0	0	Cloudy	
Fort Davis, Texas	25.44	646.2	30.40	772.1	32	0.0	79	E	2	0.9		0	0			0	0	Clear	
Fort Elliott, Texas	27.53	699.2	29.95	760.7	31	— 0.6	18	NW	8	3.6		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.65	753.1	30.22	767.6	34	1.1	70	Calm	0	0		0	0			0	0	Clear	
Fort Grant, Arizona	25.39	644.9	30.19	766.8	44	6.7	30	NE	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas	28.87	733.3	30.18	766.6	42	5.6	42	W	9	4.0		0	0			0	0	Clear	
Fort Keogh, Montana	27.72	704.1			15	— 9.4	82	NW	8	3.6			10s		Calm	0	0	Cloudy	
Fort McKavett, Texas	27.96	710.2	29.98	761.5	35	1.7	53	W	7	3.1		0	0			0	0	Clear	
Fort Macon, North Carolina	30.25	768.3	30.26	768.6	40	4.4	82	NE	14	6.3		0	Hz		Calm	0	0	Clear	
Fort St. Michaels	30.02	762.5	30.06	763.5	2	—16.7	100	N	4	1.8		0	0						
Fort Missoula, Montana	26.95	684.5			44	6.7	84	SW	1	0.4			10s		Calm	0	0	Cloudy	
Fort Shaw, Montana	26.56	674.6			11	—11.7	80	NE	4	1.8			10n		Calm	0.01	0.3	Light snow	
Fort Sill, Indian Territory	28.95	735.3	30.12	765.0	35	1.7	90	S	12	5.4		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.35	720.1			8	—13.3	78	SW	14	6.3			10ks		SW	0	0	Cloudy	
Fort Verde, Arizona					34	1.1	61	NW			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.50	723.9	30.13	765.3	41	5.0	65	W	2	0.9		7c	0	W		0	0	Fair	
Galveston, Texas	30.28	769.1	30.32	770.1	47	8.3	92	W	3	1.3		0	1s		Calm	0	0	Clear	
Grand Haven, Michigan	29.20	741.7	29.87	758.7	29	— 1.7	89	S	15	6.7			10s		Calm	0	0	Cloudy	
Hatteras, North Carolina	30.26	768.6	30.28	769.1	41	5.0	74	NE	16	7.2		0	0			0	0	Clear	
Helena, Montana	25.82	655.8			47	8.3	48	W	13	5.8		2c	0	W		0	0	Fair	
Henrietta, Texas	29.21	741.9	30.20	767.1	34	1.1	61	Calm	0	0		0	0			0	0	Clear	
Indianapolis, Indiana	29.23	742.4	30.04	763.0	35	1.7	75	S	6	2.7		2c;cs	0	SW		0	0	Fair	
Indianola, Texas	30.27	768.8	30.30	769.6	51	—10.6	93	SE	3	1.3		0	0			0	0	Clear	
Jacksboro, Texas	29.04	737.6	30.24	768.1	35	1.7	70	Calm	0	0		0	0			0	0	Clear	
Jacksonville, Florida	30.18	766.6	30.23	767.8	48	8.9	70	NE	5	2.2		0	Fg			0	0	Clear	
Keokuk, Iowa	29.32	744.7	29.99	761.7	32	0.0	69	SW	8	3.6		0	1s		Calm	0	0	Clear	
Key West, Florida	30.14	765.5	30.17	766.3	69	20.6	75	N	12	5.4		0	0			0	0	Clear	
Kittyhawk, North Carolina	30.28	769.1	30.31	769.9	34	1.1	90	N	5	2.2		0	0			0	0	Clear	
Knoxville, Tennessee	29.22	742.2	30.29	769.4	29	— 1.7	95	Calm	0	0			Fg		Calm	0	0	Dense fog	
La Crosse, Wisconsin	29.10	739.1	29.87	758.7	22	— 5.6	72	S	5	2.2		0	0			0	0	Clear	
La Mesilla, New Mexico	26.34	669.0	30.50	774.7	30	— 1.1	57	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.87	758.7	30.22	767.6	50	10.0	94	Calm	0	0		0	0			0	0	Clear	
Leavenworth, Kansas	29.21	741.9	30.09	764.3	33	0.6	79	NW	3	1.3		0	0			0	0	Clear	
Lewiston, Idaho	29.50	749.3	30.17	766.3	42	5.6	73	NE	2	0.9			10ks		NE	0.01	0.3	Cloudy	
Little Rock, Arkansas	29.91	759.7	30.24	768.1	38	3.3	72	SW	4	1.8		0	0			0	0	Clear	
Los Angeles, California	29.78	756.4	30.14	765.5	59	15.0	38	SE	8	3.6		0	0			0	0	Clear	
Louisville, Kentucky	29.56	750.8	30.14	765.5	38	3.3	81	S	6	2.7		5ck	2s	S	Calm	0	0	Fair	
Lynchburg, Virginia	29.57	751.1	30.29	769.4	31	— 0.6	79	Calm	0	0		1c	0	Calm		0	0	Clear	
Madison, Wisconsin	28.81	731.8	29.83	757.7	26	— 3.3	75	SW	10	4.5		0	8s		W	0	0	Cloudy	
Marquette, Michigan	28.96	735.6	29.79	754.4	23	— 5.0	73	S	5	2.2			10s		Calm	0	0	Cloudy	
Mason, Texas	28.62	726.9	30.46	773.7	42	5.6	74	NW	4	1.8		0	0			0	0	Clear	

UNITED STATES SERIES.

By authority of the Secretary of War.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0–10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.87	758.7	30.23	767.8	40	4.4	73	Calm	0	0	.....	Hz	Hz	Calm	Calm	0	0	Light haze.	
Milwaukee, Wisconsin	29.09	738.9	29.84	757.9	29	— 1.7	89	S	7	3.1	.....	10s	.....	S	.....	0	0	Cloudy	
Mobile, Alabama	30.22	767.6	30.30	769.6	38	3.3	72	NW	6	2.7	.....	0	Fg	.....	.....	0	0	Clear.	
Montgomery, Alabama	30.07	763.8	30.32	770.1	35	1.7	90	N	1	0.4	.....	2c	0	Calm	.....	0	0	Clear.	
Moorhead, Minnesota	29.13	739.9	30.19	766.8	5	—15.0	75	N	16	7.2	.....	.....	10s	.....	N	Inap.	Inap.	Cloudy	
Morgantown, W. Virginia	29.17	740.9	30.22	767.6	31	— 0.6	79	Calm	0	0	.....	0	2s;sk	.....	Calm	0.03	0.8	Fair	
Mt. Washington, N. H	23.44	595.4	29.80	756.9	3	—16.1	86	NW	50	22.4	.....	.....	Fg	.....	NW	0.27	6.9	Light fog..	
Nashville, Tennessee	29.68	753.9	30.25	768.3	33	0.6	79	W	1	0.4	.....	2cs	Fg	Calm	Calm	0	0	Fair	
New Haven, Connecticut	30.07	763.8	30.20	767.1	27	— 2.8	64	NW	1	0.4	.....	0	0	.....	.....	0.34	8.6	Clear	
New London, Connecticut	30.14	765.5	30.19	766.8	28	— 2.2	77	NW	5	2.2	.....	0	0	.....	.....	0.54	13.7	Clear	
New Orleans, Louisiana	30.25	768.3	30.31	769.9	49	9.4	71	N	3	1.3	.....	0	Sk	.....	.....	0	0	Clear	
Newport, Rhode Island	30.08	764.0	30.14	765.5	29	— 1.7	78	W	11	4.9	.....	0	0	.....	.....	1.17	29.7	Clear.	
New River, N. Carolina	.....	.....	.....	.....	39	3.9	91	NE	.....	.....	4	0	0	.....	.....	.....	.....	Clear.	
New Shoreham, Rhode I'd	30.16	766.1	30.19	766.8	29	— 1.7	67	NW	16	7.2	.....	0	0	.....	.....	1.23	31.2	Clear	
New York, New York	30.04	763.0	30.23	767.8	30	— 1.1	89	W	6	2.7	.....	0	Fg	.....	Calm	0.20	5.1	Clear	
Norfolk, Virginia	30.24	768.1	30.31	769.9	37	2.8	71	Calm	0	0	.....	5cs	Sk	Calm	Calm	0.02	0.5	Fair	
North Platte, Nebraska	27.18	690.4	29.87	758.7	28	— 2.2	78	W	9	4.0	.....	2c	0	Calm	.....	0	0	Clear	
Olympia, Washington T'y	30.24	768.1	30.28	769.1	50.0	10.0	90	S	10	4.5	.....	.....	10n	.....	Calm	0.65	16.5	Light rain	
Omaha, Nebraska	28.90	734.0	30.04	763.0	31	— 0.6	79	NW	14	6.3	.....	0	5s	.....	W	0	0	Fair	
Oswego, New York	29.80	756.9	30.14	765.5	23	— 5.0	86	S	4	1.8	.....	0	0	.....	.....	0.04	1.0	Clear	
Pensacola, Florida	30.28	769.1	30.31	769.9	43	6.1	75	N	8	3.6	.....	Hz	0	Calm	.....	0	0	Clear	
Philadelphia, Pa	30.21	767.3	30.27	768.8	32	0.0	69	NW	7	3.1	.....	0	Hz	.....	Calm	0.05	1.3	Clear	
Phœnix, Arizona	28.99	736.3	30.87	784.1	40	4.4	65	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.79	451.9	30.00	762.0	4	—15.6	78	W	22	9.8	.....	0	0	.....	.....	0	0	Clear	
Pilot Point, Texas	29.44	747.8	30.31	769.9	39	3.9	73	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Ploche, Nevada	24.35	618.5	30.12	765.0	33	0.6	51	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	29.34	745.2	30.19	766.8	30	— 1.1	73	S	11	4.9	.....	0	0	.....	.....	0.01	0.3	Clear	
Port Huron, Michigan	29.26	743.2	29.95	760.7	27	— 2.8	88	S	16	7.2	.....	8c	0	W	.....	Inap.	Inap.	Fair	
Portland, Maine	30.00	762.0	30.05	763.3	24	— 4.4	74	NW	5	2.2	.....	0	2s	.....	Calm	0.65	16.5	Clear	
Portland, Oregon	30.33	770.4	30.41	772.4	49	9.4	89	S	4	1.8	.....	.....	10n	.....	Calm	Inap.	Inap.	Light rain	
Portsmouth, N. Carolina	.....	.....	.....	.....	40	4.4	73	NE	18	8.0	.....	0	0	.....	.....	0	0	Clear.	
Prescott, Arizona	25.01	635.2	30.37	771.4	26	— 3.3	52	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	30.15	765.8	30.17	766.3	59	15.0	76	N	12	5.4	.....	5c	0	W	.....	0	0	Fair	
Red Bluff, California	29.96	761.0	30.32	770.1	48.0	8.9	70	NE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Rio Grande City, Texas	30.11	764.8	30.34	770.6	48	8.9	93	Calm	0	0	.....	2c	5s	W	Calm	0	0	Fair	
Rochester, New York	29.44	747.8	30.10	764.5	24	— 4.4	74	SW	3	1.3	.....	1c	1s	SW	Calm	0.02	0.5	Clear	
Roseburg, Oregon	29.91	759.7	30.51	774.9	38.5	3.6	95	Calm	0	0	.....	0	Fg	.....	Calm	0	0	Clear.	
Sacramento, California	30.23	767.8	30.31	769.9	51	10.6	86	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
St. Louis, Missouri	29.47	748.5	30.06	763.5	38	3.3	67	S	1	0.4	.....	5ck	0	W	.....	0	0	Fair	
St. Paul, Minnesota	29.01	736.8	29.88	758.9	24	— 4.4	74	NW	8	3.6	.....	1cs	2s	NW	NW	0	0	Fair	
Salt Lake City, Utah	26.02	660.9	30.35	770.9	35	1.7	45	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
San Antonio, Texas	29.61	752.1	30.34	770.6	41	5.0	74	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
San Diego, California	30.06	763.5	30.13	765.3	58	14.4	27	Calm	0	0	.....	2c	0	Calm	.....	0	0	Clear	
Sandusky, Ohio	29.31	744.5	30.01	762.2	33	0.6	79	S	20	8.9	.....	0	5s	.....	S	0	0	Fair	
Sandy Hook, New Jersey	30.19	766.8	30.23	767.8	31	— 0.6	69	NW	13	5.8	.....	0	0	.....	.....	0.18	4.6	Clear.	
San Francisco, California	30.22	767.6	30.29	769.4	53	11.7	83	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Santa Fé, New Mexico	23.48	596.4	30.02	762.5	26	— 3.3	65	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Savannah, Georgia	30.14	765.5	30.23	767.8	46	7.8	69	NW	7	3.1	.....	0	Hz	.....	.....	0	0	Clear.	
Shreveport, Louisiana	30.05	763.3	30.31	769.9	37	2.8	90	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Silver City, New Mexico	24.48	621.8	30.89	784.6	33	0.6	42	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Smithville, North Carolina	30.23	767.8	30.27	768.8	42	5.6	91	NE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Socorro, New Mexico	25.70	652 8	29.76	755.9	29	— 1.7	56	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.32	744.7	30.01	762.2	36	2.2	71	SW	6	2.7	.....	2cs	1s	W	W	0	0	Fair	
Springfield, Massachusetts	30.04	763.0	30.18	766.6	28	— 2.2	66	SW	3	1.3	.....	0	0	.....	.....	0.10	2.5	Clear	
Stockton, Texas	27.19	690.6	30.19	766.8	40	4.4	39	W	6	2.7	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.33	745.0	30.24	768.1	— 7	—21.7	100	NW	18	8.0	.....	0	5s	.....	Calm	0	0	Fair	
Thatcher's Island, Mass	30.05	763.3	30 10	764.5	25	— 3.9	75	NW	16	7.2	.....	0	0	.....	.....	0.38	9.7	Clear	
Toledo, Ohio	29.29	744.0	30.00	762.0	34	1.1	75	S	12	5.4	.....	0	1s	.....	Calm	0	0	Clear	
Tucson, Arizona	27.69	703.3	30.24	768.1	42	5.6	34	SW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	30.01	762.2	30.52	775.2	42.5	5.8	79	NW	16	7.2	.....	.....	10s	.....	W	0	0	Cloudy	
Uvalde, Texas	29.32	744.7	30.20	767.1	36	2.2	71	E	1	0.4	.....	2c	0	Calm	.....	0	0	Clear	
Vicksburg, Mississippi	30.05	763.3	30.33	770.4	39	3.9	73	SE	5	2.2	.....	0	Fg	.....	Calm	0	0	Clear	
Visalia, California	29.90	759.4	30.28	769.1	45	7.2	84	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C	30.17	766.3	30.29	769.4	28	— 2.2	100	Calm	0	0	.....	0	Fg	.....	Calm	Inap.	Inap.	Dense fog	
Wickenburg, Arizona	.....	.....	.....	.....	42	5.6	42	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	30.21	767.3	30.26	768.6	40	4.4	82	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Winnemucca, Nevada	29.97	659.6	30.33	770.4	35	1.7	70	NE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass	30.10	764.5	30.14	765.5	29	— 1.7	78	NW	20	8.9	.....	0	Hz	.....	.....	0.78	19.8	Clear.	
Yankton, Dakota	28.84	732.5	30.22	767.6	26	— 3.3	88	N	11	4.9	.....	.....	10s	.....	N	0	0	Cloudy	
Yuma, Arizona	30.00	762.0	30.15	765.8	65	18.3	26	N	6	2.7	.....	1c	0	Calm	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.09	561.1	.....	.....	52.0	11.1	73	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	Thomas Herman.
Buff Bay Town, Jam ica.‡	29.89	759.2	30.20	767.1	67	19.4	84	E	.....	.....	.....	2c	2k	.....	.....	.....	.....	.....	
Havana, Cuba, W. I	30.09	764.3	30.14	765.5	74	23.3	67	NE	2.4	1.1	.....	2k	0	NE	.....	0	0	Fair	Charles Hasselbrink.
Jakobshavn, Greenland	30.11	764.7	30.17	766.2	— 0.4	—18	.....	S	.....	.....	4	.....	6	.....	.....	0.016	0.4	.....	K. V. Möller.
Kingston, Jamaica, W. I	30.07	763.8	30.08	764.0	71.5	21.9	75	N	2	0.9	.....	0	5s	.....	E	0.16	4.1	Cloudy	Robert Johnstone
Navassa, W. I	29.95	761.0	30.04	763.0	77	25.0	73	NE	12.5	5.6	.....	2k	5s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A	30.01	762.2	30.01	762.2	77	25.0	91	E	.....	.....	2	.....	10n	E	.....	0,600	15.24	Raining	Dr. C. J. Hering.
Puerto Berrio, U. S. Colmbia	29.44	747.8	30.00	762.0	80	26.7	75	Calm	.....	.....	0	.....	.....	.....	.....	0	0	Fair	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Earl Flint.
Santiago de Cuba, W. I	.....	.....	.....	.....	71.6	22	.....	SE	.....	.....	4	0	5ks	.....	SE	0	0	.....	
St. Thomas, W. I	30.08	764.0	30.11	764.8	78	25.6	72	N	3.6	1.6	.....	8ck	1s	N	.....	0	0	Cloudy	Robert Mason.
Upernavik, Greenland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gellich.
York Factory, B. A	29.89	759.3	29.96	760.9	— 7.6	—22	.....	SE	.....	.....	6	.....	0	.....	.....	0	0	....	K. Elberg.
	29.93	760.2	29.98	761.5	—31.0	—35.0	.....	NE	27	12.1	.....	.....	10n	.....	N	0.04	1.0	Snowing	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.09	764.3	59	15.0	82	ESE			6		10							Squally	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 30° 32′, E. 47° 51′	30.00	762.0	58	14.4	82	NW			1–2		3	NW						D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			34	1.1		NE			2–4		10					2	N	Snowing	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.78	756.4	80	26.7	82	E			5–6		0					4	E	Blue sky	Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 33° 48′, E 131° 32′	30.24	768.1	49	9.4	78	ESE			1	clr	3	N						D. clouds	Capt. J. W. East.
H. M. S. Condor, N. 36° 22′, E. 22° 23′	30.21	767.3	50	10.0	86	E			4		3							Squally	Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, Syracuse, Sicily	30.12	765.0	60	15.6		SE			5		6	SE						Squally	Capt. F. A. Wetherall.
H. M. S. Curacoa, Shanghai, China	29.94	760.5	57	13.9	87	SE			3–4		2							D. clouds	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.05	763.5	61.5	16.4	91	NW			2–3		8	N						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 34′, E. 81° 14′	29.90	759.4	83	28.3		NE			1		7	N				1	NNE	D. clouds	Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St. J. Garforth.
H. M. S. Egeria, N. 1° 28′, E. 104° 36′	29.82	757.4	82	27.8		N			3		1	N				3	NE	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.91	759.7	79	26.1	78	WNW			1		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 16° 25′, W. 62° 33′	30.13	765.3	78	25.6		ENE			3–4		7	ESE				4	E	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Panama, Panama	29.94	760.5	73	22.8	95	NW			3		1							Blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 50′, W. 58° 56′	30.20	767.1				WSW			2									D. clouds	Capt. L. F. Jones.
H. M. S. Griffon																			Capt. J. Inglis.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 6° 46′, E. 107° 02′	29.98	761.5	78	25.6	95	ESE			1		0					Sm'h		Blue sky	Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Zanzibar, Africa	29.94	760.5	79	26.1	86	SW			3		6	SW		Blank		2	SW	D. clouds	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 29° 57′ E. 122° 24′	29.97	761.2	59.5	15.3	94	S			3–5		10					1	S	Misty	Capt. R. H. Napier.
H. M. S. Malabar																			Capt. J. F. G. Grant.
H. M. S. Minatour, Vigo, Spain	29.86	758.4	55.5	13.1	84	NE			2		5	S						D. clouds	Capt. H. Rawson.
H. M. S. Modeste, N. 1° 17′, E. 103° 51′	29.98	761.5	83	28.3	83	ENE			3		2					3	NE	Squally	Capt. J. G. Mead.
H. M. S. Monarch. Alexandretta, Turkey, Asia	29.89	759.2	60	15.6	65	Var.			1–3		4	SE				Sm'h		D. clouds	Capt. G. Tyron. C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Pt. Royal, Jamaica, W.I.	30.01	762.2	71	21.7	85	NNW			1		5	E						D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes, N. 40° 52′, W. 13° 16′	29.92	760.0	56.5	13.6	84	N			2		9					1	WNW	D. clouds	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, Elmina, Gold Coast, Africa.	29.85	758.2	81	27.2	96	SW			2		2					2	S	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.99	761.7	79	26.1	95	SSE			4		9			Blank				D. clouds	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Spain	29.87	758.7	60	15.6	76	E			1		2							D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.57	751.1	80	26.7	91	E			1–2	10				Blank		1	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	29.95	760.7	70.5	21.4	95	SSE			1		9	SE				1	SSW	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 12° 30′, W. 61° 28	30.09	764.3	78	25.6	73	ENE			3–4		8					1	N	Squally	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo Bay, Chili, S.A.	29.97	761.2	63	17.2	83	Calm			0		1							Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 13° 10′, E. 52° 25′	29.94	760.5	83	28.3		SSE			2		1					1	E	Blue sky	Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark																			Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, N. 15° 40′, W. 22° 20′	30.03	762.8	74.3	23.5	86	NE			6		3							D. clouds	S. C. da Silva Costa, Comd't.
Sado. St. Paul de Loando, Africa	29.88	759.0	86.4	30.2	71	WNW			2		2					1		Blue sky	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

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

UNITED STATES NAVAL SERIES.

By authority of the Secretary of the Navy.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

N. Yard, Pensacola, Fla.	30.34	770.6	52	11.1	73	NW	3	1.3			0			0	0			Clear.	
N. Yard, Portsmouth, N. H.	30.07	763.8	25	— 3.9	?	W	12	5.4			0			0	0			Clear.	
Naval Hospital, Yokohama, Japan	30.16	766.1	33.5	0.8	76	Calm			0		10		W	0	0			Cloudy.	
Adams, Panama, Panama	29.96	761.0	75	23.9	86	N			2		2		NNW			Sm'h		Fair.	
Alaska, N. Yard, Mare I'd, Cal.	30.25	768.3	50	10.0	93	Calm			0		0			0	0			Clear	
Alert, Hong-Kong, China. *	29.97	761.2	71	21.7	90	SE			2		10		Calm	0	0			Cloudy.	
Alliance, New Orleans, La.			49	9.4	78	Calm			0		2			0	0	Sm'h		Clear.	
Ashuelot, Tientsin, China	29.89	759.2	33	0.6	100	N			1		10							Rainy.	
Colorado, New York, N. Y.	30.13	765.3	31	— 0.6	79	NW	7	3.1			0			Sno	w			Clear.	
Constitution, N. Yard, League I'd., Pa	30.20	767.1	30	— 1.1		W	2	0.9			0							Clear.	
Franklin, Norfolk, Va.	30.13	765.3	36	2.2	90	NNW	1.2	0.5			2			0	0			Fair.	
Galena, Off Milo I'd, Grecian Arch.	30.22	767.6	48	8.9	70	NNE			6		2		NNE			R'gh	NE	Fair.	
Independence, N. Yard, Mare I'd, Cal.	30.37	771.4	49	9.4	100	SW	9.6	4.3			1		SE	0	0			Clear.	
Jamestown, Sitka, Alaska. *	29.55	750.6	36	2.2	80	E			6		10			0.05	1.3			Snowing	
Kearsarge, New Orleans, La.	30.28	769 1	51	10.6	79	Calm			0		0					Sm'h		Clear.	
Marion, Sandy P't, Terra del Fuego	30.01	762.2	48	8.9	85	SSW			3		5		Calm	0	0	Sm'h		Fair.	
Michigan, Erie, Pennsylvania	29.93	760.2	29	— 1.7		S	3	1.3			10							Cloudy.	
Minnesota, New York, N. Y.	30.22	767.6	33	0.6		W			2		0							Hazy.	
Monocacy, Shanghai, China	29.90	759.4	60	15.6	88	S			2		0							Clear.	
New Hampshire, Port Royal, S. C.	30.20	767.1	49	9.4	93	N	5	2.2			0			0	0			Foggy	
Nipsic, Valencia, Spain	29.95	760.7	59	15.0	88	E			3		10					Sm'h		Drizzling.	
Onward, Callao, Peru. †	29.91	759.7	71	21.7	95	SE			1		10					Long	N;W	Cloudy.	
Palos, Shanghai, China	29.95	760.7	60	15.6	88	SSE			2		0							Clear	
Passaic, Washington, D. C.	30.33	770.4	32	0.0	90	SW			1		0							Clear.	
Pensacola, Panama, Panama	29.97	761.2	80	26.7	66	NNW			1		2			0	0	Sm'h		Clear.	
Powhatan, New York, N. Y.	30.22	767.6	30	— 1.1	78	NW			2		0							Clear	
Quinnebaug, Villafranca, France	30.21	767.3	58	14.4	94	ESE			3		5		E			Sm'h		Fair.	
Richmond, Hong-Kong, China	30.03	762.7	71	21.7	95	ENE			2		8		ENE	0	0			Misty.	
Saratoga, Potomac River	30.23	767.8	34	1.1	79	Calm			0		0							Clear.	
Shenandoah, Montevideo, Uruguay *	30.17	766.3	71	21.7	85	ESE			2		0					Sm'h		Clear.	
St. Louis, League Island, Pa.	30.29	769.4	30	— 1.1	100	WNW	2	0.9			0			0	0			Clear.	
Swatara, Nagasaki, Japan. †	30.15	765.8	58	14.4	70	ENE			1		8		Calm			Sm'h		D. clouds.	
Tennessee, New Orleans, La. *	30.32	770.1	49	9.4	85	N	2	0.9			2			0	0	Sm'h		Clear.	
Ticonderoga, N. Yard, Mare Id., Cal.	30.32	770.1	50	10.0	100	Calm			0		0			0	0			Clear.	
Trenton, Villafranca, France. *	30.18	766.6	64	17.8	50	SE			2		0			1 h'r	light	Sm'h		Clear.	
Vandalia, N. 17° 50′, W. 62° 55′	30.14	765.5	77	25.0	91	ENE			3		5		ENE			Long	ENE	Fair.	
Wabash, Boston, Massachusetts	30.16	766.1	24	— 4.4	74	W	4	1.8			0			0	0			Clear.	
Wachusetts, Panama, Panama. *	29.58	751.3	74	23.3	90	NW			2		2		N			Sm'h		Fair.	
Wyoming, Villafranca, France.	30.20	767.1	57	13.9	81	ESE			3		2		ESE			Sm'h	S	Clear.	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British-Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡ N. 7° 10′, W. 31° 35′	29.96	761.0	81.8	27.7	77	NNE			6		10							Misty	Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 16° 27′, W. 63° 40′	30.12	765.0	78.5	25.8	82	ENE			4		3							D. clouds	Capt. A. J. Brown.
British Merchant. ‡																			Capt. E. J. Molony.
Chin Yang ‡																			Capt. H. Youlden.
S. S. Cipero, N. 33° 00′, W. 44° 20′	30.43	772.9	67	19.4		SSE			3		5					1	WSW	D. clouds	Capt W. N. Lailey.
City of Agra, ‡ S. 1° 12′, W. 32° 12′	29.94	760.5	77.1	25.1	97	ESE			3		9							Drizzling	Capt. T. Young.
Barque Commewyne, ‡ N. 47° 00′, W. 30° 02′	29.90	759.4	49	9.4	72	NNW			7		10			Blank				Overcast	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡ S. 0° 01′, W. 23° 30′	29.93	760.2	85	29.4	72	SE			3		10							Overcast	Capt. H. Spalding.
Ship Ellen Stuart, S. 2° 33′, E. 88° 11′	29.91	759.7	85.5	29.7	72	NW			3		4							D. clouds	Capt. J. E. C. Patterson.
Barque Elisa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope, S. 15° 17′, W. 34° 24′	29.98	761.5	80.5	26.9	96	ENE			4	60		SW						D. clouds	Capt. Jas. Campbell.
Ship Iron Cross, N. 43° 30′, W. 15° 00′	29.97	761.2	55	12.8		E			5		5							D. clouds	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 31° 20′, W. 72° 50′	30.21	767.3	60.9	16.1	78	N			4		10					4	N	Overcast	Capt. H. W. Dyke.
Barque Meriola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee, ‡ S. 5° 06′, W. 30° 50′	29.93	760.2	80.5	26.9	91	ESE			4		4					Sl't	SE;N	D. clouds	Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 40° 06′, W. 11° 51′	29.92	760.0	58.0	14.4	79	NNW			3		8							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton, N. 4° 50′, E. 62° 36′	29.94	760.5	82.5	28.1	77	E			2		2							Blue sky	Capt. R. J. Blacklin.
S. S. Yorkshire, N. 31° 00′, W. 47° 05′	30.37	771.4	66	18.9	64	SSW			4		3					2	NNE	D. clouds	
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia, N. 50° 28′, W. 23° 16′ †	29.83	757.7	55	12.8	93	SSE			5		10		S	0	0	H'vy	NW	Cloudy	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 42° 42′, W. 53° 49′ †	29.39	746 5	42	5.6		WSW			7		8		W			Very h'vy	WNW	Misty	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britanic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, N. 42° 08′, W. 54° 08′ †	29.54	750.3	56	13.3		SSW			6		8		SW	2 hours		H'vy	Cross	Clear	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. L. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Köln, ‡ N. 39° 09′, W 69° 57′	30.10	764.5	39 2	4.0		NNW			4		10		NNW	24h'rs		Cross	NW	Cloudy	
S. S. Leipzig														Moderate					Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg, N. 48° 39′, W. 24° 18′	29.92	760.0	50.9	10.5		Calm			0		8		SW	5 hours		Mod. Long	WNW; NW	Fair	
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			Capt. Albert Fredholm.
Ship Peru ‡																			Capt. O. F. Skötdel rand.

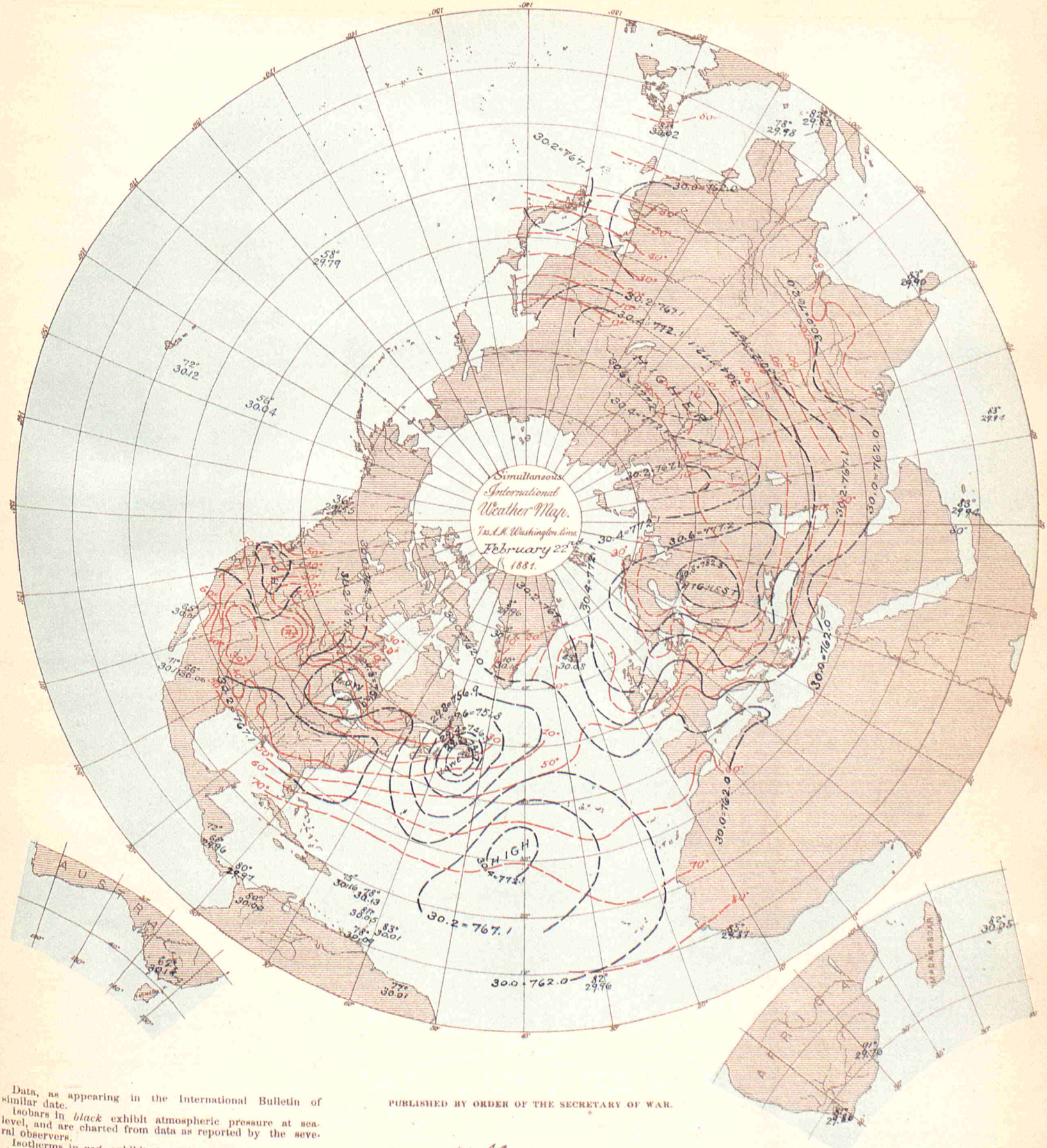
UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mil.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	30.22	767.6	39	3.9	91	NNW			3		10		NNW					Hazy	Capt. J. W. Shackford.
S. S. Indiana, ‡ Philadelphia, Pa. §†	30.11	764.8	46	7.8	77	W			3		2		W	0	0	Sm'h		Clear	Capt. R. W. Sargent.
S. S. Ohio, ‡ Liverpool, England *†	30.38	771.6	39	3.9	91	E			2		10		E	0	0			Cloudy	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, N. 47° 55′, W. 39° 50′ †‡	30.45	773.4	40	4.4	56	NNE			2		8		NNE	0	0	Mod.	N	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 27° 03′, W. 114° 37′ †‡	30.01	762.2	65	18.3	54	Calm			0		5		N	0	0	G'tl	WNW	Fair	Capt W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 38° 39′, W. 153° 15′ †‡	30.04	763.0	56	13.3	94	SSE			4		10		S	Drizzles		Mod.	WSW	Overcast	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China †*	30.10	764.5	68	20.0	70	E			3		10		E					Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 32° 14′, E. 178° 03′	29.79	756.7	58	14.4	70	SSW			2		10		W	0.01	0.3	Con.	SSW to W		Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles
S. S. Oregon																			Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, Santa Barbara, Cal.	30.12	765.0	52	11.1	54	Calm			0		0							Clear	Capt. J. N. Ingalls.
S. S. Idaho, N. 46° 21′, W. 125° 10′ †‡	30.32	770.1	52	11.1	93	SW			3		10		SW			Mod.	SW	Raining	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, San Francisco, Cal. †‡	30.34	770.6	51	10.6	93	NNE			1		0							Clear	Thos. Wallace.
S. S. State of California, N. 46° 12′, W. 124° 10′ †‡	30.38	771.6	48	8.9	92	SE			4		10		S	Rain		Long	W	Misty	Capt. G. Debney.
S. S. Victoria																			J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 35° 51′, W. 126° 23′	30.37	771.4	53	11.7	?	N			4		10		N			Mod.	N	Foggy	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W. †‡	30.09	764.3	76	24.4	82	E			2		0		SE	0	0			Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 23° —, W. 107° 20′ †‡	30.11	764.8	71	21.7	90	W			1		10		E	0	0	Sm'll	W	Overcast	Capt. D. S. Austin.
S. S. City of Peking, N. 31° 07′, E. 132° 38′ †‡	30.13	765.3	65	18.3		E			1		5		E	0	0	Sm'h		Fair	Capt. G. G. Berry.
S. S. City of Sidney, N. 23° 48′, W. 153° 12′ †‡	30.12	765.0	72	22.2	76	ESE			2	8c		ESE				Long	WNW	Sprinkling	Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ Panama, Panama †‡	29.96	761.0	74	23.3	81	NNW			1		2		N	0	0			Clear	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada																			
S. S. Zealandia, Sydney, N. S. W.	29.90	759.4	74	23.3	76	NE			2		5?		NE					Cloudy	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland ‡																			Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland, ‡ N. 44° 00′, W. 54° 44′	29.08	738.6	46	7.8		SSE			6		10		SSW	0.2	5.	Cross	ESE	Rain & fog	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 49° 24′, W. 19° 54′	30.10	764.5				SE			4		5		SE	0	0	Long	ESE	Fair	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Jacksonville, Florida †‡	30.14	765.5	65	18.3		Calm			0		0			0	0			Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, Norfolk, Va	30.25	768.3	37	2.8	81	Calm	0	0			2k			0	0			Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, Martinique, W. I. †‡	30.05	763.3	81	27.2		ENE			5		5?		ENE	0	0			Clear?	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 40° 07′, W. 11° 40′ †*	30.05	763.3	61	16.1		NNE			4		2		NNE			Long	NW	Fair	Capt B. F. Woodbury.
Brigantine George ‡																			Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	30.26	768.6	32	0.0	90	Calm	0	0		0	2s			0	0			Clear	
Ship Jumna																			Capt. James S. Gawin
Bark Sunbeam, ‡ N. 23° 37′, W. 54° 08′ †‡	30.22	767.6	76	24.4	?	E			6		5		E	Light		Mod.	E	Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 23, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather	Observers.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.87	758.8	62.6	17.0	78	SW			2		5			0	0	Cloudy	Dr. Ollive.
Nemours			29.76	756.0	60.8	16.0	96	NE			4		1			0	0	Very fair	Raynard.
Algiers			29.88	758.9	61.9	16.6	62	ESE			1		5			0	0	Cloudy	Nicolas.
La Calle			29.95	760.8	65.5	18.6	62	S			4		4			0	0	Cloudy	Fonfréde.
Tunis			29.98	761.6															Jacques.
Sfax			30.03	762.7															Gau.
Saida			29.88	758.9	62.6	17.0	31	S			3		5			0	0	Cloudy	Dumas.
Tebessa			30.04	763.0	58.3	14.6	39	SSE			1		7			0	0	Very cloudy	Watrin.
Geriville																			Lonchamp.
Laghouat			30.01	762.3	58.3	14.6	46	E			2		0			0	0	Clear	Herbin.
Biskra																			Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.98	761.5	30.07	763.8	60.0	15.6	75	SSE	4	1.8			4			0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania																			Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.95	760.7	30.54	775.7	31.8	—0.1	84	NE			2		3			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.71	754.6	30.53	775.4	29.8	—1.2	88	NE	0.7	0.3			0			0	0		Dr. Wiersbicki.
Eperies	29.58	751.3	30.50	774.7	38.3	3.5	42	SE			2		0			0	0		Julius Mikolik.
Gratz‡	29.19	741.3	30.50	774.8	35.2	1.8	59	SW			2		0			0	0		Andreas Rospini.
Hermannstadt	29.02	737.1	30.56	776.3	27.5	—2.5	81	NE			2		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.84	732.6	30.25	768.3	34.9	1.6	71	ENE			1		2			0	0		The Staff.
Lemberg	29.51	749.6	30.57	776.4	32.5	0.3	50	SE			1		1			0	0		Dr. T. Stanecki.
Pola	30.20	767.1	30.32	770.0	47.7	8.7	61	WNW			1		0			0	0		I. R. Hydrographic Office.
Szathmar	30.08	764.1	30.54	775.8	35.6	2.0	66	SW			2		1			0	0	Dense fog	Beicht Peter, S. J.
Szegedin	30.28	769.2	30.59	776.9	30.0	—1.1	76	S			1		2			0	0		Karl Stancel.
Trieste	30.24	768.0	30.34	770.6	45.0	7.2	39	ENE			2		0			0	0	Clear	P. Busin.
Vienna	29.71	754.7	30.47	774.0	34.5	1.4	53	SE			5		0			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.93	760.8	30.16	756.1	41.2	5.1	97	E			1		10		E	0.016	0.4	Heavy fog	Royal Observatory.
Furnes	30.13	765.2	30.15	765.8	41.5	5.3	91	ENE			2		10			0	0		M. E. de Cae.
Maeseyck	30.05	763.2	30.17	766.4	50.9	10.5	76	E			2		10			0	0	Foggy	M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 24, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.13	765.3	30.24	768.1	33.4	0.8	86	NW	13	5.8			10			0.075	1.91	Snowing	W. Boswell.
Armagh, Observatory	30.10	764.5	30.34	770.6	38.3	3.5	70	NNW	5	2.2			10					Overcast	S. Call.
Bidston, Liverpool Obs'y			30.27	768.8	36.6	2.6	71	NNW	9	4.0			3					Blue sky	John Hartnup.
Bolton, Sharples	29.64	752.8	30.19	766.8	37.5	3.1	68	NNW	7	3.1			0					Blue sky	Thomas Mackereth.
Bradford, Yorkshire	29.83	757.7	30.22	767.6	36.0	2.2	78	NE			1		7			0	0	D. clouds	J McLandsborough, F.R.S
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	80	26.7	70				3		4					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			30.19	765.8	36.0	2.2	90	NE			0.4		10					Snowing	John McLaren.
Chatham, School M. E.	30.09	764.3	30.23	767.8	35.7	2.1	91	NE			1		10					Raining	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.96	761.0	30.20	767.1	37.4	3.0	69	NE			3		7					Foggy	The Staff.
Fort Napier, Natal	27.50	698.5	29.71	754.6	92.2	33.4	82	NW			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.88	758.9	86	30.0	88	SW			1		2					D. clouds	C. E. Keane.
Galway, Queen's College			30.28	769.1				NNE			3		10					Overcast	J. O'Donaghadue.
Gibraltar, Mediterranean	29.82	757.4	29.87	758.7	60.6	15.9	92	E			3		7					D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.05	763.3	30.25	768.3	38.3	3.5	53	NW			2		10k					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	30.05	763.3	30.23	767.8	34.2	1.2	92	NNE			1		10					Snowing	The Staff.
Guernsey	29.87	758.7	30.09	764.3	41.5	5.3	87	NNE			4		10					Raining	Dr. S. E. Hoskins, F.R.S.
Kew, Observatory	30.19	765.8	30.22	767.8	35.0	1.7	78	N	9	4.0			10					Snowing	The Met'g'l Office.
Leicester, Museum	30.00	762.0	30.27	768.8	34.2	1.2	94	NE			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.98	761.5	30.05	763.3	57.2	14.0	74	SE			5		7					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	30.06	763.5	30.10	764.5	72.0	22.2	69	NW			3		10			Blank		Overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.70	754.4	30.25	768.3	36.0	2.2	64	NNE			1		7					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	29.99	761.7	30.25	768.3	34.8	1.6	79	NNE			1		10					Snowing	The Staff.
Plymouth	30.11	764.8	30.18	766.6	35.8	2.1	80	NE			2		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.28	769.1	36.2	2.3	94	E	5	2.2			3					D. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.24	768.1	30.31	769.9	38.2	3.4	83	NE			2		10					Raining	Serg't W. H. Lyne.
Sheffield	29.97	761.2	30.26	768.6	37.8	3.2	74	NE			1		6			0	0	D. clouds	W. F. Cooper.
Silloth Rectory	30.24	768.1	30.27	768.8	40.5	4.7	67	W			2		3			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.25	768.3	37.7	3.2	60	ENE	6	2.7			7					D. clouds	Rev. S. J. Perry.
Strathfield Turgiss	29.99	761.7	30.22	767.6	32.7	0.4	94	NE			1		10					Rain & snow	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	30.12	765.0	30.19	765.8	44	6.7	68	NE			6		5					D. clouds	W. Newcombe.
Valencia, Observatory	30.30	769.5	30.33	770.4	39.2	4.0	65	NE	19	8.5			10					Misty	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.88	758.9	29.93	760.2	13	—10.6	100	S	3	1.3		5cs?	10s?			0.125	3.18	Fair?	H. J. Cundall, C. E.
Chatham, N. B.*	29.78	756.4	29.85	758.2	3	—16.1	92	Calm	0	0			10s		Calm	0	0	Cloudy	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	29.57	751.1	29.59	751.6	29	— 1.7	75	S	10	4.5			10n			0	0	Threatening	J. McWilliams.
Fort Garry, Manitoba*	29.52	749.8	30.51	774.9	—26	—32.2	100	NW	3	1.3		0	0			0	0	Clear	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.87	758.7	30.01	762.2	20	— 6.7	98	W	2	0.9		8cs	Hz	SW	SW			Fair	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.42	747.3	29.77	756.1	20	— 6.7	85	NW	19	8.5			10s			0.06	1.5	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	29.34	745.2	29.54	750.3	31	— 0.6	98	W	15	6.7			10n			0.11	2.8	Light snow	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.30	744.2	30.08	764.0	— 3	—19.4	66	N	13	5.8		0	0			0.06	1.5	Clear	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.31	744.5	30.07	763.8	11	—11.7	82	W	16	7.2			10n			0.05	1.3	Cloudy	H. Morgan.
Port Stanley, Ontario	29.39	746.5	30.10	764.5	12	—11.1	84	W	16	7.2			5n		W	0.03	0.8	Cloudy	M. Payne.
Quebec, Quebec*	29.24	742.7	29.57	751.1	28	— 2.2	100	NE			1		10n		NE	0.06	1.5	Heavy snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.48	748.8	29.99	751.7	— 2	—18.9	100	NW	10	4.5		0	5s		NW	Inap.	Inap.	Fair	K. Stewart.
Saugeen, Ontario*	29.33	745.0	30.13	765.3	3	—16.1	87	NW	23	10.3		2cs	0			0	0	Clear	W. H. McIntyre.
St. Andrews	29.75	755.6	29.81	757.2	32	0.0	87	SW	7	3.1			10n			0	0	Cloudy	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.93	760.2	29.98	761.5	17	— 8.3	88	SW	6	2.7		0	0			0.15	3.8	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.61	752.1	30.04	763.0	8	—13.3	80	NW	29	13.0		0	5ks		NW	0.05	1.3	Fair	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.88	758.9	29.95	760.7	32	0.0	86	S	6	2.7		5ck	0	W		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.50	749.3	29.76	755.9	32	0.0	90	W	2	0.9		0	0			Blank		Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape St. Francis Lt. House	29.87	758.7			71.5	21.9	76	W	22.9	10.2			38			0	0	Fine	John Duthie.
Cape Town, C. G. H. Obs'y	29.96	761.0	30.00	762.0	80.0	26.7	50	S	3.8	1.7		2	6k			0	0		The Staff, for D. Gill.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.85	758.3	29.88	758.9	58.6	14.8	87	N	6.5	2.9			10k					Sprinkling	M. Marc Dechevrens, S. J.

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

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.27	667.2	29.99	761.7	62.6	17.0	88	SE			1	1d				0	0	Misty	Federico Maison.

DANISH SERIES.

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

Copenhagen	30.34	770.5	30.38	771.7	31.1	—0.5	86	ESE	13	6			1						Oversergent Fischer.
Fanöe	30.23	767.9	30.25	768.4	33.1	0.6	83	ESE			4		9						Overloerer Lauridsen.
Godthaab, Greenland	30.09	764.3	30.13	765.4	19.0	—7.2	72	ENE			4		4						S. Kleinschmidt.
Stykkisholm, Iceland	30.08	764.0	30.12	765.1	33.4	0.8	98	Calm			0		10					Snowing	A. O. Thorlacius.
Thorshavn	30.27	768.9	30.31	769.8	40.8	4.9	73	ENE	11	5			3						Overloerer Bergh.
Vestervig	30.17	766.3	30.26	768.7	31.1	—0.5		E			4		10						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.35	745.6	30.00	762.0	57.9	14.4	57	SSE			2		k	NW	NW	0	0		M. Labroue, Director.
Alençon	29.60	751.8	30.15	765.8	46.8	8.2	91	SW			1		2kn		SW	0.102	2.6	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.89	759.1	30.15	765.9	41.4	5.2	94	ENE			1		10					Covered	M. Klein, Commandant.
Avignon, Normal School	30.08	764.1	30.16	766.1	60.4	15.8	35	SE			2		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.58	751.2	30.13	765.2	57.7	14.3	71	SSE			1		5k			0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.89	759.2	30.17	766.2	43.7	6.5	90	E			1		10			0.128	3.25	Misty	M. Frère Eugene Marie.
Besançon, Normal School	29.28	743.8	30.19	766.9	51.1	10.6	70	ESE			1		0			0	0		M. Gobin, Director.
Bordeaux, Observatory	29.72	754.8	29.98	761.4	59.5	15.3	56	SSE			3				SSW	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.51	749.5	30.06	763.6	53.6	12	87	ENE			2				ENE	0	0		M. Postel, Director.
Brest, Naval Observatory	29.84	757.9	30.08	764.1	42.8	6.0	94	NE			2		10		NE	0.020	0.50		M. de Rermaree, Dir.
Caen, Normal School	29.97	761.1	30.04	763.1	46.6	8.1	100	N					10			0.16	4.	Covered	M. Bietrix, Director.
Châlons-sur-Marne, N.Sch'l	29.84	758.0	30.16	766.1	58.1	14.5	71	SSE			1		0			0	0	Clear	M. Jadot, Director.
Charleville, Normal School	29.63	752.6	30.15	765.9	54.3	12.4	69	SSE			1		0			0	0	Clear	M. Grimard.
Clermont-Ferrand Obs'y	28.71	729.2	30.06	763.4	58.5	14.7	30	S			1		0			0	0	Clear	M. Alluard, Director.
Cluny, Normal School	29.30	744.3	30.15	765.9	55.4	13.0	54	SE			3		0			0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.30	744.2	30.19	766.7	49.3	9.6	74	SE			1					0	0		Dr. Coulet, Director.
Gap, Normal School	27.60	701.1	30.17	766.3	48.2	9	36	NE			1		2		NE	0	0	¼ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	29.07	738.4	30.21	767.4	57.0	13.9	50	E			3		2		SE	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.38	746.2	30.15	765.8	55.2	12.9	50	SSE			1		0			0	0	Clear	M. Ablard, Director.
Guéret, Normal School	28.53	724.6	30.13	765.2	55.4	13	52	SW			1		0			0	0	Clear	M. Rivoir, Director.
Lamballe, Normal School	29.82	757.4	30.10	764.5	43.0	6.1	99	NNE			1		10		NNE	0.20	5.	Raining	M. Ollitrault, Director.
Lescar, Normal School	29.38	746.2	30.04	762.9	61.9	16.6	63	N			1		2		SE	0	0	Slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	29.97	761.2	30.07	763.8	46.4	8.0	97	NE			1		10	SE	NE	0.630	16.0	Raining	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.08	738.7	30.11	764.7	55.4	13.0	43	S			3		1		S	0	0	Clear	M. André, Director.
Mans, Normal School	29.80	756.9	30.11	764.9	50.9	10.5	84	S			1		0			0.205	5.2	Clear	M. Piboen, Director.
Marseille, Observatory	29.86	758.5	30.13	765.4	59.0	15.0	40	E			3		2		ESE	0	0		M. Stephan, Director.
Montlouis l'Instituteur																			M. Cave, for Dr. Fines.
Montpellier, Normal School	30.05	763.2	30.16	766.0	55.4	13	57	SE			3		5		S	0	0	Cloudy	M. Galzin, Director.
Nancy, Normal School	29.39	746.5	30.17	766.2	49.6	9.8	69	W			1		0			0	0	Clear	M. Hasse.
Nantes, Observatory	29.91	759.8	30.08	763.9	57.9	14.4	75	SE			2		6kn		SW	0.598	15.2		M. Larocque, Director.
Nice	30.15	765.7	30.18	766.6	57.2	14.0	50	E			6		5	E	E	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	30.01	762.3	30.12	765.0	53.8	12.1	74	SE	15.0	6.7			10		E	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.44	569.9			35.8	2.1							1			0	0	Clear	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.10	739.2	30.17	766.4	55.8	13.2	43	SE			1		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.17	639.2			36.9	2.7	80	S			2		0			0	0	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.02	762.6	30.06	763.4	59.0	15.0	61	SSE			1		2		SE	0.24	6.	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.83	757.6	30.04	763.1	55.4	13	77	ESE			3		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.97	710.4	30.15	765.9	47.1	8.4	72	E			4		4k		S	0	0		M. Richard, Director.
Rouen, Normal School	30.07	763.8	30.16	766.0	44.6	7	85	SE			1		5		SE	0.16	4.	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.95	760.7	30.11	764.7	45.1	7.3	88	ENE			1		Mist		NE	0.098	2.5	Misty	M. Delaplanche, Dir.
Saint Maur, Observatory	29.97	761.2	30.13	765.4	53.8	12.1	72	SW			1		0			0	0	Foggy	M. Renou, Director.
Toulouse, Observatory	29.31	744.4	30.03	762.8	54.3	12.4	69	SSE			6		2			0	0	Slightly cl'dy	M. Bailland, Director.
Tours	29.89	759.3	30.09	764.3	55.0	12.8	64	SE			1		0			0.04	1.	Clear	M. de Tastes.
Versailles, Observatory	29.64	752.9	30.13	765.4	49.6	9.8	86	NE			1		0			0	0	Clear	Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

GERMAN SERIES.

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

Bamberg	29.35	745.6	30.22	767.6	39.2	4.0	55	SE			2		3cs			0	0		Prof. Dr. Hoh.
Berlin	30.13	765.2	30.30	769.7	43.2	6.2	33	S			4		0			0	0		Prof. Dr. Arndt.
Breslau	29.88	759.0	30.42	772.7	39.4	4.1	52	SE			2		1			0	0		Royal University Obs'y.
Carlsruhe	29.76	756.0	30.21	767.3	37.8	3.2	86	E			0		0			0	0		Albert Senz.
Cassel	29.60	751.9	30.17	766.4	46.0	7.8	55	SE			2		0			0	0		Dr. H. Möhl.
Frankfort on the Main	29.90	759.4	30.28	769.1	43.0	6.1	54	E			0		2			0	0		Physical Society.
Friedrichshafen	28.74	730.1	30.24	768.0	38.8	3.8	87	SW			2		10	SW		0	0		Chief Telegrapher Wilhelm.
Hamburg	30.14	765.6	30.25	768.4	40.1	4.5	65	SE			3		3			0	0		Dr. R. Kleeman.
Kiel	30.24	768.0	30.25	768.4	35.6	2.0	70	ESE			2		2			0.018	0.46		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.83	757.7	30.27	768.8	40.6	4.8	50	ESE			2		0			0	0		Prof. Dr. Bruhns.
Magdeburg	30.09	764.2	30.32	770.1	38.5	3.6	62	ESE			3		0			0	0	Light fog	Dr. Assmann.
Memel	30.58	776.6	30.62	777.8	22.3	—5.4	83	E			3	6c							Reinbrecht & Issermann.
Munich	28.35	720.0	30.23	767.7	35.8	2.1	88	N			1		4	N		0	0		Central Station.
Neufahrwasser	30.52	775.2	30.54	775.6	28.0	—2.2	69	S			2		4			0	0		A Lothes.
Neustadt, Palatinate	29.60	751.9	30.13	765.3	41.7	5.4	75						10			0	0	Light fog	Dicknether.
Stuttgart	29.21	742.0	30.14	765.5	40.6	4.8	79	E			1		0			0	0		Prof. Dr. Schoder.
Thorn	30.27	768.8	30.46	773.7	33.1	0.6	57	SE			3		0			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	28.64	727.5	30.17	768.3	45.0	7.2	62	E			2		6			0	0		Prof. Kemlein.
Wustrow	30.30	769.6	30.33	770.3	32.2	0.1	92	E			2		5s			0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.91	759.8	30.32	770.1	43.5	6.4	.....	NE	.....	.....	5.0	.....	10	.....	.....	.....	.....	Covered	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.88	758.9	29.93	760.2	77.3	25.2	69	WSW	26.0	11.6	.....	.....	0	.....	.....	0	0	Blue sky	
Deesa	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Bombay	29.92	759.9	29.96	760.9	81.2	27.3	70	NW	14.0	6.3	.....	.....	0	.....	.....	0	0	Blue sky	
Poona, Yarrowda	28.05	712.6	29.88	759.0	85.8	29.9	16	WSW	23.0	10.3	.....	.....	0	.....	.....	0	0	Blue sky	
Belgaum	27.37	695.3	29.87	758.7	84.9	29.4	30	SW	9.0	4.0	.....	.....	0	.....	.....	0	0	Blue sky	
Lahore	29.15	740.5	29.92	759.9	68.7	20.4	52	NNE	3.3	1.5	.....	.....	0	.....	.....	0	0	Blue sky	
Roorkee	29.03	737.4	29.96	761.0	63.8	17.7	89	Calm	1.1	0.5	.....	.....	3	.....	.....	0.03	0.8	D. clouds	
Agra	29.31	744.4	29.87	758.7	83.3	28.5	32	SE	2.3	1.0	.....	.....	9	.....	.....	0.11	2.8	Misty	
Nagpur	28.82	731.9	29.84	757.9	91.9	33.3	22	SW	5.7	2.6	.....	.....	4	.....	E	0	0	.....	
Jubbulpore	28.53	724.6	29.89	759.2	82.8	28.2	21	NW	2.4	1.1	.....	.....	5	SW	.....	0	0	D. clouds	
Lucknow	29.52	749.9	29.90	759.4	83.2	28.4	41	NNE	1.3	0.6	.....	.....	3	.....	.....	0	0	D. clouds	
Allahabad	29.57	751.2	29.89	759.1	81.7	27.6	42	NNW	2.0	0.9	.....	.....	0	.....	.....	0	0	Blue sky	
Patna	29.78	756.3	29.96	760.9	81.1	27.3	67	W	1.2	0.5	.....	.....	1	.....	.....	0	0	D. clouds	
Hazaribagh	27.87	707.8	29.88	759.0	76.8	24.9	46	N	11.8	5.3	.....	.....	5	W	W	0	0	D. clouds	
Cuttack	29.81	757.1	29.89	759.2	87.9	31.1	32	Calm	0.5	0.2	.....	.....	1	.....	.....	0.12	3.0	Showery	
Calcutta, Alipore	29.84	758.0	29.86	758.5	80.5	26.9	56	W	0.5	0.2	.....	.....	0	.....	.....	0	0	Blue sky	
Goalpara	29.42	747.1	29.82	757.5	76.5	24.7	54	W	4.7	2.1	.....	.....	1	W	.....	0	0	D. clouds	
Chittagong	29.81	757.1	29.89	759.2	78.2	25.7	87	SW	3.4	1.5	.....	.....	1	.....	.....	0	0	D. clouds	
Sibsagar	29.60	751.8	29.94	760.6	65.4	18.6	89	NE	3.3	1.5	.....	.....	10	W	W	0.43	10.9	Overcast	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.93	760.2	30.35	770.9	47.3	8.5	16	E	4.9	2.2	.....	.....	1	.....	.....	.....	.....	.....	Prof. Giovanni Clodig
Milan	29.79	756.7	30.32	770.2	48.2	9.0	63	ENE	3.8	1.7	.....	.....	4	NE	.....	0	0	.....	Prof. Schiaparelli.
Padua	30.24	768.1	30.35	771.0	45.0	7.2	51	NE	9.8	4.4	.....	.....	2	E	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.39	746.6	30.32	770.1	45.7	7.6	67	E	1.3	0.6	.....	.....	6	.....	.....	0	0	.....	Prof. P. F. Denza.
Genoa	30.08	764.0	30.28	769.0	50.2	10.1	50	N	8.7	3.9	.....	.....	6	SE	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.27	718.0	30.26	768.5	41.5	5.3	62	NNW	.....	.....	2	.....	1	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	30.29	769.3	30.34	770.6	43.9	6.6	82	NW	13.0	5.8	.....	.....	6	SE	.....	0.031	0 8	.....	Prof. Luigi Guidi.
Florence	29.98	761.6	30.24	768.2	52.3	11.3	43	N	.....	.....	4	.....	0	.....	.....	0	0	.....	Cav. F. Meucci.
Leghorn	30.15	765.9	30.24	768.1	53.4	11.9	47	ENE	11.7	5.3	.....	.....	6	.....	.....	0	0	.....	Prof. P. Monte.
Rome	30.02	762.5	30.20	767.0	56.8	13.8	47	Calm	0	0	.....	.....	0	.....	.....	0	0	.....	Prof. P. S. Ferrari.
Lecce	29.99	761.8	30.25	768.4	52.3	11.3	58	E	5.6	2.5	.....	.....	2	.....	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.34	745.2	30.25	768.3	50.7	10.4	70	NW	0.7	0.3	.....	.....	2	WNW	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.80	757.0	30.00	761.9	55.9	13.3	77	ESE	.....	.....	6	.....	10	.....	.....	0.327	8.3	.....	Prof. A. Pacinotti.
Palermo	29.87	758.8	30.13	765.2	59.4	15.2	51	SW	8.7	3.9	.....	.....	6	.....	.....	0	0	.....	Prof. G. Ciacciatore.
Syracuse	30.10	764.6	30.15	765.7	54.9	12.7	88	E	8.7	3.9	.....	.....	10	E	.....	0.039	1.0	.....	Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R	29.64	752.8	30.17	766.3	56.5	13.6	52	E	1.3	0.6	.....	.....	0	.....	.....	.....	.....	.....	
Stelvio	22.28	565.8	.....	.....	25.5	— 3.6	73	E	.....	.....	2	.....	38	.....	S	0	0	Misty	Prof. F. Brioschi.
Valdobbia	22.25	565.2	.....	.....	21.2	— 6.0	77	E	.....	.....	2	.....	5k	.....	SSE	0	0	Misty	P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.03	762.7	30.05	763.3	50.1	10.1	92	SW	1.1	0.5	.....	.....	10n	.....	.....	1.125	28.58	Raining	K. Sasaki.
Kioto	29.94	760.5	30.12	765.0	49.7	9.8	65	.....	.....	.....	.....	.....	6s;ck	.....	.....	0.260	6.60	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.78	756.4	29.98	761.5	61.6	16.4	89	S	16.8	7.5	.....	.....	10n	.....	.....	1.180	29.97	Raining	S. Takehayashi.
Tokei Obs'y, Yeddo	30.14	765.5	30.21	767.3	43.7	6.5	85	Calm	0	0	.....	.....	10s;ck	.....	.....	0	0	Cloudy	The Staff.
Wakayama	30.04	763.0	30.09	764.3	56.8	13.8	90	SSE	2.6	1.1	.....	rock	0	.....	.....	0.470	11.94	Cloudy	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.90	759.4	30.08	764.1	81.8	27.7	69	E	21.0	9.4	.....	6	3	WSW	E	0.24	6.1	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.57	624.0	30.38	771.6	52.0	11.1	84	N	.....	.....	1	2c	0	.....	.....	0	0	Hazy	Prof. M. Leal.
Mazatlan	29.76	755.9	30.02	762.5	68.5	20.3	82	E	1.6	0.8	.....	1cs	0	.....	.....	0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.21	589.6	30.36	771.2	46.4	8.0	82	Calm	0	0	.....	0	5k	.....	.....	0	0	½ cloudy	The Staff.
Pabellon, Aguascalientes	24.06	611.2	30.19	766.8	50.9	10.5	82	N	.....	.....	1	3c	0	NNE	.....	0	0	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.44	595.3	30.34	770.7	44.6	7.0	50	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.07	611.4	30.06	763.4	51.8	11.0	65	SE	0.9	0.4	.....	4	2	W	E	0	0	Fair	G. Barroeta, M. D.
Tlacotalpam	30.22	767.7	30.24	768.0	66.6	19.2	92	N	5.2	2.3	.....	10	N	Inap.	Inap.	Overcast			Prof. M. Chazaro.
Zacatecas	22.65	575.4	30.44	773.1	44.6	7.0	89	E	5.1	2.3	.....	10n	E	0	0	Covered			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.19	766.7	30.19	766.7	42.1	5.6	.....	NNE	.....	.....	2	.....	.....	.....	.....	0.197	5.0	.....	
Groningen	30.14	765.5	30.19	766.9	43.9	6.6	.....	N	.....	.....	1	.....	.....	.....	.....	0.055	1.4	.....	
Helder	30.19	766.8	30.19	766.8	36.7	2.6	.....	NNW	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.19	766.8	30.19	766 8	42.6	5.9	94	NE	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Utrecht	30.15	765.8	30.20	767.0	45.5	7.5	84	SE	.....	.....	1	.....	8	.....	.....	0.008	0.2	Very cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill	Reduced to sea-level. Inch.	Mill	Tempera-ture of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direc-tion. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.19	766.9	30.26	768.5	38.8	3.8	64	Calm	0	0			8			0	0		
Christiania	30.40	772.1	30.56	776.1	23.5	— 4.7	74	ENE	2	1			10					Light snow.	
Gjæsvær	30.25	768.7	30.29	769.3	34.3	1.3		WSW			7–8		10						
Lodingen	30.53	775.5	30.58	776.7	25.0	— 3.9	73	Calm			0		0			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores																			Dr. J. A. Sampaio.
Campo Major	28.86	733.0	29.85	758.3	58.3	14.6	68	ESE	4.2	1.9			8			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.72	754.9	29.81	757.2	55.2	12.9	67	SW	2.5	1.1			10			0.322	8.2	Raining	Capt. D. A. de Cunha.
Lisbon, Observatory	29.52	749.9	29.89	759.1	53.8	12.1	80	ENE	5.6	2.5			3	E		0	0		The Staff.
Ponta Delgada, Azores	29.91	759.7	29.98	761.5	52.5	11.4	83	NW	15.4	6.9			10			0.385	9.8	Light rain	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.09	738.8	30.29	769.4	— 0.8	—18.2	83	SW	2	1			8					Light clouds	Capt. Lasarew.
Archangel	30.54	775.6	30.56	776.1	16.2	— 8.8	91	WNW	4	2			0						Capt. Sseliwerstow.
Astrakhan	30.51	775.0	30.43	772.9	23.5	— 4.7	74	W	4	2			10cp			Bla	nk	Heavy cl'ds.	Capt. Wisganow.
Barnaul ‡	29.85	758.1	30.42	772.6	— 4.0	—20.0	70	SW	4	2			9						Meteorological Obs'y.
Dorpat	30.50	774.7	30.81	782.6	7.9	—13.4	84	E	4	2									Observatory.
Ekaterinburg	28.97	735.7	30.00	762.0	13.5	—10.3	83	W	13	6		4ck	10					Snowing	Meteorological Obs'y.
Kasan	30.04	762.9	30.33	770.4	16.0	— 8.9	68	N	7	3		2c							Observatory.
Kertch	30.43	772.9	30.45	773.4	23.9	— 4.5	93	ENE	9	4			9						Lagorio.
Kieff	29.98	761.4	30.68	779.3	15.4	— 9.2	88	N	7	3		c	4cs;ks						Cand. Fatjanow.
Lugan	30.26	768.6	30.48	774.3	16.9	— 8.4	70	NNE	13	6			5			Bla	nk	Light clouds	Meteorological Obs'y.
Moscow	30.04	762.9	30.64	778.2	19.4	— 7.0	65	NE	4	2			1k						Meteorological Obs'y.
Nertchinsk	28.07	713.0	30.71	780.1	—11.9	—24.4	40	NNW	4	2			1						Meteorological Obs'y.
Nikolaiev	30.55	776.0	30.62	777.8	16.5	— 8.6	82	NNE	13	6			0						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.60	751.8	29.69	754.0	5.0	—15.0	87	Calm	0	0			1on						Lieut. Iwanow.
Nukuss	30.21	767.3	30.47	773.8	25.5	— 3.6	65	NNW	6.7	3.0			4k						Dr. Dobrochotow.
Pekin, China	30.17	766.4	30.32	770.0	32.7	0.4	19	NW	16	7			2k						Physical Observatory.
St. Petersburg	30.76	781.4	30.78	781.8	9.5	—12.5	79	W	2	1			6s					Light clouds	Central Physical Obs'y.
Tashkend, Laboratory	28.61	726.8	30.26	768.6	36.3	2.4	65						10						Teich, A. M.
Tiflis	28.89	733.7	30.38	771.6	35.2	1.8	66	E	2	1			10						Physical Observatory.
Warsaw	30.11	764.7	30.56	776.1	30.6	— 0.8	56	SE	9	4			0						Astronomical Obs'y.
Wilna	30.23	767.7	30.67	779.1	30.4	— 0.9	53	Calm	0	0			9					Light clouds	Berg, Assistant.
Yeniseisk	30.11	764.9	30.45	773.4	—17.9	—27.7	77	Calm	0	0			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.26	768.6	38.3	3.5	71	NE			2		5k			0	0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			30.25	768.3	41	5.0	91	NE			3	3?	3?	NE		0	0	Clear?	J. Youngclause.
North Unst, Shetland Isl'ds			30.31	769.9				S			2	3	8	SW		0	0		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.93	760.3	30.04	763.0	55.0	12.8	91	E	10.7	4.8			10			0.075	1.91	Raining	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.93	760.1	29.98	761.6	59.7	15.4	60	S	7	3.0		2	8	N		0.098	2.5	Covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.96	684.8			50.0	10.0	72	E	4.9	2.2		0	7			0.413	10.5	Cloudy	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.67	702.8	29.88	758.9	58.8	14.9	64	SE	3.8	1.7		0	8			0.012	0.3	Very cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.77	756.1	29.92	759.9	65.5	18.6	67	E	1.3	0.6		2	5	SW		0	0	Cloudy	Olayo Dias, Director.
Santiago, Met. Obs'y	28.92	734.6	29.82	757.4	56.7	13.7	65	N	0	0			4			0.004	0.1	Cloudy	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.11	764.7	30.17	766.4	69.0	20.6	62	N	10.3	4.6		6ck	3k	W	NNE	0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.97	761.2	30.02	762.5	81.5	27.5	72	ESE	5.5	2.5						0	0	Fair	Federico Faura, S. J
San Fernando, Naval Obs'y	29.79	756.7	29.89	759.2	59.7	15.4	75	S	6.1	2.7		0	8		S	0.005	0.13		Capt. C. Fujason, R. N., Dir.
San Juan de Porto Rico, W. I	30.01	762.2	30.10	764.5	72.7	22.6	90	S	0	0		10	3ck	S	S	0.128	3.25	Clear	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.92	760.0	30.07	763.7	79.0	26.1	81	WNW	3.8	1.7		1ck		W		0	0	Fair	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.74	780.7	30.78	781.7	3.6	—15.8	100	Calm			0		10			0	0	Foggy	
Umea	30.76	781.4	30.82	782.7	16.9	— 8.4	88	Calm			0		0			0	0		
Hernosand	30.76	781.3	30.81	782.6	13.5	—10.3	97	Calm			0		10			0	0		
Stockholm	30.46	773.7	30.64	778.2	24.4	— 4.2	81	E			2		10			0	0		
Wisby	30.45	773.3	30.50	774.8	28.8	— 1.8	84	ESE			2		3			0	0		
Sub-Series.																			
Upsala	30.56	776.3	30.65	778.5	18.0	— 7.8	97	NE	0	0			10			0	0		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.73	729.7	30.18	765.5	46.0	7.8	62	N			3		2			0	0	Clear	The Observatory.
Zurich	28.52	724.5	30.21	767.3	40.1	4.5	84	W			3		3			0	0	Clear	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. +3.9 mm.; Ther. +3°.0 cent.; Hum. —5 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.36	771.1	38.5	3.6	80	NNE	20	9.0			10		N	0.197	5.0		The Observatory.
Valona			30.21	767.4	58.5	14.7		W			1		0			0	0	Clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.02	762.5	57.9	14.4	65	W			2		8n		W	0.27	6.9		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.61	752.1	29.70	754.4	39	3.9	64	S	11	4.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Alpena, Michigan	29.50	749.3	30.24	768.1	— 5	—20.6	63	NW	10	4.5	.....	.....	10n	.....	Calm	0.07	1.8	Light snow.	
Atlanta, Georgia	28.93	734.8	30.10	764.5	45	7.2	60	W	13	5.8	.....	0	0	.....	.....	0	0	Clear	
Atlantic City, New Jersey	29.78	756.4	29.80	756.9	37	2.8	90	S	14	6.3	.....	5c	2s	SW	Calm	0	0	Fair	
Attou Id., Alaska	29.61	752.1	.....	.....	30	— 1.1	78	Calm	0	0	.....	.....	10s	.....	S	Inap.	Inap.	Cloudy	
Augusta, Georgia	29.92	760.0	30.13	765.3	42	5.6	83	Calm	0	0	.....	0	Hz	.....	Calm	0	0	Clear	
Baltimore, Maryland	29.75	755.6	29.80	756.9	39	3.9	73	SE	5	2.2	.....	.....	1on	.....	Calm	Inap.	Inap.	Light rain	
Barnegat, New Jersey	29.77	756.1	29.79	756.7	37	2.8	81	S	16	7.2	.....	8ck	Hz	W	Calm	0	0	Fair	
Benton, Montana	27.24	691.9	.....	.....	13	—10.6	81	Calm	0	0	.....	.....	10s	.....	Calm	0.04	1.0	Cloudy	
Bismarck, Dakota	28.49	723.6	30.35	770.9	3	—16.1	86	Calm	0	0	.....	2c	0	Calm	.....	0.02	0.5	Fair	
Boise City, Idaho	27.51	698.7	30.47	773.9	35	1.7	70	Calm	0	0	.....	5c	0	W	.....	0	0	Fair	
Boston, Massachusetts	29.64	752.8	29.80	756.9	35	1.7	70	SW	10	4.5	.....	2ck	8s	SW	SW	0	0	Clear	
Brackettville, Texas	29.09	738.9	30.18	766.6	48	8.9	85	E	1	0.4	.....	10cs	0	Calm	.....	0	0	Cloudy	
Brownsville, Texas	30.26	768.6	30.31	769.9	52	11.1	93	E	2	0.9	.....	2c	Fg	Calm	Calm	0	0	Cloudy	
Buffalo, New York	29.24	742.7	30.00	762.0	13	—10.6	81	W	14	6.3	.....	.....	10n	.....	Calm	0.16	4.1	Clear	
Burlington, Vermont	29.30	744.2	29.59	751.6	34	1.1	79	S	23	10.3	.....	.....	10n	.....	S	Inap.	Inap.	Light snow.	
Cairo, Illinois	29.89	759.2	30.30	769.6	33	0.6	70	N	10	4.5	.....	5c	2s	N	Calm	0	0	Fair	
Campo, California	27.56	700.0	30.13	765.3	31	— 0.6	79	E	4	1.8	.....	5c	0	W	.....	0	0	Fair	
Camp Thomas, Arizona	27.43	696.7	.....	.....	35	1.7	53	SE	.....	.....	1	2c	0	Calm	.....	0	0	Clear	
Cape Henry, Virginia	29.85	758.2	29.87	758.7	43	6.1	59	SW	17	7.6	.....	8c	0	Calm	.....	0	0	Fair	
Cape May, New Jersey	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Castroville, Texas	29.51	749.5	30.25	768.3	41	5.0	91	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Cedar Keys, Florida	30.21	767.3	30.24	768.1	50	10.0	79	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Champaign, Illinois	29.42	747.3	30.30	769.6	13	—10.6	62	N	21	9.4	.....	0	0	.....	.....	0	0	Clear	
Charleston, S. Carolina	30.04	763.0	30.10	764.5	47	8.3	55	SW	6	2.7	.....	0	5s	.....	N	0	0	Fair	
Charlotte, N. Carolina	29.12	739.6	29.95	760.7	40	4.4	73	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Chattanooga, Tennessee	29.31	744.5	30.13	765.3	47	8.3	62	NW	8	3.6	.....	0	Fg	.....	Calm	0	0	Clear	
Cheyenne, Wyoming	24.20	614.7	30.14	765.5	33	0.6	51	NW	8	3.6	.....	5cs	Sk	W	Calm	0	0	Fair	
Chicago, Illinois	29.54	750.3	30.30	769.6	13	—10.6	62	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Chincoteague, Virginia	29.84	757.9	29.86	758.4	38	3.3	81	SW	21	9.4	.....	8k	0	SW	.....	0.01	0.3	Clear	
Cincinnati, Ohio	29.48	748.8	30.16	766.1	34	1.1	79	NW	12	5.4	.....	.....	10ks	.....	N	0	0	Cloudy	
Cleveland, Ohio	29.39	746.5	30.19	766.8	11	—11.7	70	NW	22	9.8	.....	0	2s	.....	NW	0.13	3.3	Clear	
Coleman City, Texas	28.45	722.6	30.18	766.6	42	5.6	58	SW	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Columbus, Ohio	29.24	742.7	30.12	765.0	25	— 3.9	75	N	16	7.2	.....	0	5n	.....	.....	Inap.	Inap.	Light snow.	
Concho, Texas	28.31	719.1	30.09	764.3	32	0.0	79	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Corsicana, Texas	29.84	757.9	30.33	770.4	45	7.2	76	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Davenport, Iowa	29.68	753.9	30.40	772.1	6	—14.4	76	NW	8	3.6	.....	.....	10s	.....	NW	Inap.	Inap.	Cloudy	
Dayton, Washington T'y	28.44	722.4	30.13	765.3	49	9.4	77	S	8	3.6	.....	0	5ks	.....	Calm	0.11	2.8	Fair	
Deadwood, Dakota	25.46	646.7	.....	.....	39	3.9	55	SW	4	1.8	.....	5ck	0	Calm	.....	0	0	Fair	
Decatur, Texas	29.06	738.1	30.35	770.9	51	10.6	46	S	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Delaware Breakwater, Del.	29.78	756.4	29.80	756.9	39	3.9	73	S	27	12.1	.....	1ck	5ks	SW	SW	0	0	Cloudy	
Denison, Texas	29.46	748.3	30.27	768.8	47	8.3	70	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Denver, Colorado	24.96	634.0	30.18	766.6	35	1.7	53	SE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Des Moines, Iowa	29.54	750.3	30.54	775.7	5	—15.0	75	N	8	3.6	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Detroit, Michigan	29.45	748.0	30.21	767.3	11	—11.7	80	W	12	5.4	.....	0	0	.....	.....	0.26	6.6	Clear	
Dodge City, Kansas	27.62	701.5	30.06	763.5	27	— 2.8	64	SE	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Dubuque, Iowa	29.64	752.8	30.43	772.9	6	—14.4	76	NW	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
Duluth, Minnesota	29.68	753.9	30.48	774.2	—11	—23.9	76	SW	20	8.9	.....	0	0	.....	.....	0	0	Clear	
Eagle Pass, Texas	29.52	749.8	30.28	769.1	46	7.8	84	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Eagle Rock, Idaho	25.57	649.5	30.22	767.6	6	—14.4	100	N	6	2.7	.....	.....	Fg	.....	.....	0	0	Foggy	
Eastport, Maine	29.75	755.6	29.82	757.4	34	1.1	61	S	15	6.7	.....	.....	10s	.....	S	0	0	Cloudy	
Edinburg, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
El Paso, Texas	26.45	671.8	.....	.....	32	0.0	50	NE	2	0.9	.....	0	2s	.....	Calm	0	0	Clear	
Erie, Pennsylvania	29.30	744.2	30.08	764.0	13	—10.6	81	NW	15	6.7	.....	.....	10s	.....	Calm	0.07	1.8	Cloudy	
Escanaba, Michigan	29.62	752.3	30.37	771.4	— 5	—20.6	63	N	.....	.....	1	0	0	.....	.....	0.02	0.5	Clear	
Florence, Arizona	28.70	729.0	30.30	769.6	59	15.0	33	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort Apache, New Mexico	25.23	640.8	30.68	779.3	27	— 2.8	64	E	4	1.8	.....	1c	0	Calm	.....	0	0	Clear	
Fort Assinniboine, Montana	27.22	691.4	.....	.....	4	—15.6	74	Calm	0	0	.....	.....	10ks	.....	Calm	0	0	Cloudy	
Fort Bennett, Dakota	28.75	730.2	.....	.....	10	—12.2	79	SE	9	4.0	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
Fort Buford, Dakota	28.23	717.0	30.28	769.1	6	—14.4	76	Calm	0	0	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
Fort Custer, Montana	26.94	684.3	.....	.....	18	— 7.8	84	Calm	0	0	.....	5c	0	W	.....	0	0	Fair	
Fort Davis, Texas	25.38	644.6	30.34	770.6	33	0.6	61	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Elliott, Texas	27.44	697.0	29.84	757.9	32	0.0	50	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Gibson, Indian T'y	29.74	755.4	30.31	769.9	34	1.1	79	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Grant, Arizona	25.36	644.1	30.16	766.1	48	8.9	29	NE	4	1.8	.....	2k	0	Calm	.....	0	0	Clear	
Fort Griffin, Texas	28.87	733.3	30.19	766.8	38	3.3	63	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Keogh, Montana	27.54	699.5	.....	.....	12	—11.1	80	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Clear	
Fort McKavett, Texas	28.00	711.2	30.02	762.5	35	1.7	53	SW	4	1.8	.....	0	0	.....	.....	0	0	Cloudy	
Fort Macon, North Carolina	29.98	761.5	29.99	761.7	46	7.8	92	W	7	3.1	.....	Hz	Hz	Calm	Calm	0	0	Light haze	
Fort St. Michaels	30.13	765.3	30.17	766.3	— 3	—19.4	100	N	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Fort Missoula, Montana	26.88	682.7	.....	.....	35	1.7	100	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Shaw, Montana	26.37	669.8	.....	.....	41	5.0	74	SW	13	5.8	.....	0	5s	.....	Calm	0.01	0.3	Fair	
Fort Sill, Indian Territory	28.99	736.3	30.15	765.8	38	3.3	81	NW	16	7.2	.....	0	0	.....	.....	0	0	Clear	
Fort Stevenson, Dakota	28.39	721.1	.....	.....	— 3	—19.4	83	NW	4	1.8	.....	.....	10ks	.....	NW	0	0	Cloudy	
Fort Verde, Arizona	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fredericksburg, Texas	28.53	724.6	30.16	766.1	37	2.8	53	NW	.....	.....	1	0	0	.....	.....	0	0	Clear	
Galveston, Texas	30.29	769.4	30.33	770.4	44	6.7	68	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Grand Haven, Michigan	29.52	749.8	30.23	767.8	52	11.1	86	W	3	1.3	.....	Hz	0	Calm	.....	0	0	Clear	
Hatteras, North Carolina	29.93	760.2	29.95	760.7	15	— 9.4	82	N	10	4.5	.....	8k	0	NW	.....	0.04	1.0	Cloudy	
Helena, Montana	25.88	657.3	.....	.....	43	6.1	83	S	8	3.6	.....	8cs	0	N	.....	0	0	Cloudy	
Henrietta, Texas	29.22	742.2	30.20	767.1	48	8.9	12	S	9	4.0	.....	0	2s	.....	S	0	0	Fair	
Indianapolis, Indiana	29.37	746.0	30.20	767.1	40	4.4	73	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Indianola, Texas	30.29	769.4	30.32	770.1	52	11.1	93	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Jacksboro, Texas	29.07	738.4	30.23	767.8	46	7.8	62	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Jacksonville, Florida	30.15	765.8	30.20	767.1	49	9.4	64	W	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Keokuk, Iowa	29.70	754.4	30.42	772.7	10	—12.2	79	N	12	5.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Key West, Florida	30.17	766.3	30.20	767.1	64	17.8	63	N	24	10.7	.....	2k	2s	W	N	0	0	Fair	
Kittyhawk, North Carolina	29.92	760.0	29.95	760.7	41	5.0	74	SE	6	2.7	.....	2c	0	SW	.....	0	0	Clear	
Knoxville, Tennessee	29.08	738.6	30.10	764.5	42	5.6	66	SW	9	4.0	.....	5cs	0	Calm	.....	0	0	Fair	
La Crosse, Wisconsin	29.63	752.6	30.47	773.9	2	—16.7	72	N	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
La Mesilla, New Mexico	26.31	668.3	30.46	773.7	30	— 1.1	36	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Laredo, Texas	29.87	758.7	30.22	767.6	50	10.0	86	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Leavenworth, Kansas	29.54	750.3	30.48	774.2	16	— 8.9	66	N	7	3.1	.....	0	5s	.....	N	0	0	Fair	
Lewiston, Idaho	29.40	746.7	30.06	763.5	43	6.1	75	NE	3	1.3	.....	.....	10ks	.....	Calm	0.17	4.3	Cloudy	
Little Rock, Arkansas	29.94	760.5	30.27	768.8	46	7.8	69	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Los Angeles, California	29.71	754.6	30.07	763.8	61	16.1	55	NE	9	4.0	.....	0	2s	.....	Calm	0	0	Fair	
Louisville, Kentucky	29.60	751.8	30.19	766.8	32	0.0	69	NW	9	4.0	.....	8c	2s	NW	Calm	0	0	Cloudy	
Lynchburg, Virginia	29.19	741.4	29.88	758.9	43	6.1	59	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Madison, Wisconsin	29.28	743.7	30.39	771.9	5	—15.0	75	W	6	2.7	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Marquette, Michigan	29.55	750.6	30.35	770.9	2	—16.7	86	N	4	1.8	.....	.....	1cn	.....	Calm	0.04	1.0	Light snow	
Mason, Texas	28.60	726.4	30.43	772.9	43	6.1	77	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—CONTINUED.																			
Memphis, Tennessee	29.91	759.7	30.26	768.6	44	6.7	60	NW	1	0.4		0	0			0	0	Clear	
Milwaukee, Wisconsin	29.51	749.5	30.32	770.1	6	—14.4	76	NW	12	5.4			10s		Calm	Inap	Inap.	Cloudy	
Mobile, Alabama	30.19	766.8	30.26	768.6	47	8.3	70	SW	3	1.3		0	Hz		Calm	0	0	Dense haze	
Montgomery, Alabama	30.00	762.0	30.24	768.1	44	6.7	75	W	4	1.8		0	0			0	0	Clear	
Moorhead, Minnesota	29.40	746.7	30.50	774.7	— 5	—20.6	63	W	5	2.2		0	0			0	0	Clear	
Morgantown, W. Virginia	29.11	739.4	30.14	765.5	31	— 0.6	69	NE	14	6.3			10s		NW	0	0	Cloudy	
Mt. Washington, N. H	23.24	590.3	29.60	751.8	17	— 8.3	100	W	66	29.5			Fg		W	0.03	0.8	Dense fog	
Nashville, Tennessee	29.66	753.4	30.22	767.6	40	4.4	73	NW	4	1.8		5cs	Sk	W	Calm	0	0	Fair	
New Haven, Connecticut	29.67	753.6	29.79	756.7	32	-- 0.0	89	Calm	0	0		8cs	Fg	SW		0	0	Cloudy	
New London, Connecticut	29.77	756.1	29.82	757.4	33	0.6	79	SW	1	0.4		7cs	0	Calm		0	0	Fair	
New Orleans, Louisiana	30.24	768.1	30.30	769.6	50	10.0	79	W	5	2.2		0	Sk			0	0	Clear	
Newport, Rhode Island	29.78	756.4	29.83	757.7	36	2.2	90	S	10	4.5		4k	4s;sk	Calm	Calm	0	0	Cloudy	
New River, N. Carolina					43	6.1	92	W			2	0	Hz					Light haze	
New Shoreham, Rhode I'd	29.80	756.9	29.83	757.7	40	4.4	82	S	13	5.8		5ck	0	SW		0	0	Fair	
New York, New York	29.61	752.1	29.79	756 7	34	1.1	90	S	6	2.7		2cs	5s	Calm	Calm	0	0	Fair	
Norfolk, Virginia	29.84	757.9	29.90	759.4	42	5.6	66	SW	11	4.9		5ck	0	W		0	0	Fair	
North Platte, Nebraska	27.26	692.4	29.97	761.2	27	— 2.8	88	S	3	1.3		0	0			Inap.	Inap.	Clear	
Olympia, Washington T'y	30.10	764.5	30.14	765.5	52.0	11.1	93	S	3	1.3			10n		Calm	0.59	15.0	Light rain	
Omaha, Nebraska	29.28	743.7	30.52	775.2	8	—13.3	78	N	6	2.7			10s		Calm	Inap.	Inap.	Cloudy	
Oswego, New York	29.50	749.3	29.84	757.9	24	— 4.4	87	W	22	9.8			10s		W	0.08	2.0	Cloudy	
Pensacola, Florida	30.26	768.6	30.29	769.4	47	8.3	70	NW	4	1.8		0	Hz		Calm	0	0	Clear	
Philadelphia, Pa	29.72	754.9	29.77	756.1	35	1.7	90	SW	10	4.5		10cs	Fg	W	Calm	0	0	Cloudy	
Phœnix, Arizona	29.60	736.6	30.87	784.1	46	7.8	47	NE	1	0.4		0	0			0	0	Clear	
Pike's Peak, Colorado	17.88	454.1	30.09	764.3	12	—11.1	42	W	24	10.7		0	0			0	0	Clear	
Pilot Point, Texas	29.47	748.5	30.34	770.6	46	7.8	62	SE	3	1.3		0	0			0	0	Clear	
Pioche, Nevada	24.26	616.2	30.03	762.7	32	0.0	59	Calm	0	0		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.21	741.9	30.06	763.5	23	— 5.0	73	NW	10	4.5			10s		NW	0.07	1.8	Cloudy	
Port Huron, Michigan	29.44	747.8	30.18	766.6	4	—15.6	74	NW	17	7.6		8cs	0	N		0.51	13.0	Fair	
Portland, Maine	29.71	754.6	29.76	755.9	37	2.8	71	S	14	6.3		0	8s		SW	0	0	Fair	
Portland, Oregon	30.18	766.6	30.26	768.6	49	9.4	96	S	3	1.3			10s		Calm	0.01	0.3	Cloudy	
Portsmouth, N. Carolina					46	7.8	77	NE	8	3.6		0	0			0	0	Clear	
Prescott, Arizona	24.97	634.2	30.33	770.4	26	— 3.3	52	E	1	0.4		2c	0	Calm		0	0	Clear	
Punta Rassa, Florida	30.20	767.1	30.22	767.6	53	11.7	73	N	10	4.5		8c	0	W		0	0	Fair	
Red Bluff, California	29.83	757.7	30.18	766.6	47.5	8.6	81	N	5	2.2		0	0			0	0	Clear	
Rio Grande City, Texas	30.83	765.3	30.36	771.1	46	7.8	92	N	4	1.8		0	0			0	0	Clear	
Rochester, New York	29.24	742.7	29.90	759.4	19	— 7.2	85	NW	12	5.4			10n		NW	0.05	1.3	Light snow	
Roseburg, Oregon	29.72	754.9	30.31	769.9	41	5.0	91	Calm	0	0		0	0			0	0	Clear	
Sacramento, California	30.10	764.5	30.18	766.6	50	10.0	93	Calm	0	0		0	0			0	0	Clear	
St. Louis, Missouri	29.73	755.1	30.36	771.1	21	— 6.1	71	NW	11	4.9			10s		Calm	0	0	Cloudy	
St. Paul, Minnesota	29.54	750.3	30.49	774.4	0	—17.8	69	NW	2	0.9		0	0			Inap.	Inap.	Clear	
Salt Lake City, Utah	25.91	658.1	30.24	768.1	35	1.7	53	SE	1	0.4		0	0			0	0	Clear	
San Antonio, Texas	29.68	753.9	30.41	772.4	44	6.7	92	Calm	0	0		0	0			0	0	Clear	
San Diego, California	29.99	761.7	30.06	763.5	60	15.6	34	NE	5	2.2		0	2s		Calm	0	0	Clear	
Sandusky, Ohio	29.47	748.5	30.21	767.3	11	—11.7	80	NW	24	10.7		0	0			0.13	3.3	Clear	
Sandy Hook, New Jersey	29.74	755.4	29.78	756.4	36	2.2	71	SW	10	4.5		8cs	0	Calm		0	0	Cloudy	
San Francisco, California	30.09	764.3	30.16	766.1	55	12.8	77	N	8	3.6		0	0			0	0	Clear	
Santa Fé, New Mexico	23.47	596.1	30.01	762.2	33	0.6	61	N	9	4.0		0	0			0	0	Clear	
Savannah, Georgia	30.04	763.0	30.14	765.5	48	8.9	56	W	12	5.4		0	Hz			0	0	Clear	
Shreveport, Louisiana	30.06	763.5	30.32	770.1	43	6.1	83	Calm	0	0		0	0			0	0	Clear	
Silver City, New Mexico	24.45	621.0	30.98	786.9	26	— 3.3	63	Calm	0	0		0	0			0	0	Clear	
Smithville, North Carolina	29.99	761.7	30.03	762.7	44	6.7	84	SW	6	2.7		0	Hz			0	0	Clear	
Socorro, New Mexico	25.67	652.0	29.73	755.1	28	— 2.2	43	N	4	1.8		0	0			0	0	Clear	
Springfield, Illinois	29.65	753.1	30.38	771.6	17	— 8.3	76	NW	10	4.5		0	5s		W	Inap.	Inap.	Fair	
Springfield, Massachusetts	29.63	752.6	29.77	756.1	33	0.6	79	S	4	1.8			10s		Calm	0	0	Cloudy	
Stockton, Texas	27.17	690.1	30.17	766.3	35	1.7	53	SW	4	1.8		1c	0	Calm		0	0	Clear	
St. Vincent, Minnesota	29.49	749.0	30.43	772.9	—16	—26.7	100	NW	6	2.7		0	0			0	0	Clear	
Thatcher's Island, Mass	29.76	755.9	29.81	757.2	35	1.7	90	S	18	8.0		2cs	5s	SW	S	0	0	Cloudy	
Toledo, Ohio	29.48	748.8	30.22	767.6	14	—10.0	74	NW	9	4.0		0	0			0.03	0.8	Clear	
Tucson, Arizona	27.64	702.0	30.19	766.8	59	15.0	18	SE	8	3.6		5c	0	W		0	0	Fair	
Umatilla, Oregon	29.87	758.7	30.38	771.6	39	3.9	91	SE	6	2.7			10s		Calm	0	0	Cloudy	
Uvalde, Texas	29.34	745.2	30.11	764.8	42	5.6	83	S	1	0.4		0	0			0	0	Clear	
Vicksburg, Mississippi	30.02	762.5	30.29	769.4	49	9.4	87	SW	7	3.1		0	0			0	0	Clear	
Visalia, California	29.77	756.1	30.15	765.8	46	7.8	92	S	1	0.4			Fg		Calm	0	0	Dense fog	
Washington, D. C	29.68	753.9	29.80	756.9	39	3.9	82	S	2	0.9		0	8s		W	Inap.	Inap.	Clearing	
Wickenburg, Arizona					40	4.4	56	W			1	0	2s		Calm	0	0	Clear	
Wilmington, N. Carolina	29.95	760.7	30.01	762.2	43	6.1	83	W	3	1.3		0	0			0	0	Clear	
Winnemucca, Nevada	25.86	656.8	30.22	767.6	34	1.1	70	NE	10	4.5		0	0			0	0	Clear	
Wood's Holl, Mass	29.80	756.9	29.84	757.9	35	1.7	90	SE	8	3.6		2ck	2s	SW	SW	0	0	Fair	
Yankton, Dakota	29.12	739.6	30.58	776.7	8	—13.3	78	E	8	3.6			10n		Calm	0.08	2.0	Light snow	
Yuma, Arizona	29.91	759.7	30.06	763.5	67	19.4	25	N	6	2.7		1c	0	Calm		0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.10	561.3			53.8	12.1	79	Calm	0	0		10cs	0			0	0	Cloudy	Thomas Herman.
Buff Bay Town, Jam ica.‡	29.90	759.4	30.21	767.3	67	19.4	90	W				0	1k						
Havana, Cuba, W. I	30.12	765.0	30.17	766.3	70	21.1	56	N	9.6	4.3		4k	4ks	N	N	0	0	Cloudy	Charles Hasselbrink.
Jakobshavn, Greenland	30.44	773.1	30.46	773.7	0.7	—17.4		Calm			0		0			0	0		K. V. Möller.
Kingston, Jamaica, W. I	30.07	763.8	30.03	764.0	70.8	21.6	83	Calm	0	0		0	0			0	0		Robert Johnstone
Navassa, W. I	29.98	761.5	30.06	763.5	75	23.9	77	E	3	1.3		8k	5s	SE	E	0.11	2.8	Cloudy	F. M. Everett.
Paramaribo, S. A	30.00	762.0	30.00	762.0	78	25.6	86	E			2		8ks	E		0.540	13.72	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.43	747.5	29.99	761.7	80	25.7	80	Calm			0		10ks			0	0	Cloudy	Francesco J. Cisneros
Rivas, Nicaragua					73.4	23		E			4	0	1ks		E	0	0		Earl Flint.
Santiago de Cuba, W. I	30.06	763.5	30.09	764.3	77	25.0	82	NW				8ck	1s		NE	0	0	Cloudy	Robert Mason.
St. Thomas, W. I																			G. O. Gollich.
Upernavik, Greenland	30.39	771.8	30.45	773.4	— 6.2	—21.2		W			2		0			0	0		K. Elberg.
York Factory, B. A	30.05	763.3	30.10	764.5	—33.0	—36.1		NW	8	3.6		3k	3s	NW	NW	0	0	Cloudy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.12	765.0	58.5	14.7	76	ESE			6		10							Squally	Capt. Lord Walter Kerr
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 30° 32′, E. 47° 51′	30.04	763.0	64	17.8	53	NW			1		4	N						D. clouds	Comm. G. Haud.
H. M. S. Bittern, Constantinople, Turkey			40	4.4		NE			2-3		10					1	NE	Raining	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.80	756.9	83	28.3	75	SE			1-2		1	SE				2	Conf	D. clouds	Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 34° 06′, E. 132° 55′	30.05	763.3	50	10.0	79	NNE			1		10							Overcast	Capt. J. W. East.
H. M. S. Condor, N. 36° 24′, E. 23° 50′	30.21	767.3	47	8.3	77	NNE			7-8	7ck						7-8	N	Squally	Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer, Syracuse, Sicily	30.17	766.3	55	12.8		ENE			5		6	SE						Squally	Capt. F. A. Wetherall.
H. M. S. Curacoa, Shanghai, China	29.76	755.9	63	17.2	83	N			1-2		10							Overcast	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.00	762.0	57.5	14.2	97	NNE			2-3		9	NE						D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 2° 40′, E. 104° 45′	29.84	757.9	81	27.2		N			2		1	N				1	NE	D. clouds	Capt. W. H. Maxwell.
H. M. S. Emerald																			Comm. C. Johnstone.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.87	758.7	80	26.7	78	NW			5-6		0							Squally	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 16° 53′, W. 63° 34′	30.07	763.8	76	24.4		ENE			3		7	E				3	E	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyu.
H. M. S. Gannet, Panama, Panama	29.95	760.7	74	23.3	86	NNW			2		8							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 50′, W. 58° 56′	29.87	758.7				NNW			6									Squally	Capt. L. F. Jones.
H. M. S. Griffon																			Capt. J. Inglis.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 4° 09′, E. 105° 27′	29.94	750.5	80	26.7	87	NNE			1		0					Sm'h		Blue sky	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Africa	29.90	759.4	82	27.8	91	SW			1-2		9	SW						Raining	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 29° 46′, E. 122° 22′	29.88	758.9	56.5	13.6	91	SW			1		10					3	SSE	Foggy	Capt. R. H. Napier.
H. M. S. Malabar																			Capt. J. F. G. Grant.
H. M. S. Minataur, Vigo, Spain	29.84	757.9	59	15.0	82	Calm			0		4	E						D. clouds	Capt. H. Rawson.
H. M. S. Modeste, N. 1° 17′, E. 103° 51′	29.91	759.7	82	27.8	79	NE			3-5		2					1		Squally	Capt. J. G. Mead.
H. M. S. Monarch, Alexandretta, Turkey, Asia	29.97	761.2	60	15.6	60	N			1-2		4	E				Sm'h		D. clouds	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Pt. Royal, Jamaica, W.I.	30.03	762.7	76	24.4	82	N			1		2							D. clouds	Capt. E. Drummond.
H. M. S. Orontes, N. 39° 01′, W. 18° 26′	29.88	758.9	57.5	14.2	84	E			2		8	W				1–3	NW	D. clouds	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, Elmina, Gold Coast, Africa.	29.87	758.7	81	27.2	96	WSW			3		3					3	S	D. clouds	Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman, N. 48° 36′, W. 7° 30′						ENE			6		10	NE				6	E	Overcast	Capt. P. H. W. Mayow.
H. M. S. Rocket																			Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.92	760.0	79	26.1	?	W			2		10							Raining	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	29.86	758.4	58	14.4	82	E			1		1							D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.50	749.3	82	27.8	91	E			1–2		0					1	SE	Blue sky	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	29.98	761.5	68	20.0	95	Calm			0		4							D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos, N. 12° 36′, W. 61° 28′	30.05	763.3	79	26.1	74	ENE			2–4		3					1	N	Squally	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo Bay, Chili, S.A.	29.98	761.5	62	16.7	91	Calm			0		10							Overcast	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 12° 50′, E. 56° 35′	29.96	761.0	80	26.7		E			1		2					Sm'h		D. clouds	Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, N. 29° 59′, E. 48° 29′	30.03	762.7	61.5	16.4	72	SE			1		2	S						D. clouds	Capt. F. Negham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, N. 16° 42′, W. 24° 18′	30.06	763.4	73.8	23.2	90	NE			3		5					2		D. clouds	S. C. da Silva Costa, Comd't.
Sado. St. Paul de Loando, Africa.	29.91	759.8	82.4	28.0	77	NW			1		8					0		Blue sky	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.27	768.8	58	14.4	64	W	3	1.3			0			0	0			Clear	
N. Yard, Portsmouth, N. H.	29.70	754.4	32	0.0	?	SW	11	4.9			10		SW	0	0			Cloudy	
Naval Hospital, Yokohama, Japan	30.07	763.8	44	6.7	79	Calm			0		10		W	0	0			Gloomy	
Adams, Panama, Panama	29.99	761.7	75	23.9	86	NNW			2		2		NNW			Sm'h		Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.09	764.3	50	10.0	93	Calm			0		0			0	0			Clear	
Alert, Hong-Kong, China *.	29.83	757.7	75	23.9	86	SSW			2		8		SSW	0	0	Sm'h		Cloudy	
Alliance, New Orleans, La			52	11.1	86	Calm			0		0			0	0	Sm'h		Clear	
Ashuelot, Tientsin, China	30.30	769.6	32	0.0	79	E			2		10		Calm					Light snow.	
Colorado, New York, N. Y.	29.71	754.6	34	1.1	100	S	2	0.9			8		S	0	0			Misty	
Constitution, N. Yard, League I'd., Pa	29.71	754.6	36	2.2	80	SW	2	0.9			10							Overcast	
Franklin, Norfolk, Va	29.88	758.9	40	4.4	73	SSW	5	2.2			2		SW	0	0			Fair	
Galena, Off Milo I'd, Grecian Arch.	30.21	767.3	46	7.8	77	NNE			6		5					Mod.		Fair	
Independence, N. Yard, Mare I'd, Cal.	30.11	764.8	49	9.4	49	E	9.6	4.3			0			0	0			Clear	
Jamestown, Sitka, Alaska *	29.67	753.6	34	1.1	90	NW			2		10			0.14	3.6			Snowing	
Kearsarge, New Orleans, La	30.29	769.4	51	10.6	79	W			1		2		Calm			Sm'h		Hazy	
Marion, Strait of Magellan	29.82	757.4	53	11.7	86	WNW			0-1		2		W			Sm'h		Clear	
Michigan, Erie, Pennsylvania	30.02	762.5	14	—10.0		NNW	4	1.8			8		NW					Cloudy	
Minnesota, New York, N. Y.	29.78	756.4	39	3.9	82	S			1		8		S					Misty	
Monocacy, Shanghai, China	29.86	758.4	64	17.8	83	NNW			5		10		NNW					Rainy	
New Hampshire, Port Royal, S. C.	30.11	764.8	50	10.0	72	WNW	12	5.4			0			0	0			Clear	
Nipsic, Valencia, Spain	29.95	760.7	56	13.3	81	NE			3		8					Sm'h		D. clouds	
Onward, Callao, Peru †	29.93	760.2	70	21.1	95	Calm			0		5					Long	N;W	Light fog	
Palos, Shanghai, China	29.90	759.4	58	14.4	76	NNW			3		10							Overcast	
Passaic, Washington, D. C.	29.99	761.7	42	5.6	91	SW			2		8		Calm					Cloudy	
Pensacola, Panama, Panama	29.99	761.7	75	23.9	81	NW			2		2			0	0	Sm'h		Fair	
Powhatan, New York, N. Y.	29.83	757.7	36	2.2	80	SSW			1		8							Cloudy	
Quinnebaug, Villafranca, France	30.16	766.1	59	15.0	54	ESE			2		2		E			Sm'h		Fair	
Richmond, Hong-Kong, China	29.97	761.2	73	22.8	100	Calm			0		10		Calm	0	0			Cloudy	
Saratoga, Potomac River	29.85	758.2	39	3.9	100	S			2		5		Calm					Fair	
Shenandoah, Montevideo, Uruguay *	30.22	767.6	70	21.1	80	NNE			1		5					Sm'h		Fair	
St. Louis, League Island, Pa	29.90	759.4	36	2.2	90	SSW	8	3.6			8			0	0			Cloudy	
Swatara, Nagasaki, Japan †	29.94	760.5	63	17.2	89	SSE			4		10		Calm			Mod.	SSE	Raining	
Tennessee, New Orleans, La *	30.40	772.1	49	9.4	93	WSW	1	0.4			0			0	0	Sm'h		Clear	
Ticonderoga, N. Yard, Mare Id., Cal.	30.18	766.6	51	10.6	93	Calm			0		0			0	0			Clear	
Trenton, Villafranca, France *	30.15	765.8	62	16.7	51	E			1-3		5			0	0	Sm'h		Fair	
Vandalia, N. 18° 17', W. 64° 54'	30.10	764.5	77	25.0	100	E			2		2		E					Fair	
Wabash, Boston, Massachusetts	29.86	758.4	37	2.8	81	SSW	16	7.2			10		SW					Cloudy	
Wachusetts, Panama, Panama *.	29.60	751.8	74	23.3	92	NW			3		2		N			Sm'h		Fair	
Wyoming, Villafranca, France	30.17	766.3	57	13.9	58	ESE			1-2		2		ESE			Sm'h		Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
N. 9° 40′, W. 33° 15′	29.97	761.2	78	25.6	82	NE			6		9							Misty	Capt. C. J. Russell.
S. S. Bateshire,																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 15° 50′, W. 65° 47′	30.06	763.5	78.0	25.6	80	ENE			4		2							D. clouds	Capt. A. J. Brown.
British Merchant, ‡																			Capt. E. J. Molony.
Chin Yang, ‡																			Capt. N. Youlden.
S. S. Cipero,																			
N. 35° 25′, W. 41° 10′	30.31	769.9	66	18.9		SW			4		9					2	WSW; N	Overcast	Capt. W. N. Lailey.
City of Agra, ‡																			
S. 0° 10′, W. 32° 38′	29.92	760.0	83.5	28.6	83	SE			3		5							D. clouds	Capt. T. Young.
Barque Commewyne, ‡																			
N. 46° 35′, W. 27° 30′	30.13	765.3	57	13.9	75	ESE			3		9							Overcast.	Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire,																			Capt. H. Y. Murdoch.
Barque Dochra, ‡																			
N. 0° 28′, W. 24° 06′	29.96	761.0	84	28.9	69	ENE			2		8							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart,																			
S. 4° 03′, E. 87° 52′	29.91	759.7	81.5	27.5	87	W			2		8							Gloomy	Capt. J. E. C. Patterson.
Barque Elissa,																			Capt. A. Watson.
S. S. Ethiopia, ‡																			Capt. A. Campbell.
S. S. Fleurs Castle,																			Capt. J. Kidder.
Barque Gem,																			Capt. H. Park.
S. S. Gordon Castle,																			Capt. W. Waring.
Barque Harvest Home,																			Capt. H. H. Williams
Barquentine Hope, ‡																			Capt. Jas. Campbell.
Ship Iron Cross,																			
N. 40° 20′, W. 16° 35′	29.91	759.7	57.2	14.0		ENE			5		5							D. clouds	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith,																			Capt. Alex. Wilson.
S. S. Lamperts,																			Capt. G. H. Jones.
Laomene,																			Capt. W. P. Hughes.
Ship Lochee, ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania,																			Capt. C. A. F. Powell.
Majestic,																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 32° 22′, W. 74° 14′	30.01	762.2	59.5	15.3	88	SW			4		10					3	N	Drizzling	Capt. H. W. Dyke.
Barque Mertola,																			Capt. E. W. Turner.
Nairnshire,																			Capt. W. Niven.
S. S. Nizam,																			Capt. J. W. Brady.
Queen of Cambria,																			Capt. M. Parry.
S. S. Richmond,																			Capt. W. H. Stuart
Barque Shun Lee, ‡																			Capt. John M. Gray.
S. S. Seine,																			Capt. H. Manning.
S. S. Strathleven ‡																			
N. 36° 18′, W. 13° 57′	29.76	755.9	56.0	13.3	78	S			3		10							Overcast	Capt. C. W. Pearson.
Schr. Traveller,																			Capt. A. Simpson.
S. S. Wyberton, ‡																			
N. 2° 36′, E. 66° 28′	29.97	761.2	81	27.2	83	Calm			0		4							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire,																			
N. 31° 15′, W. 51° 20′	30.23	767.8	68	20.0	85	SSW			4		9					1	NNE	D. clouds	
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian,																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			
S. S. Bothnia																			Capt. W. Watson.
S. S. Scythia,																			
N. 49° 10′, W. 30° 54′	30.03	762.7	54	12.2	80	N			3		10		NW	Heavy showers		H'vy	N	Cloudy	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic,																			
N. 47° 45′, W. 58° 21′ †	30.02	762.5	42	5.6		WNW			2		5?		WNW			Mod.	WNW	Clear?	Capt. J. W. Jennings.
S. S. Baltic,																			Capt. H. Parsell.
S. S. Britanic,																			Capt. H. Perry.
S. S. Celtic,																			Capt. Benj. Gleadell.
S. S. Germanic,																			
N. 43° 12′, W. 46° 22′ †	30.12	765.0	43	6.1		WNW			5		5?		WNW	0	0	H'vy	WNW	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic,																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, ‡																			
S. S. Köln,																			Capt. H. Baur.
N. 37° 20′, W. 75° 22′	29.87	758.7	42.8	6.0		SW			2		0			0	0	Sm'h	SW	Clear	
S. S. Leipzig,																			Capt. F. Pfeiffer.
S. S. Ohio,																			Capt. G. Meyer.
S. S. Strassburg,																			
N. 47° 50′, W. 30° 11′	30.16	766.1	50.9	10.5		N			3		5		NNE	1 hour		Long	NW	Fair	
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredhelm, ‡																			Capt. Albert Fredhom.
Ship Peru, ‡																			
N. 24° 13′, W. 80° 30′	30.17	766.2	68.0	20.0	91	N			6		4							Misty	Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. ‡ Liverpool, England.....*	30.18	766.6	42	5.6	91	NNW	.....	.....	4	.....	2	.....	NE	.....	.....	.....	.....	Clear	Capt. J. W. Shackford.
S. S. Indiana, ‡ Delaware River, Del....†	29.92	760.0	38	3.3	63	NNW	.....	.....	5	.....	8	.....	N	Lig	ht	Sm'h	.....	Cloudy.....	Capt. R. W. Sargent.
S. S. Ohio, Liverpool, England ...†*	30.84	770.6	54	12.2	93	NE	.....	.....	2	.....	5	.....	NE	0	0	.....	.....	Fair.....	Wm. Shakford, 1st Off'r
S. S. Pennsylvania, N. 49° 13′, W. 33° 17′....†	30.20	767.1	46	7.8	54	E	.....	.....	3	.....	8	.....	E	0	0	Sm'h	E	Cloudy.....	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 30° 31′, W. 116° 29′....†	30.06	763.5	62	16.7	83	NNW	.....	.....	2	.....	8	.....	NW	0	0	G'tl	WNW	Fair.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 38° 39′, W. 147° 19′ ....†	30.03	762.7	63	17.2	78	SSE	.....	.....	4	.....	10	.....	.....	Driz	zles	Light	WSW	Overcast.....	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China.....*†	30.02	762.5	64	17.8	83	SW	.....	.....	3	.....	10	.....	SW	.....	.....	.....	.....	Overcast.....	Capt. W. H. Kidley.
S. S. Oceanic, N. 32° 14′, E. 174° 51′.....	29.58	751.3	57	13.9	75	W	.....	.....	7	.....	5	.....	W	0.09	2.29	High	WSW; W	.....	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, Columbia river.....†	30.23	767.8	50	10.0	79	ENE	.....	.....	1	.....	10	.....	SSE	.....	.....	.....	.....	Foggy	Capt. Fred. Bolles.
S. S. Oregon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, N. 35° 36′, W. 121° 20′....†	30.06	763.5	60	15.6	65	N	.....	.....	3	.....	0	.....	.....	.....	.....	Mod.	.....	Clear.....	Capt. J. N. Ingalls.
S. S. Idaho, ‡ Victoria, Washington Ter..†	30.11	764.8	46	7.8	92	NE	.....	.....	2	.....	10	.....	SW	.....	.....	.....	.....	Raining	C. E. Lyons, 1st Officer.
S. S. Orizaba.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Senator, N. 35° 15′, W. 121° 20′....†	30.06	763.5	62	16.7	77	SE	.....	.....	1	.....	0	.....	.....	.....	.....	Sm'h	.....	Clear.	Thos. Wallace.
S. S. State of California, Portland, Oregon.....†	30.23	767.8	47	8.3	92	E	.....	.....	2	.....	10	.....	E	0	0	.....	.....	Foggy	Capt. G. Debney.
S. S. Victoria.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Bannerman, 1st Officer.
S. S. City of New York, Sydney, N. S. W.....†	29.98	761.5	74	23.3	90	E	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	Clear.....	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 24° —′, W. 111° 14′....†	30.13	765.3	69	20.6	80	NW	.....	.....	1	.....	2	.....	NW	0	0	Sm'll	W	Clear.....	Capt. D. S. Austin.
S. S. City of Peking, N. 34° 11′, E. 137° 36′.....†	30.15	765.8	64	17.8	68	ESE	.....	.....	4	.....	10	.....	SE	0	0	Sm'h	.....	Misty.....	Capt. G. G. Berry.
S. S. City of Sidney, N. 21° 11′, W. 157° 48′....†	30.13	765.3	74	23.3	68	ENE	.....	.....	3	5c	.....	NE	.....	0	0	Mod.	E	Fair.....	Capt. H. C. Dearborn.
S. S. City of Tokio.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Ritchie, 2d Officer.
S. S. Colima, Panama, Panama .....†	30.01	762.2	77	25.0	91	NNW	.....	.....	2	.....	10	.....	N	0	0	.....	.....	Cloudy.....	Capt. R. R. Searle.
S. S. Dakota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. D. E. Griffiths.
S. S. Granada.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Zealandia, Sydney, N. S. Wales.....	29.88	758.9	72	22.2	80	S	.....	.....	8	.....	8	.....	S	.....	.....	.....	.....	Raining	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland..... ‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Sam'l Jackson.
S. S. Nederland..... ‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. S. Stokes.
S. S. Rhynland, ‡ N. 43° 00′, W. 58° 07′.....	30.09	764.3	35	1.7	.....	W	.....	.....	5	.....	8	.....	W	0.1	2.	Mod.	W	Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland, N. 49° 39′ W. 14° 15′.....	30.30	769.6	.....	.....	.....	E	.....	.....	5	.....	10	.....	ESE	Spri	nkles	Long	ESE	Cloudy.....	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, ‡ Jacksonville, Florida...†	30.09	764.3	65	18.3	.....	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	Fine.....	Capt. A. Mehaffey.
Sch'r Addie Fuller, Norfolk, Va.....	29.91	759.7	47	8.3	85	SW	4	1.8	.....	5ck	.....	.....	.....	0	0	.....	.....	Fair.....	Capt J. Jorgensen.
Sch'r Annie R. Lewis, Martinique, W. I..... ..†	30.01	762.2	80	26.7	.....	ENE	.....	.....	5	.....	8	.....	ENE	0	0	.....	.....	Cloudy.....	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 41° 20′, W. 12° 05′....†*	30.05	763.3	58	14.4	.....	NE	.....	.....	6	.....	10	.....	NE	.....	.....	Mod.	NE	Raining	Capt. B. F. Woodbury.
Brigantine George..... ‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. W H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va.†	29.97	761.2	45	7.2	68	S	1	0.4	.....	2cs	2cs	.....	.....	0	0	.....	.....	Clear.....	.....
Ship Jumna.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 23° 46′, W. 57° 20′..†	30.20	767.1	78	25.6	100	SE	.....	.....	6	.....	5	.....	ESE	Lig	ht	Light	E	Fair.....	Capt. Jos. Hand.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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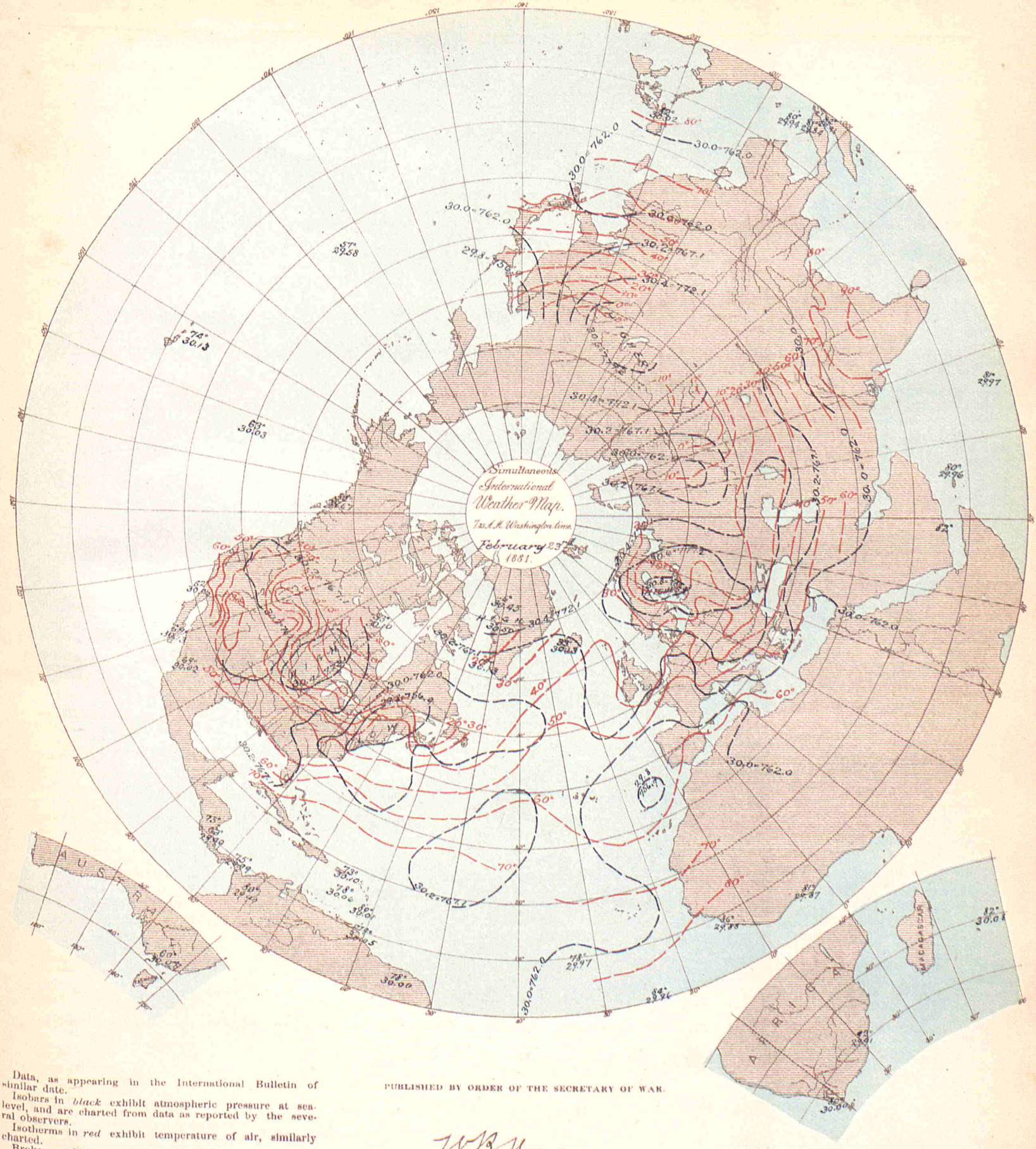
PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 24, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature.		Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Velocity.		Force	Clouds. Amount and kind.		Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.77	756.2	57.9	14.4	85	SW			2		10			0.945	24.0	Covered	Dr. Ollive.
Nemours			29.79	756.6	63.9	17.7	82	S			5					Inap.	Inap.	Cloudy	Raynard.
Algiers			29.88	759.0	59.4	15.2	66	WSW			1		2			0	0	Fair	Nicolas.
La Calle			29.94	760.5	63.3	17.4	59	WSW			4		3			0	0	Pretty fair	Fonfrède.
Tunis			29.99	761.7															Jacques.
Sfax			30.06	763.4															Gau.
Saida			29.86	758.4	62.4	16.9	38	SE			4		0			0	0	Clear	Dumas.
Tebessa			30.03	762.8	54.7	12.6	68	Calm			0		7			0.004	0.1	Very cloudy	Watrin.
Geriville																			Lonchamp.
Laghouat			29.98	761.5	60.4	15.8	41	S			1		1			0	0	Very fair	Herbin.
Biskra																			Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.96	761.0	30.05	763.3	59.7	15.4	68	SSW	14	6.3			9			0.02	0.5	Dull	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania																			Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.80	757.0	30.39	771.9	31.3	— 0.4	72	Calm			0		6			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.56	750.7	30.37	771.3	32.0	0.0	85	NE	3.1	1.4			0			0	0		Dr. Wiersbicki.
Eperies	29.45	747.9	30.37	771.4	36.0	2.2	61	Calm			0		0			0	0		Julius Mikolik.
Gratz‡	29.04	737.7	30.37	771.3	33.8	1.0	72	SW			3		0			0	0		Andreas Rospini.
Hermannstadt	28.91	734.2	30.45	773.3	26.4	— 3.1	85	E			2		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.80	731.4	30.20	767.1	34.5	1.4	74	Calm			0		0			0	0		The Staff.
Lemberg	29.35	745.4	30.39	772.0	32.7	0.4	39	SE			2		0			0	0		Dr. T. Stanecki.
Pola	30.18	766.6	30.30	769.6	44.2	6.8	41	ESE			2		0			0	0		I. R. Hydrographic Office.
Szathmar	29.97	761.3	30.43	772.9	32.7	0.4	80	N			2		0			0	0	Dense fog	Beicht Peter, S. J.
Szegedin	30.11	764.9	30.42	772.6	27.3	— 2.6		E			1		7			0	0		Karl Stancel.
Trieste	30.17	766.4	30.28	769.0	43.3	6.3	39	E			1		0			0	0	Clear	P. Busin.
Vienna	29.58	751.4	30.35	770.8	34.9	1.6	56	SE			4		0			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	30.00	761.9	30.21	767.2	38.8	3.8	100	NNE			1		10			0.020	0.5	Heavy fog	Royal Observatory.
Furnes	30.19	766.8	30.21	767.4	41.7	5.4	82	NNE			4		10			0.008	0.2	Light rain	M. E. de Cae.
Maeseyck	30.07	763.8	30.20	767.0	37.0	2.8	98	W			2		10			0	0	Foggy	M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 25, 1882.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.22	767.6	30.33	770 4	39.0	3.9	75	NW	11	4.9			7			0.025	0.64	D. clouds	W. Boswell.
Armagh, Observatory	30.18	766.6	30.42	772.7	40.2	4.6	80	NE	3	1.3			1					D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.37	771.4	36.3	2.4	78	NNE	3	1.3			2?					Raining	John Hartnup.
Bolton, Sharples	29.79	756.7	30.35	770.9	37.1	2.8	59	NNE					6					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.91	759.7	30.31	769.9	37.0	2.8	73	NE			1		9			0	0	Overcast	J McLandsborough, F.R.S
Bridgetown, Barbadoes	29.97	761.2	30.00	762.0	82	27.8	65				2		2					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			30.29	769.4	40.0	4.4	82	NE			0.6		10					Overcast	John McLaren.
Chatham, School M. E.	30.15	765.8	30.28	769.1	36.5	2.5	92	NE			2		10			Blank		Overcast	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	30.05	763.3	30.28	769.1	38.0	3.3	72	NNE			3		9					Foggy	The Staff.
Fort Napier, Natal	27.62	701.5	29.83	757.7	71.4	21.9	99	NE			1		8					Overcast	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.63	752.6	29.87	758.7	85	29.4	83	SW			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			30.36	771.1				N			6		7					D. clouds	J. O'Donaghadue.
Gibraltar, Mediterranean	29.72	754.9	29.77	756.1	59.4	15.2	93	WSW			3		8					Gloomy	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.15	765.8	30.35	770.9	40.2	4.6	58	W			2							Blue sky	D. G. MacLean.
Greenwich, Royal Obs'y	30.11	764.8	30.29	769.4	37.3	2.9	80	NE			1		10					Overcast	The Staff.
Guernsey	29.95	761.0	30.18	766.6	41.5	5.3	91	NE			4		10					Overcast	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.26	768.6	30.30	769.6	38.2	3.4	67	NNE	14	6.3			9					D. clouds	The Met'g'l Office.
Leicester, Museum	29.87	758.7	30.14	765.5	37.6	3.1	52	NE			2		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.96	761.0	30.03	762.7	57.2	14.0	73	NE			4		8					Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas	30.13	765.3	30.18	766.6	68.0	20.0	62	N			3		5					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.80	756.9	30.35	770.9	37.5	3.1	60	NNE			2		9					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	30.08	764.0	30.33	770.4	37.5	3.1	67	NNE			2		10					Overcast	The Staff.
Plymouth	30.19	766.8	30.26	768.6	40.9	4.9	66	NE			4		7					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			30.28	769.1	40.6	4.8	85	NW	10	4.5			9					D. clouds	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.22	767.6	30.29	769.4	40.0	4.4	79	NE			2		10					Gloomy	Serg't W. H. Lyne.
Sheffield	30.07	763.8	30.37	771.4	38.6	3.7	70	NE			1		10					Rain & snow	W. F. Cooper.
Silloth Rectory	30.34	770.6	30.37	771.4	42.5	5.8	69	Calm			0		0			0	0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.35	770.9	37.5	3.1	51	NE	4	1.8			8					D. clouds	Rev. S. J. Perry.
Strathfield Turgiss	30.08	764.0	30.30	769.6	39.4	4.1	69	NE			2		9					D. clouds	Rev. C. H. Griffith, F. M. S.
Truro, Royal Institution	30.20	767.1	30.28	769.1	43	6.1	67	NE			4		6					D. clouds	W. Newcombe.
Valencia, Observatory	30.37	771.4	30.40	772.1	40.8	4.9	60	NE	16	7.2			1					Misty	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.38	746.2	29.43	747.5	22	— 5.6	96	NW	14	6.3			10n			0.175	4.45	Light snow.	H. J. Cundall, C. E.
Chatham, N. B.*	29.53	750.0	29.59	751.6	5	—15.0	88	W	3	1.3		2k	8ks	W	S	0.24	6.1	Cloudy	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.90	759.4	29.92	760.0	—12	—24.4	74	NW	25	11.2			10n		Calm	0.22	5.6	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	28.95	735.6	29.86	758.4	7	—13.9	95	NW	5	2.2			10n		NW	0.040	1.02	Cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.33	745.0	29.46	748.3	31	— 0.6	98	W	12	5.4			10n			0.226	5.74	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.01	762.2	30.38	771.6	—12	—24.4	80	NW	1	0.4		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.06	763.5	30.29	769.4	—15	—26.1	100	W	9	4.0		0	0			0.05	1.3	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.57	751.1	30.40	772.1	—24	—31.1	48	Calm	0	0		2k	2ks	W	W	0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.62	752.3	30.43	772.9	— 9	—22.8	100	NW	1	0.4		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	29.68	753.9	30.43	772.9	—11	—23.9	100	NE	1	0.4		0	2s		NW	0	0	Clear	M. Payne.
Quebec, Quebec*	29.74	755.4	30.12	765.0	—20	—28.9	66	N			5	0	0			0.10	2.5	Clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.83	757.7	30.40	772.1	—31	—35.0	100	W	1	0.4		0	0			0	0	Clear	K. Stewart.
Saugeen, Ontario*	29.55	750.6	30.36	771.1	2	—16.7	78	SW	8	3.6		5cs	0			0	0	Fair	W. H. McIntyre.
St. Andrews	29.69	754.1	29.74	755.4	3	—16.1	76	NW	12	5.4		0	0			0.26	6.6	Clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.52	749.8	29.56	750.8	32	0.0	95	SE	12	5.4			10n			0.04	1.0	Light snow	T. C. Hill, C. E.
Toronto, Ontario*	29.98	761.5	30.42	772.7	— 7	—21.7	100	NW	4	1.8		0	0			0	0	Clear	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.64	752.8	29.71	754.6	14	—10.0	84	N	28	12.5			10s			0.44	11.2	Light snow	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.54	750.3	29.80	756.9	32	0.0	100	SW	2	0.9			10n			0	0		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't

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

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

Beaufort West, Cape Colony																			
Cape St. Francis Lt. House	30.02	762.5			69.0	20.6	88	SE	15.8	7.1			10s			0	0	Overcast	John Duthie.
Cape Town, C. G. H. Obs'y	29.94	760.5	29.98	761.5	77.5	25.3	59	N	17.0	7.6		0	2k			0	0		The Staff, for D. Gill.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.26	768.6	30.28	769.2	35.6	2.0	82	N	4.0	1.8			10			0.465	11.8	Covered	M. Marc Dechevrens, S. J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	25.26	667.0	29.98	751.5	60.4	15.8	87	SE			1		0			0	0	Clear	Federico Maison.

DANISH SERIES.

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

Copenhagen	30.15	765.8	30.20	767.0	30.0	—1.1	92	E	11	5			0						Oversergent Fischer.
Fanöe	30.13	765.4	30.15	765.9	29.8	—1.2	96	Calm			0		0						Overloerer Lauridsen.
Godthaab, Greenland	29.79	756.7	29.84	757.8	35.2	1.8	62	ENE			2		10						S. Kleinschmidt.
Stykkisholm, Iceland	30.50	774.6	30.54	775.7	19.4	—7.0	89	E			2		2						A. O. Thorlacius.
Thorshavn	30.14	765.5	30.17	766.4	43.2	6.2	88	SSW	9	4			10					Rain & fog	Overloerer Bergh.
Vestervig	30.07	763.8	30.17	766.2	28.2	—2.1		NE			4		10						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.36	745.8	30.00	762.0	57.2	14	58	SSE			2	clr		NW	NW	0	0		M. Labroue, Director.
Alençon	29.68	753.9	30.23	767.9	39.9	4.4	93	NW			3		10		NE	0	0	Misty	M. Nicot, Director.
Arras, Engineer School	29.94	760.4	30.21	767.2	39.2	4.0	97	NE			2		10					Covered	M. Klein, Commandant.
Avignon, Normal School	30.09	764.2	30.17	766.2	59.4	15.2	45	NNE			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.58	751.3	30.13	765.4	56.1	13.4	56	E			1		0			0	0	Clear	M. Saillard, Director.
Beauvais, Normal School	29.93	750.3	30.21	767.3	43.0	6.1	91	NE			1		10			0	0	Misty	M. Frère Eugene Marie.
Besançon, Normal School	29.28	743.6	30.18	766.6	52.9	11.6	63	WNW			1		0			0	0	Clear	M. Gobin, Director.
Bordeaux, Observatory	29.75	755.6	30.01	762.2	56.8	13.8	63	SSE			3		8		SSE	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.54	750.2	30.09	764.2	54.3	12.4	56	ENE			1				ENE	0	0		M. Postel, Director.
Brest, Naval Observatory	29.90	759.4	30.14	765.6	45.3	7.4	94	NE			2		10		NE	0.079	2.00		M. de Rermaree, Dir.
Caen, Normal School	30.00	762.1	30.08	764 1	46.6	8.1	72	NE					10			0	0	Covered	M. Bietrix, Director.
Châlons-sur-Marne, N.Sch'l	29.84	757.8	30.16	766.0	53.2	11.8	83	S			1		0			0	0	Clear	M. Jadot, Director.
Charleville, Normal School	29.63	752.5	30.15	765.9	53.6	12.0	59	WSW			1		0			0	0	Clear	M. Grimard.
Clermont-Ferrand Obs'y	28.71	729.3	30.07	763.7	55.8	13.2	48	E			1		0			0	0	Clear	M. Alluard, Director.
Cluny, Normal School	29.30	744.1	30.14	765.6	59.4	15.2	62	E			2		0			0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.28	743.8	30.16	766.0	49.1	9.5	83	SE			1	clr		SE	SE	0	0		Dr. Coulet, Director.
Gap, Normal School	27.62	701.6	30.20	767.1	45.5	7.5	37	E			1		5		S	0	0	½ covered	M. Jeanglrard, Director.
Gréasque, du. Rhone	29.07	738.3	30.21	767.3	57.7	14.3	37	E			1		5		E	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.37	746.0	30.15	765.7	52.3	11.3	54	SW			1		0			0	0	Clear	M. Ablard, Director.
Guéret, Normal School	28.54	724.8	30.13	765.4	53.6	12	56	SW			1	2c				0	0	Slightly cl'dy	M. Rivoir, Director.
Lamballe, Normal School	29.89	759.3	30.18	766.5	43.5	6.4	97	NNE			2		Fg		NNE	0.063	1.6	Foggy	M. Ollitrault, Director.
Lescar, Normal School	29.40	746.8	30.06	763.5	62.6	17	80	E			1		2			0	0	Slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	30.02	762.6	30.13	765.2	51.1	10.6	86	NE			2		5		NE	0.20	5.	½ covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	29.08	738.6	30.10	764.6	55.4	13.0	38	SSE			1		k			0	0	Clear	M. André, Director.
Mans, Normal School	29.85	758.1	30.19	766.9	44.1	6.7	89	NE			3		2		E	0	0	Slightly cl'dy	M. Piboeu, Director.
Marseille, Observatory	29.87	758.7	30.14	765.6	60.4	15.8	39	SE			1		4		SE	0	0		M. Stephan, Director.
Montlouis l'Instituteur																			M. Cave, for Dr. Fines.
Montpellier, Normal School	30.06	763.4	30.17	766.2	56.8	13.8	67	SE			2		2		S	0	0	Slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	29.37	746.0	30.15	765.8	48.2	9.0	57	WNW			1	5c		NE		0	0	Foggy	M. Hasse.
Nantes, Observatory	29.97	761.2	30.13	765.4	58.3	14.6	70	N			1		0			0	0	Misty	M. Larocque, Director.
Nice	30.14	765.6	30.17	766.4	55.8	13.2	62	SE			3		5	SE	SE	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.98	761.6	30.09	764.3	52.2	11.2	82	E	11.2	5.0			10		E	0.512	13.0		Dr. Fines.
Pic-du-Midi, Plantade	22.43	569.7			35.6	2.0							5		SE	0	0	Cloudy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	29.11	739.3	30.18	766.6	54.0	12.2	56	Calm			0		2			0	0	Slightly cl'dy	M. Tallieu.
Puy de Dôme O s'y, Summit	25.18	639.5			37.4	3.0	85	ESE			2		2k			0	0	Misty	M. Alluard, Director
Rochefort, Naval Obs'y	30.04	763.1	30.08	763.9	59.5	15.3	60	SE			1		0			0	0	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.88	759.0	30.10	764.4	57.2	14	65	ENE			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.91	708.9	30.08	763.9	50.0	10.0	54	E			2		4k		E	0	0		M. Richard, Director.
Rouen, Normal School	30.08	764.0	30.17	766.2	43.9	6.6	91	NE			1		5		N	0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.05	763.3	30.21	767.3	41.9	5.5	97	E			1		10			0	0	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.00	762.1	30.17	766.3	42.4	5.8	95	NE			2		10		NNE	0.008	0.2		M. Renou, Director.
Toulouse, Observatory	29.34	745.1	30.06	763.5	53.8	12.1	73	SSE			6		8	SSE		0	0	Very cloudy	M. Baillaud, Director.
Tours	29.87	758.8	30.07	763.8	52.5	11.4	71	ENE			2		0			0	0	Clear	M. de Tastes.
Versailles, Observatory	29.67	753.5	30.16	766.0	40.6	4.8	100	N			1		10			0.007	0.17	Covered	Dr. A. Bérigny, Director
Sun-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

GERMAN SERIES.

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

Bamberg	29.27	743.5	30.14	765.5	40.3	4.6	55	SE			3		2s			0	0		Prof. Dr. Hoh.
Berlin	29.99	761.8	30.17	766.4	39.9	4.4	64	SE			3		0			0	0		Prof. Dr. Arndt.
Breslau	29.76	755.8	30.29	769.4	36.7	2.6	55	SE			2		0			0	0		Royal University Obs'y.
Carlsruhe	29.72	755.0	30.17	766.4	34.9	1.6	97	SW			0		10			0	0	Foggy	Albert Senz.
Cassel	29.50	749.3	30.11	764.7	43.2	6.2	65	SE			2		3	NW		0	0		Dr. H. Möhl.
Frankfort on the Main	29.85	758.1	30.23	767.8	41.4	5.2	71	SE			1		1			0	0		Physical Society.
Friedrichshafen	28.69	728.8	30.19	766.7	37.4	3.0	90	SW			2		10			0	0	Dense fog	Chief Telegrapher Wilhelm.
Hamburg	30.07	763.8	30.14	765.6	36.0	2.2	84	SE			3		0			0	0		Dr. R. Kleeman.
Kiel	30.12	765.0	30.13	765.4	32.4	0.2	78	E			1		0			0.004	0.10		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.73	755.2	30.17	766.3	40.6	4.8	56	SE			2		4			0	0		Prof. Dr. Bruhns.
Magdeburg	29.90	759.5	30.13	765.4	37.2	2.9	74	SE			2		10s	SE		0	0	Foggy	Dr. Assmann.
Memel	30.38	771.7	30.43	772.9	30.4	—0.9	71	SE			3		10n						Reinbrecht & Issermann.
Munich	28.29	718.5	30.16	766.0	41.5	5.3	66	N			1		5	N		0	0		Central Station.
Neufahrwasser	30.34	770.6	30.35	771.0	30.6	—0.8	77	S			2		1			0	0		A Lothes.
Neustadt, Palatinate	29.60	751.8	30.13	765.2	34.9	1.6	95									0	0		Dicknether.
Stuttgart	29.17	741.0	30.11	764.7	35.2	1.8	95	E			1		10			0	0	Foggy	Prof. Dr. Schoder.
Thorn	30.11	764.7	30.30	769.5	36.0	2.2	54	SE			2		0			0	0		Dr. O. Cumerth.
Weissenburg, Bavaria	28.59	726.1	30.11	764.7	43.0	6.1	65	S			2		6	W		0	0		Prof. Kemlein.
Wustrow	30.16	766.1	30.19	766.8	33.8	1.0	100	E			2		3s			0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r.	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.82	757.4	30.22	767.6	44.8	7.1		NE			5.0		5					½ clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.81	757.3	29.86	758.6	78.0	25.6	77	WSW	19.0	8.5			4	WSW		0	0	D. clouds	
Deesa	29.41	747.1	29.88	759.1	84.3	29.1	42	W	8.8	3.9			4	W	W	0	0	D. clouds	
Bombay	29.90	759.4	29.94	760.4	81.0	27.2	76	NW	19.0	8.5			0			0	0	Blue sky	
Poona, Yarrowda	28.04	712.2	29.87	758.7	86.0	30.0	21	W	18.0	8.0			0			0	0	Blue sky	
Belgaum	27.37	695.1	29.88	758.9	82.2	27.9	43	SW	8.0	3.6			1		N	0	0	D. clouds	
Lahore	29.14	740.2	29.91	759.6	67.7	19.8	70	NE	2.9	1.3			10			0.21	5.3	Overcast	
Roorkee	28.95	735.6	29.88	758.9	71.8	22.1	67	Calm	3.0	1.3			7			0	0		
Agra	29.30	744.1	29.87	758.7	71.3	21.8	33	N	4.5	2.0			8		N			Thd'r storm	
Nagpur	28.90	734.0	29.92	760.0	92.7	33.7	24	Calm	3.2	1.4			8		W	0	0	D. clouds	
Jubbulpore	28.52	724.5	29.89	759.2	80.6	27.0	41	W	2.9	1.3			0			0	0	Blue sky	
Lucknow	29.50	749.3	29.88	758.9	80.2	26.8	43	NNE	1.0	0.4			4	ESE		0	0	D. clouds	
Allahabad	29.52	749.7	29.83	757.6	84.7	29.3	38	N	1.6	0.7			2			0	0	D. clouds	
Patna	29.78	756.4	29.96	761.0	81.1	27.3	70	W	0.9	0.4			6	W	W	0	0	D. clouds	
Hazaribagh	27.84	707.2	29.85	758.2	78.3	25.7	42	NNW	7.3	3.3			1			0	0	D. clouds	
Cuttack	29.78	756.3	29.85	758.2	87.3	30.7	32	S	1.3	0.6			1			0	0	D. clouds	
Calcutta, Alipore	29.82	757.4	29.84	757.9	84.7	29.3	44	WSW	2.0	0.9			1		W	0	0	D. clouds	
Goalpara	29.38	746.3	29.79	756.6	77.9	25.5	44	W	4.4	2.0			0			0	0	Blue sky	
Chittagong	29.86	758.3	29.95	760.7	78.8	26.0	60	SW	4.0	1.8			1			0	0	Blue sky	
Sibsagar	29.56	750.8	29.91	759.6	63.5	17.5	93	NE	4.4	2.0			10	W	W	0.52	13.2	Gloomy	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.84	758.0	30.26	768.7	42.8	6.0	29	E	1.8	0.8			1			0	0		Prof. Giovanni Clodig
Milan	29.71	754.5	30.24	768.0	46.9	8.3	61	ENE	3.1	1.4			4			0	0		Prof. Schiaparelli.
Padua	30.16	766.0	30.27	768.9	43.0	6.1	61	ENE	5.6	2.5			7	E		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.29	744.0	30.22	767.5	45.0	7.2	62	ESE	2.5	1.1			1			0	0		Prof. P. F. Denza.
Genoa	30.01	762.3	30.21	767.3	50.9	10.5	31	N	5.6	2.5			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.27	718.0	30.26	768.5	41.5	5.3	62	NNW			2		1			0	0		Prof. D. C. Bruno.
Pesaro	30.22	767.5	30.27	768.8	41.0	5.0	81	NW	11.9	5.3			10	SE		0	0		Prof. Luigi Guidi.
Florence	29.93	760.1	30.19	766.7	50.9	10.5	33	NE			2		1			0	0		Cav. F. Meucci.
Leghorn	30.10	764.4	30.18	766.6	52.5	11.4	45	ENE	11.2	5.0			3			0	0		Prof. P. Monte.
Rome	30.03	762.8	30.21	767.3	54.7	12.6	44	Calm	0	0			1			0	0		Prof. P. S. Ferrari.
Lecce	29.94	760.5	30.20	767.1	49.6	9.8	60	SSW	0.7	0.3			7			0	0		Prof. C. de Giorgi.
Cosenza	29.26	743.3	30.17	766.4	50.0	10.0	68	NNE	1.3	0.6			9	NE		0	0		Prof. D. Conti.
Cagliari	29.84	758.0	30.04	762.9	59.7	15.4	62	ESE			2		9	SE		0.098	2.5		Prof. A. Palmotti.
Palermo	29.86	758.5	30.11	764.9	55.8	13.2	45	E	9.4	4.2			3			0	0		Prof. G. Ciaccatore.
Syracuse	30.05	763.2	30.09	764.3	54.0	12.2	65	E	17.4	7.8			10	ENE		0.016	0.4		Prof. Vincenzo Guillano
Sub-Series.																			
Naples, S. R	29.63	752.5	30.16	766.1	53.1	11.7	46	ESE	1.3	0.6			0			0	0		Prof. F. Brioschi.
Stelvio	22.19	563.6			24.6	— 4.1	47	ENE			4		0			0	0	Misty	P. F. Denza.
Valdobbia	22.18	563.3			23.4	— 4.8	66	E			2	2ck	0	WNW		0	0	Misty	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y	30.01	762.2	30.02	762.5	46.3	7.9	75	NNE	14.2	6.3			1k;ck			0.133	3.38	Fair	K. Sasaki.
Kioto	29.78	756.4	29.96	761.0	49.1	9.5	98						10n			0.510	12.95	Raining	M. Tojima.
Nagasaki, I. M. Obs'y	29.81	757.2	30.02	762.5	47.8	8.8	88	N	1.4	5.1			18			0.125	3.17	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.71	754.6	29.77	756.1	60.8	16.0	90	SSW	16.1	7.2			10s			0.041	1.14	Cloudy	The Staff.
Wakayama	29.83	757.7	29.88	758.9	53.9	12.2	89	NNE	10.6	4.7		ck	10s			0.431	10.95	Cloudy	Y. Kuwamuen.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.87	758.7	30.05	763.3	81.9	27.7	64	E	21.5	9.6		0	5		ESE	0.02	0.5	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	25.54	623.2	30.31	769.9	54.1	12.3	83	W			1	0	0			0	0	Fine	Prof. M. Leal.
Mazatlan	29.78	756.5	30.05	763.2	70.0	21.1	82	E	1.8	0.8		0	0			0	0		F. Quijano, C. E.
Mexico, Central Obs'y	23.17	588.5	30.30	769.6	45.5	7.5	83	Calm	0	0		0	0			0.020	0.5	Fine	The Staff.
Pabellon, Aguascalientes	24.00	609.5	30.11	764.7	50.0	10.0	78	Calm				0	0			0	0	Fine	M. Y. de Leon, M. E.
Puebla, Catholic Institute	23.43	595.2	30.34	770.5	44.8	7.1	50	Calm	0	0					E	0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.21	615.0	30.23	767.8	45.2	7.3	62	ESE	0.9	0.4		1	0	W		0	0	Clear	G. Barreeta, M. D.
Tlacotalpam	30.14	765.6	30.16	765.9	66.6	19.2	90					3	5	NE	N	0	0	Very cloudy	Prof. M. Cházaro.
Zacatecas	22.64	575.1	30.36	771.3	50.7	10.4		Calm	0	0		0	0			0	0	Fine	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.24	768.0	30.24	768.0	41.4	5.2		NNE			3					0	0		
Groningen	30.12	765.0	30.17	766.4	36.3	2.4		N			2					0	0		
Helder	30.21	767.4	30.21	767.4	36.9	2.7		N			4					0	0		
Hellevoetsluis	30.22	767.7	30.22	767.7	40.6	4.8	92	N			2					0	0		
Utrecht	30.17	766.3	30.22	767.5	38.1	3.4	92	N			2		10			0.606	0.2	Dull	H. van der Brink

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Tempera-ture of the Air.		Rel. Hum.	Wind. Direc-tion.	Wind. Velocity.		Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.18	766.5	30.24	768.1	34.5	1.4	96	Calm	0	0	.....	.....	10	.....	.....	0.031	0.8	Light snow..	
Christiania	30.13	765.3	30.29	769.3	23.5	— 4.7	79	SE	4	2	.....	.....	10	.....	.....	0.031	0.8	Snowing.....	
Gjæsvær	29.91	759.7	29.93	760.3	29.1	— 1.6	.....	NE	.....	.....	4	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.96	761.0	30.03	762.0	29.5	— 1.4	74	Calm	.....	.....	0	.....	10	.....	.....	0.051	1.3	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. J. A. Sampaio.
Campo Major	28.83	732.3	29.83	757.6	57.2	14.0	63	ENE	8.0	3.6	.....	.....	8	.....	.....	0	0	.....	Dr. A. M. R. dos Santos
Funchal, Madeira	29.74	755.3	29.82	757.5	55.9	13.3	77	N	1.3	0.6	.....	.....	10	.....	.....	0.094	2.4	Raining	Capt. D. A. de Cunha.
Lisbon, Observatory	29.48	748.9	29.53	750.1	55.2	12.9	77	NE	18.1	8.1	.....	.....	4	WSW	.....	0.008	0.2	.....	The Staff.
Ponta Delgada, Azores	30.12	765.0	30.19	766.8	56.8	13.8	67	N	2.5	1.1	.....	.....	3	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.72	729.4	29.89	759.2	7.2	—13.8	100	SSW	56	25	.....	.....	10	.....	.....	Bla	nk	.....	Capt. Lasarew.
Archangel	30.07	763.7	30.09	764.2	15.4	— 9.2	91	W	4	2	.....	.....	4ks	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	30.49	774.5	30.41	772.4	14.9	— 9.5	74	NNW	7	3	.....	.....	10cp	.....	.....	Bla	nk	Heavy cl'ds	Capt. Wisganow.
Barnaul ‡	29.59	751.5	30.14	765.6	0.5	—17.5	70	SW	2	1	.....	.....	2	.....	.....	.....	.....	.....	Meeorological Obs'y.
Dorpat	30.26	768.7	30.53	775.5	11.5	—11.4	85	ESE	7	3	.....	.....	0	.....	.....	.....	.....	.....	Obervatory.
Ekaterinburg	28.57	725.6	29.59	751.6	14.7	— 9.6	78	W	13	6	.....	.....	10	.....	.....	.....	.....	Snowing.....	Meteorological Obs'y.
Kasan	29.84	757.9	30.13	765.3	17.1	— 8.3	80	W	20	9	.....	.....	8	.....	.....	.....	.....	.....	Observatory.
Kertch	30.39	771.8	30.41	772.3	18.5	— 7.5	89	ENE	7	3	.....	.....	9	.....	.....	.....	.....	.....	Lagorio.
Kieff	29.83	757.7	30.53	775.5	15.8	— 9.0	75	NNE	4	2	.....	.....	0	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	30.19	766.9	30.42	772.6	16.3	— 8.7	69	ENE	13	6	.....	.....	10	.....	.....	Bla	nk	.....	Meteorological Obs'y.
Moscow	30.01	762.2	30.61	777.6	14.4	— 9.8	84	NE	4	2	.....	.....	10s	.....	.....	.....	.....	Light snow..	Meteorological Obs'y.
Nertchinsk	27.89	708.3	30.56	776.1	—18.4	—28.0	69	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	30.42	772.7	30.49	774.5	22.6	— 5.2	74	NNE	9	4	.....	.....	4cs	.....	.....	.....	.....	Light clouds	1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.67	753.7	29.76	755.9	—11.6	—24.2	50	Calm	0	0	.....	.....	1k	.....	.....	.....	.....	.....	Lieut. Iwanow.
Nukuss	30.06	763.4	30.30	769.7	28.0	— 2.2	79	W	2.2	1.0	.....	.....	10ku	.....	.....	.....	.....	.....	Dr. Dobrochotow.
Pekin, China	30.28	769.1	30.42	772.7	27.0	— 2.8	51	Calm	0	0	.....	.....	2k	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	30.52	775.1	30.53	775.5	18.9	— 7.3	61	SSE	7	3	.....	.....	0	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.60	726.4	30.26	768.7	30.6	— 0.8	92	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.80	731.5	30.28	769.1	37.6	3.1	45	SE	2	1	.....	.....	1c	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.95	760.7	30.49	772.2	26.6	— 3.0	63	SE	11	5	.....	10	.....	.....	.....	.....	.....	Light clouds	Astronomical Obs'y.
Wilna	30.09	764.2	30.54	775.6	28.2	— 2.1	58	SSE	2	1	.....	.....	3	.....	.....	.....	.....	Light clouds	Berg, Assistant.
Yeniseisk	29.91	759.8	30.24	768.0	— 5.6	—20.9	81	SE	4	2	.....	.....	0	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	30.36	771.1	49.0	4.4	64	W	.....	.....	2	.....	7k	NE	.....	0	0	Light clouds	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.29	769.4	45	7.2	92	W	.....	.....	3	10	5	NW	.....	0	0	Cloudy.....	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	30.21	767.3	.....	.....	.....	NW	.....	.....	4	5	7	NNW	.....	0	0	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.91	759.8	30.02	762.6	54.7	12.6	89	E	5.4	2.4	.....	.....	9	.....	.....	0.907	23.03	Raining	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.94	760.4	29.99	761.8	64.9	18.3	52	SE	4.0	1.8	.....	2	7	NW	.....	0	0	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.98	685.4	.....	.....	46.8	8.2	83	NE	5.4	2.4	.....	0	9	.....	.....	0	0	Almost cov'd	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.69	703.3	29.91	759.7	56.7	13.7	61	NE	6.0	2.7	.....	0	9	.....	.....	0.075	1.9	Very cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.78	756.3	29.93	760.1	61.9	16.6	70	ENE	5.8	2.6	.....	3	5	SW	.....	0	0	Cloudy.....	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.95	735.2	29.82	757.5	60.6	15.9	61	SE	11.2	5.0	.....	.....	2	.....	.....	0	0	Light clouds	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	30.11	764.7	30.17	766.4	67.7	19.8	50	NNE	6.3	2.8	.....	0	0	.....	.....	0	0	Clear.....	Benito Vines, S. J.
Manilla, Philippine Islands	29.97	761.1	30.02	762.4	80.6	27.0	60	ESE	6.6	3.0	.....	.....	.....	.....	.....	0	0	Fair.....	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.68	753.8	29.78	756.3	61.7	16.5	65	ESE	21.3	9.5	.....	0	8	.....	E	0.045	1.1	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.00	762.0	30.09	764.3	71.6	22.0	94	SW	0	0	.....	20s	0	E	.....	0	0	Clear	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.90	759.4	30.04	763.1	79.9	26.6	74	S	2.3	1.0	.....	.....	.....	.....	.....	0	0	Fair...	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.16	766.0	30.20	767.0	14.4	— 9.8	100	S	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	30.20	767.1	30.25	768.4	20.5	— 6.4	90	SW	.....	.....	2	.....	10	.....	.....	0	0	.....	
Hernosand	30.25	768.4	30.30	769.7	18.9	— 7.3	87	S	.....	.....	2	.....	5	.....	.....	0	0	.....	
Stockholm	30.11	764.9	30.29	769.4	30.2	— 1.0	80	S	.....	.....	2	.....	9	.....	.....	0	0	.....	
Wisby	30.19	766.9	30.25	768.4	33.8	1.0	85	S	.....	.....	2	.....	5	.....	.....	0	0	.....	
SUB-SERIES.																			
Upsala	30.19	766.9	30.28	769.1	25.9	— 3.4	89	SSW	6.3	2.8	.....	.....	10	.....	.....	0	0	.....	Nils Ekholm.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.71	729.2	30.16	765.0	46.0	7.8	59	N	.....	.....	2	.....	1	.....	.....	0	0	Clear.....	The Observatory.
Zurich	28.48	723.5	30.15	765.9	44.6	7.0	55	W	.....	.....	1	.....	3	.....	.....	0.008	0.2	Clear.....	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. +3.4 mm.; Ther. +2°.9 cent.; Hum. —9 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.36	771.1	38.8	3.8	80	NE	22	10.0	.....	.....	10	.....	N	0	0	.....	The Observatory.
Valona	.....	.....	30.14	765.6	54.3	12.4	.....	NW	.....	.....	1	.....	10	.....	.....	0	0	Covered.....	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.95	760.7	49.1	9.5	92	SE	.....	.....	1	.....	10n	.....	SW	0.503	12.83	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	† OBSERVERS.
Albany, New York	30.21	767.3	30.30	769.6	2	—16.7	44	W	10	4.5	.....	0	0	.....	.....	0.11	2.8	Clear	
Alpena, Michigan	29.62	752.3	30.40	772.1	—25	—31.7	54	W	2	0.9	.....	0	0	.....	.....	0.02	0.5	Clear	
Atlanta, Georgia	29.03	737.3	30.23	767.8	36	2.2	62	NW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Atlantic City, New Jersey	30.29	769.4	30.31	769.9	13	—10.6	61	NW	15	6.7	.....	0	0	.....	.....	0.04	1.0	Clear	
Attou Id', Alaska ‡	29.66	753.4	.....	.....	32	0.0	79	NE	3	1.3	.....	0	5s	.....	N	0.06	1.5	Fair	
Augusta, Georgia	30.06	763.5	30.27	768.8	42	5.6	74	W	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Baltimore, Maryland	30.30	769.6	30.35	770.9	16	— 8.9	66	NW	14	6.3	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Barnegat, New Jersey	30.24	768.1	30.27	768.8	11	—11.7	60	NW	19	8.5	.....	0	0	.....	.....	0.03	0.8	Clear	
Benton, Montana	27.00	685.8	.....	.....	32	0.0	79	W	5	2.2	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Bismarck, Dakota	27.96	710.2	29.81	757.2	22	— 5.6	86	NW	26	11.6	.....	0	1s	.....	Calm	0.04	1.0	Clear	
Boise City, Idaho	27.26	692.4	30.22	767.6	33	0.6	79	NE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Boston, Massachusetts	29.90	759.4	30.08	764.0	3	—16.1	73	NW	23	10.3	.....	0	0	.....	.....	0.02	0.5	Clear	
Brackettville, Texas	28.91	734.3	29.98	761.5	51	10.6	93	E	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Brownsville, Texas	30.05	763.3	30.10	764.5	58	14.4	94	SE	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Buffalo, New York	29.61	752.1	30.42	772.7	— 5	—20.6	63	SW	4	1.8	.....	.....	10s	.....	W	Inap.	Inap.	Cloudy	
Burlington, Vermont	29.98	761.5	30.31	769.9	—10	—23.3	54	N	11	4.9	.....	0	0	.....	.....	0.01	0.3	Clear	
Cairo, Illinois	29.85	758.2	30.28	769.1	28	— 2.2	66	SE	12	5.4	.....	10ck	0	Calm	.....	0	0	Cloudy	
Campo, California	27.53	699.2	30.10	764.5	30	— 1.1	68	S	4	1.8	.....	5c	0	W	.....	0	0	Fair	
Camp Thomas, Arizona	27.31	693.7	.....	.....	33	0.6	79	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	30.28	769.1	30.30	769.6	26	— 3.3	75	N	32	14.3	.....	0	0	.....	.....	0	0	Clear	
Cape May, New Jersey	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Castroville, Texas	29.33	745.0	30.04	763.0	54	12.2	93	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Threatening	
Cedar Keys, Florida	30.19	766.8	30.22	767.6	53	11.7	86	NW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Champaign, Illinois	29.32	744.7	30.20	767.1	14	—10.0	63	SE	10	4.5	.....	.....	10s	.....	SE	0	0	Cloudy	
Charleston, S. Carolina	30.21	767.3	30.27	768.8	45	7.2	53	NE	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Charlotte, N. Carolina	29.38	746.2	30.24	768.1	34	1.1	70	E	5	2.2	.....	0	Fg	.....	.....	0	0	Clear	
Chattanooga, Tennessee	29.43	747.5	30.29	769.4	32	0.0	69	Calm	0	0	.....	0	Sk	.....	Calm	0	0	Clear	
Cheyenne, Wyoming	23.98	609.1	29.92	760.0	38	3.3	63	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Chicago, Illinois	29.48	748.8	30.24	768.1	11	—11.7	40	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Chincoteague, Virginia	30.30	769.6	30.32	770.1	18	— 7.8	68	NW	20	8.9	.....	1k	0	NW	.....	0	0	Clear	
Cincinnati, Ohio	29.63	752.6	30.33	770.4	28	— 2.2	77	E	3	1.3	.....	0	8k;fg	.....	Calm	0	0	Clear	
Cleveland, Ohio	29.57	751.1	30.37	771.4	12	—11.1	71	SE	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Coleman City, Texas	28.28	718.3	30.00	762.0	40	4.4	73	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Columbus, Ohio	29.41	747.0	30.32	770.1	18	— 7.8	76	NW	2	0.9	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Concho, Texas	28.12	714.2	29.82	757.4	45	7.2	61	Calm	0	0	.....	2c	0	Calm	.....	0	0	Clear	
Corsicana, Texas	29.68	753.9	30.15	765.8	51	10.6	72	SW	12	5.4	.....	5cs	0	Calm	.....	0	0	Fair	
Davenport, Iowa	29.46	748.3	30.18	766.6	5	—15.0	75	SE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Dayton, Washington T'y	28.23	717.0	29.90	759.4	46	7.8	85	S	2	0.9	.....	0	5ks	.....	Calm	0	0	Fair	
Deadwood, Dakota	25.23	640.8	.....	.....	41	5.0	57	NE	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Decatur, Texas	28.87	733.3	30.07	763.8	40	4.4	56	NW	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Delaware Breakwater, Del.	30.28	769.1	30.30	769.6	20	— 6.7	72	NW	24	10.7	.....	0	2ks	.....	NW	0	0	Clear	
Denison, Texas	29.25	742.9	30.06	763.5	47	8.3	77	SW	8	3.6	.....	0	5s	.....	Calm	0	0	Fair	
Denver, Colorado	24.75	628.6	29.97	761.2	41	5.0	33	W	11	4.9	.....	0	0	.....	.....	0	0	Clear	
Des Moines, Iowa	29.13	739.9	30.08	764.0	13	—10.6	81	S	10	4.5	.....	.....	10s	.....	Calm	0	0	Cloudy	
Detroit, Michigan	29.57	751.1	30.34	770.6	13	—10.6	81	NE	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Dodge City, Kansas	27.33	694.2	29.71	754.6	28	— 2.2	77	SW	5	2.2	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Dubuque, Iowa	29.35	745.5	30.12	765.0	8	—13.3	78	SE	3	1.3	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy	
Duluth, Minnesota	29.26	743.2	30.00	762.0	10	—12.2	89	SW	4	1.8	.....	.....	10n	.....	SW	0.14	3.6	Light snow	
Eagle Pass, Texas	29.32	744.7	30.06	763.5	50	10.0	86	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Eagle Rock, Idaho	25.38	644.0	30.03	762.7	9	—12.8	78	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Eastport, Maine	29.69	754.1	29.76	755.9	2	—16.7	72	NW	22	9.8	.....	2k	0	NW	.....	0.19	4.8	Fair	
Edinburg, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
El Paso, Texas	26.25	666.7	.....	.....	55	12.8	46	NW	2	0.9	.....	2c	0	Calm	.....	0	0	Clear	
Erie, Pennsylvania	29.59	751.6	30.40	772.1	0	—17.8	70	S	5	2.2	.....	Hz	Hz	Calm	Calm	0	0	Light haze	
Escanaba, Michigan	29.47	748.5	30.22	767.6	— 6	—21.1	61	S	.....	.....	1	0	5s	.....	S	0	0	Fair	
Florence, Arizona	28.53	724.6	30.13	765.3	43	6.1	59	Calm	0	0	.....	1c	0	Calm	.....	0	0	Clear	
Fort Apache, New Mexico	25.10	637.5	30.55	776.0	26	— 3.3	63	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Assiniboine, Montana	26.99	685.5	.....	.....	25	— 3.9	75	NE	15	6.7	.....	.....	10ks	.....	NE	0	0	Cloudy	
Fort Bennett, Dakota	28.17	715.5	.....	.....	25	— 3.9	75	NE	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Buford, Dakota	27.95	710.2	29.92	760.0	17	— 8.3	83	W	3	1.3	.....	0	0	.....	.....	0.04	1.0	Clear	
Fort Custer, Montana	26 76	679.7	.....	.....	37	2.8	90	NW	21	9.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Davis, Texas	25.20	640.1	30.16	766.1	45	7.2	61	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Elliott, Texas	27.27	692.6	29.67	753.6	26	— 3.3	52	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Gibson, Indian T'y	29.48	748.8	30.04	763.0	30	— 1.1	78	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Grant, Arizona	25.24	641.1	30.04	763.0	49	9.4	26	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Fort Griffin, Texas	28.71	729.2	30.03	762.7	36	2.2	80	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Keogh, Montana	27.38	695.4	.....	.....	36	2.2	90	W	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort McKavett, Texas	27.79	705.9	29.73	755.1	50	10.0	65	SW	12	5.4	.....	5k	0	SW	.....	0	0	Fair	
Fort Macon, North Carolina	30.23	767.8	30.25	768.3	35	1.7	80	N	15	6.7	.....	2k	Hz	Calm	Calm	0	0	Fair	
Fort St. Michaels	30.05	763.3	30.08	764.0	5	—15.0	100	N	1	0.4	.....	0	0	.....	.....	.....	.....	.....	
Fort Missoula, Montana	26.67	677.4	.....	.....	37	2.8	50	N	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Shaw, Montana	26.23	666.2	.....	.....	29	— 1.7	89	Calm	0	0	.....	.....	Fg	.....	Calm	0.01	0.3	Foggy	
Fort Sill, Indian Territory	28.80	731.5	29.95	761.0	31	— 0.6	79	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Stevenson, Dakota	27.98	710.7	.....	.....	17	— 8.3	83	S	4	1.8	.....	0	0	.....	.....	0.05	1.3	Clear	
Fort Verde, Arizona	.....	.....	.....	.....	33	0.6	51	W	.....	.....	1	0	0	.....	.....	0	0	Clear	
Fredericksburg, Texas	28.36	720.3	29.95	760.7	48	8.9	78	W	4	1.8	.....	9cs	0	W	.....	0	0	Fair	
Galveston, Texas	30.13	765.3	30.17	766.3	56	13 3	87	SW	3	1.3	.....	5ck	0	Calm	.....	0	0	Fair	
Grand Haven, Michigan	29.52	749.8	30.24	768.1	9	—12.8	78	E	3	1.3	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Hatteras, North Carolina	30.22	767.6	30.24	768.1	33	0.6	79	NE	25	11.2	.....	0	0	.....	.....	0.14	3.6	Clear	
Helena, Montana	25.66	651.8	.....	.....	45	7.2	18	S	1	0.4	.....	5k	0	Calm	.....	0	0	Fair	
Henrietta, Texas	29.06	738.1	30.04	763.0	33	0.6	61	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Indianapolis, Indiana	29.40	746.7	30.25	768.3	18.5	— 7.5	76	E	5	2.2	.....	5c	0	Calm	.....	Inap.	Inap.	Fair	
Indianola, Texas	30.11	764.8	30.13	765.3	55	12.8	93	S	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Jacksboro, Texas	28.92	734.6	30.09	764.3	38	3.3	72	W	5	2.2	.....	0	5s	.....	Calm	0	0	Fair	
Jacksonville, Florida	30.18	766.6	30.23	767.8	50	10.0	79	W	3	1.3	.....	0	Fg	.....	.....	0	0	Clear	
Keokuk, Iowa	29.46	748.3	30.17	766.3	11	—11.7	80	SE	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Key West, Florida	30.19	766.8	30.23	767.8	64	17.8	53	NE	18	8.0	.....	0	0	.....	.....	0	0	Clear	
Kittyhawk, North Carolina	30.30	769.6	30.32	770.1	28	— 2.2	66	N	36	16.1	.....	0	0	.....	.....	0.04	1.0	Clear	
Knoxville, Tennessee	29.24	742.7	30.32	770.1	28	— 2.2	66	NE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
La Crosse, Wisconsin	29.25	742.9	30.06	763.5	6	—14.4	100	S	10	4.5	.....	.....	10n	.....	Calm	0.02	0.5	Heavy snow	
La Mesilla, New Mexico	26.16	664.5	30.31	769.9	39	3.9	31	W	1	0.4	.....	0	2s	.....	Calm	0	0	Fair	
Laredo, Texas	29.68	753.9	30.02	762.5	57	13.9	81	Calm	0	0	.....	10ck	0	S	.....	0	0	Cloudy	
Leavenworth, Kansas	29.14	740.1	30.05	763 3	15	— 9.4	65	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Lewiston, Idaho	29.16	740.7	29.80	756.9	43	6.1	67	NE	4	1.8	.....	0	5s	.....	NE	0	0	Fair	
Little Rock, Arkansas	29.82	757.4	30.15	765.8	40	4.4	73	SE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Los Angeles, California	29.73	755.1	30.10	764.5	46	7.8	51	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Louisville, Kentucky	29.67	753.6	30.27	768.8	27	— 2.8	64	E	4	1.8	.....	2cs	Sk	Calm	Calm	0	0	Clear	
Lynchburg, Virginia	29.61	752.1	30.34	770.6	27	— 2.8	64	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Madison, Wisconsin	29.06	738.1	30.15	765.8	5	—15.0	75	SE	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
Marquette, Michigan	29.36	745.7	30.15	765.8	2	—16.7	72	S	1	0.4	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Mason, Texas	28.49	723.6	30.29	769.4	50	10.0	79	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.88	758.9	30.23	767.8	33°	0.6	70	E	3	1.3		0	0			0	0	Clear.	
Milwaukee, Wisconsin	29.42	747.3	30.23	767.8	10	—12.2	79	S	7	3.1			10s		Calm	0	0	Cloudy	
Mobile, Alabama	30.14	765.5	30.21	767.3	46	7.8	84	NW	4	1.8		0	Fg			0	0	Clear	
Montgomery, Alabama	30.01	762.2	30.26	768.6	44	6.7	75	N	3	1.3		0	0			0	0	Clear	
Moorhead, Minnesota	28.79	731.3	29.82	757.4	8	—13.3	89	SE	28	12.5			10n		S	0.34	8.6	Heavy snow	
Morgantown, W. Virginia	29.31	744.5	30.38	771.6	21	— 6.1	71	W	2	0.9		8cs	0	NW		0	0	Fair	
Mt. Washington, N. H.	23.03	585.0	29.39	746.5	—24	—31.1	56	NW	72	32.2		0	2s		NW	0.09	2.3	Clear.	
Nashville, Tennessee	29.72	754.9	30.29	769.4	28	— 2.2	66	E	2	0.9		0	Sk		E	0	0	Dense smoke	
New Haven, Connecticut	30.08	764.0	30.21	767.3	6	—14.4	52	N	9	4.0		0	0			0	0	Clear	
New London, Connecticut	30.10	764.5	30.16	766.1	9	—12.8	57	NW	9	4.0		0	0			0.21	5.3	Clear	
New Orleans, Louisiana	30.15	765.8	30.21	767.3	54	12.2	74	NW	1	0.4		0	Sk			0	0	Clear	
Newport, Rhode Island	30.03	762.7	30.09	764.3	10.0	—12.2	79	NW	22	9.8		0	0			Inap.	Inap.	Clear	
New River, N. Carolina					34	1.1	90	N			4	5k	0	E				Fair	
New Shoreham, Rhode I'd.	30.09	764.3	30.12	765.0	11	—11.7	60	NW	28	12.5		0	0			0.04	1.0	Clear	
New York, New York	30.07	763.8	30.27	768.8	9	—12.8	78	W	17	7.6		0	0			0.08	2.0	Clear	
Norfolk, Virginia	30.27	768.8	30.34	770.6	23	— 5.0	73	N	16	7.2		0	0			Inap.	Inap.	Clear.	
North Platte, Nebraska	26.95	684.5	29.59	751.6	29	— 1.7	89	SW	9	4.0		0	0			0	0	Clear	
Olympia, Washington T'y	29.89	759.2	29.93	760.2	51.0	10.6	90	S	6	2.7		0	5s		Calm	0.33	8.4	Fair	
Omaha, Nebraska	28.81	731.8	30.00	762.0	13	—10.6	81	S	12	5.4		0	1s		Calm	Inap.	Inap.	Clear	
Oswego, New York	30.00	762.0	30.36	771.1	9	—12.8	78	N	7	3.1		1k	0	N		0.09	2.3	Clear.	
Pensacola, Florida	30.21	767.3	30.24	768.1	48	8.9	93	SW	3	1.3		0	Fg		Calm	0	0	Light fog	
Philadelphia, Pa.	30.27	768.8	30.33	770.4	10	—12.2	79	N	28	12.5		0	0			0.03	0.8	Clear	
Phœnix, Arizona	28.93	734.8	30.80	782.3	42	5.6	66	E	2	0.9		5c	0	S		0	0	Fair	
Pike's Peak, Colorado	17.72	450.1	29.93	760.2	14	—10.0	46	NW	36	16.1		0	0			0	0	Clear	
Pilot Point, Texas	29.29	744.0	30.16	766.1	48	8.9	70	SW	9	4.0		5c	2s	Calm	Calm	0	0	Fair	
Pioche, Nevada	24.11	612.4	29.88	758.9	33	0.6	42	Calm	0	0		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.50	749.3	30.39	771.9	15	— 9.4	73	NW	3	1.3		10cs	0	Calm		0.01	0.3	Cloudy	
Port Huron, Michigan	29.61	752.1	30.36	771.1	0	—17.8	78	SE	4	1.8		2cs	0	Calm		0	0	Clear	
Portland, Maine	29.94	760.5	30.00	762.0	7	—13.9	54	NW	8	3.6		0	0			0.04	1.0	Clear	
Portland, Oregon	29.95	760.7	30.03	762.7	49	9.4	96	S	6	2.7		2k	2s	SW	Calm	Inap.	Inap.	Fair	
Portsmouth, N. Carolina					31	— 0.6	58	NE	32	14.3		2k	0	W		0	0	Clear	
Prescott, Arizona	24.84	630.9	30.20	767.1	31	— 0.6	48	S	2	0.9		0	0			0	0	Clear.	
Punta Rassa, Florida	30.19	766.8	30.21	767.3	55	12.8	74	N	8	3.6		0	Hz		Calm	0	0	Clear	
Red Bluff, California	29.73	755.1	30.09	764.3	47.0	8.3	85	NW	4	1.8		0	0			0	0	Clear	
Rio Grande City, Texas	29.91	759.7	30.14	765.5	56	13.3	94	E	4	1.8		0	0			0	0	Clear	
Rochester, New York	29.66	753.4	30.36	771.1	3	—16.1	73	W	4	1.8		2k	2s	NE	Calm	Inap.	Inap.	Fair	
Roseburg, Oregon	29.53	750.0	30.11	764.8	42.5	5.8	91	Calm	0	0			10s		Calm	0	0	Cloudy	
Sacramento, California	30.02	762.5	30.10	764.5	51	10.6	86	NE	3	1.3		0	0			0	0	Clear	
St. Louis, Missouri	29.56	750.8	30.17	766.3	21	— 6.1	86	NE	15	6.7		10ck	0	W		Inap.	Inap.	Cloudy	
St. Paul, Minnesota	29.01	736.8	29.91	759.7	7	—13.9	88	SE	14	6.3			10n		NE	0.16	4.1	Heavy snow	
Salt Lake City, Utah	25.74	653.8	30.07	763.8	38	3.3	45	Calm	0	0		0	0			0	0	Clear	
San Antonio, Texas	29.45	748.0	30.16	766.1	53	11.7	93	Calm	0	0			10s		Calm	0	0	Threatening	
San Diego, California	30.06	763.5	30.13	765.3	46	7.8	62	E	2	0.9		0	2s		Calm	0	0	Clear	
Sandusky, Ohio	29.59	751.6	30.33	770.4	16	— 8.9	66	NW	4	1.8		0	5s		Calm	0	0	Fair	
Sandy Hook, New Jersey	30.21	767.3	30.25	768.3	10	—12.2	58	NW	26	11.6		0	0			0.05	1.3	Clear	
San Francisco, California	30.01	762.2	30.07	763.8	53	11.7	80	Calm	0	0		0	1s		SW	0	0	Clear	
Santa Fé, New Mexico	23.32	592.3	29.86	758.4	31	— 0.6	58	N	4	1.8		0	0			0	0	Clear	
Savannah, Georgia	30.14	765.5	30.24	768.1	49	9.4	57	W	5	2.2		0	Hz			0	0	Clear	
Shreveport, Louisiana	29.88	758.9	30.13	765.3	49	9.4	78	S	4	1.8		0	0			0	0	Clear	
Silver City, New Mexico	24.30	617.2	30.64	778.2	34	1.1	52	Calm	0	0		0	2s		Calm	0	0	Clear	
Smithville, North Carolina	30.25	768 3	30.29	769.4	37	2.8	53	N	7	3.1		0	1ks		Calm	0	0	Clear	
Socorro, New Mexico	25.49	647.4	29.56	750.8	34	1.1	43	NW	8	3.6		0	0			0	0	Clear	
Springfield, Illinois	29.47	748.5	30.20	767.1	19	— 7.2	77	S	8	3.6		Hz	2s	Calm	NW	Inap.	Inap.	Hazy	
Springfield, Massachusetts	30.03	762 7	30.18	766.6	3	—16.1	46	NW	14	6.3		0	0			0.12	3.0	Clear	
Stockton, Texas	26.98	685.3	29.98	761.5	42	5.6	74	Calm	0	0		0	2s		Calm	0	0	Fair	
St. Vincent, Minnesota	28.93	734.8	29.78	756.4	11	—11.7	80	S	12	5.4			10s		Calm	0	0	Cloudy	
Thatcher's Island, Mass	29.97	761.2	30.03	762.7	4	—15.6	74	NW	36	16.1		0	0			0.10	2.5	Clear	
Toledo, Ohio	29.57	751.1	30.32	770.1	13	—10.6	81	Calm	0	0		0	Sk		Calm	Inap.	Inap.	Clear	
Tucson, Arizona	27.58	700.5	30.13	765.3	50	10.0	39	SE	3	1.3		0	0			0	0	Clear	
Umatilla, Oregon	29.66	753.4	30.17	766.3	39	3.9	91	E	1	0.4		0	8s		Calm	0	0	Cloudy	
Uvalde, Texas	29.14	740.1	29.98	761.5	52	11.1	85	S	1	0.4		0	0			0	0	Clear	
Vicksburg, Mississippi	29.92	760.0	30.18	766.6	51	10.6	59	S	8	3.6		0	0			0	0	Clear	
Visalia, California	29.70	754.4	30.07	763.8	48	8.9	92	Calm	0	0		0	0			0	0	Clear	
Washington, D. C.	30.25	768.6	30.39	771.9	13	—10.6	62	NW	8	3.6		0	0			0	0	Clear	
Wickenburg, Arizona					40	4.4	56	W			1	0	0			0	0	Clear	
Wilmington, N. Carolina	30.22	767.6	30.28	769.1	38	3.3	54	NE	7	3.1		0	0			0	0	Clear	
Winnemucca, Nevada	25.72	653.3	30.08	764.0	28	— 2.2	77	N	1	0.4		0	0			0	0	Clear	
Wood's Holl, Mass	30.00	762.0	30.05	763.3	8	—13.3	55	NW	32	14.3		0	0			0	0	Clear	
Yankton, Dakota	28.45	722.6	29.78	756.4	28	— 2.2	88	SW	23	10.3			10s		Calm	0.07	1.8	Cloudy	
Yuma, Arizona	29.85	758.2	30.00	762.0	51	10.6	59	Calm	0	0		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.09	561.1			54.0	12.2	85	Calm	0	0			10n			1.20	30.5	Cloudy	Thomas Heiman.
Buff Bay Town, Jam ica‡	29.87	758.7	30.18	766.6	68	20.0	90	E				0	0						
Havana, Cuba, W. I.	30.11	764.8	30.16	766.1	70	21.1	49	NE	2.4	1.1		0	0			0	0	Clear	Charles Hasselbrink.
Jakobshavn, Greenland	29.91	759.6	29.97	761.1	30.2	— 1.		SW			6		7			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	30.04	763.0	30.05	763.3	79.0	21.1	88	Calm	0	0		0	0			0.01	0.3		Robert Johnstone.
Navassa, W. I.	29.97	761.2	30.05	763.3	76	24.4	77	NE	9	4.0		5k	5s	SE	NE	0.03	0.8	Fair	F. M. Everett.
Paramaribo, S. A.	29.99	761.7	29.99	761.7	77	25.0	91	E			2	5ck	5k	E		0	0	½ cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.42	747.3	29.97	761.2	79	25.1	80	N			2		10s		N	0	0	Cloudy	Francesco J. Cisneros
Rivas, Nicaragua					73 4	23		SE			3	0	7ks		SE	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.05	763.3	30.08	764.0	73	22.8	81	N	4.8	2.1		0	1s			0.05	1.3	Clear	Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	30.01	762.3	30.08	763.9	6.8	—14.		W			2		2			0	0		K. Elberg.
York Factory, B. A.	30.00	762.0	30.05	763.3	—17.0	—27 2	69.0	W	4	1.8		3k	3s	NW	W	0.01	0.3	Cloudy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.09	764.3	57	13.9	75	E			5		9	E						D' clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 30° 32′, E 47° 51′	29.98	761.5	68	20.0	56	NW			1		5	NW						D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			40	4.4		NE			2-3		8	NE				2	NE	Squally	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.95	760.7	77	25.0	79	SSW			5		10					2	SW	Overcast	Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 34° 23′, E 133° 07′	29.95	760.7	50	10.0	79	WNW			2-4		8							Squally	Capt. J. W. East.
H. M. S. Condor, N. 36° 50′, E. 24° 47′	30.11	764.8	50.5	10.3	75	NNE			6-7	6ck						6	NNE	Squally	Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, Syracuse, Sicily	30.12	765.0	55	12.8		ENE			3		5	E						D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa, Shanghai, China	30.17	766.3	43	6.1	75	Calm			0		10							Overcast	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.94	760.5	65	18.3	73	SW			1-2		1	NE						Blue sky	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad																			Comm. John Hext.
H. M. S. Eclipse																			Comm. E. St. J. Garforth.
H. M. S. Egeria, N. 1° 34′, E. 104° 40′	29.84	757.9	80	26.7		N			3		1	N				1	NE	Blue sky	Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.90	759.4	80	26.7	74	NW			1-2		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 17° 23′, W. 64° 13′	30.07	763.8	77	25.0		ESE			2-3		8	ESE				1	E	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Panama, Panama	29.97	761.2	73	22.8	85	NW			3		1							Blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 54′, W. 58° 42′						Calm			0										Capt. L. F. Jones.
H. M. S. Griffon																			Capt. J. Inglis.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 1° 17′, E. 104° 00′	29.90	759.4	80	26.7	87	NW			2		3	NW				Sm'h		D. clouds	Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Zanzibar, Africa	29.98	761.5	82	27.8	87	SW			1-2		9	SW						Showery	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 28° 02′ E. 121° 49′	30.19	766.8	46.5	8.1	85	NNE			5		10					3	N	Misty	Capt. R. H. Napier.
H. M. S. Malabar																			Capt. J. F. G. Grant.
H. M. S. Minatour, Vigo, Spain	29.86	758.4	57.5	14.2	81	Calm			0		10?							Blue sky?	Capt. H. Rawson.
H. M. S. Modeste, N. 1° 17′, E. 103° 51′	29.96	761.0	82	27.8	83	NE			3		3					2		D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Alexandretta, Turkey, Asia	29.91	759.7	55	12.8	68	E			2		5	E				Sm'h		D. clouds	Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Pt. Royal, Jamaica, W.I.	30.00	762.0	72	22.2	90	NNW			2		1							D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes, N. 37° 15′, W. 23° 25′	30.14	765.5	59.5	15.3	85	NNE			1-2		8	N				3-4	NNW	Showery	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, Elmina, Gold Coast, Africa.	29.87	758.7	78	25.6	91	SW			1		2	SW				2	S	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman, N. 47° 07′, W. 9° 58′						ENE			6		10	NE				5	E	Raining	Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.90	759.4	79	26.1	95	S			1		10							Raining	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	29.77	756 1	59	15.0	76	E			3		6							D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 20′, E. 48° 57′	29.50	749.3	82	27.8	96	Calm			0	6ck						1	SE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	29.91	759.7	72	22.2	90	Ca'm			0		2							D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 12° 03′, W. 61° 45	30.04	763.0	79	26.1	78	ENE			3		1					Sm'h		D. clouds	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo Bay, Chili, S.A.	30.03	762.7	64.5	18.1	83	NW			1		10							Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 12° 00′, E. 60° 15′	29.94	760.5	80	26.7		E			2		1					Sm'h		Blue sky	Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, N. 29° 01′, E. 50° 50′	30.02	762.5	68.5	20.3	65	N			1		8	W						D. clouds	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm G. W. Pollard
GERMAN NAVAL SERIES.																			
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PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, St. Vincent, Cape Verd Id's.	30.09	764.3	74.5	23.6	85	ENE			4		8					3	NW	D. clouds	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando, Africa	29.89	759.1	84.2	29.0	72	NW			2		5		NW			1		D. clouds	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.27	768.8	58	14.4	88	Calm	0	0						0	0			Clear.	
N. Yard, Portsmouth, N. H.	29.99	761.7	0	—17.8	100	NW	16	7.2			0			0	0			Clear.	
Naval Hospital, Yokohama, Japan	29.65	753.1	61	16.1	91	SW			6		10		W	0.90	22.9			Light rain	
Adams, Panama, Panama	30.00	762.0	75	23.9	86	NW			2		2		NW			Sm'h		Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.03	762.7	53	11.7	100	Calm			0		0			0	0			Clear.	
Alert, Hong-Kong, China *.	29.85	758.4	75	24.4	86	SE			1		10		WSW	0	0	Sm'h		Misty	
Alliance, New Orleans, La	30.20	767.1	52	11.1	86	WNW			1		2			0	0	Sm'h		Clear.	
Ashuelot, Tientsin, China	30.45	773.4	25	— 3.9	?	S			1		8		Calm					Cloudy	
Colorado, New York, N. Y.	30.24	768.1	11	—11.7	80	NW					0			0	0			Clear.	
Constitution, N. Yard, League I'd., Pa	30.27	768.8	12	—11.1		NNW	10	4.5			0							Clear	
Franklin, Norfolk, Va	30.25	768.3	25	— 3.9		NNE	20	8.9			2		N	0	0			Fair	
Galena, N. 35° 05′, E. 24° 50′	30.21	767.3	50	10.0	79	NNE			5		2		NNE			R'gh	NNE	Fair	
Independence, N. Yard, Mare I'd, Cal.	30.15	765.8	57	13.9	?	SW	9.6	4.3			0			0	0			Clear.	
Jamestown, Sitka, Alaska *	29.77	756.1	33	0.6	100	WNW			1		2			0.21	5.3			Clear.	
Kearsarge, New Orleans, La	30.18	766.6	51	10.6	79	Calm			0		0					Sm'h		Misty	
Marion, Strait of Magellan	29.44	747.8	55	12.8	93	WSW			0–1		8		Calm			Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	30.38	771.6	2	—16.7		S	3	1.3			10		S					Cloudy	
Minnesota, New York, N. Y.	30.25	768.6	11	—11.7		NNW			6		5							Hazy.	
Monocacy, Shanghai, China	30.45	773.4	39	3.9	82	N			3		10		Calm					Overcast	
New Hampshire, Port Royal, S. C.	30.21	767.3	51	10.6	65	NE	7	3.1			0			0	0			Clear.	
Nipsic, Valencia, Spain	29.98	761.5	59	15.0	82	NE			2		8		E			Sm'h		D. clouds	
Onward, Callao, Peru †	29.93	760.2	71	21.7	95	Calm			0		5					Long	N;W	Fair	
Palos, Shanghai, China	30.29	769.4	36	2.2	80	N			2		10							Overcast	
Passaic, Washington, D. C.	30.37	771.4	16	— 8.9	83	NW			2		0							Clear.	
Pensacola, N. 6° 37′, W. 79° 43′	29.95	760.7	74	23.3	90	N			4		10			0	0	Sm'h		Fair	
Powhatan, New York, N. Y.	30.23	767.8	9	—12.8	100	NW			3–5		0							Clear.	
Quinnebaug, Villafranca, France	30.16	766.1	58	14.4	48	SE			1		2		Calm			Sm'h		Fair	
Richmond, Hong-Kong, China	30.00	762.0	75	23.9	95	S			1		10		S	0.03	0.8			Foggy	
Saratoga, Alexandria, Va	30.33	770.4	17	— 8.3	83	NNW			4		0			0	0			Clear.	
Shenandoah, Montevideo, Uruguay *	30.19	756.8	68	20.0	74	NNE			3		8					Sm'h		Fair	
St. Louis, League Island, Pa	30.35	770.9	11	—11.7	100	NW	17	7.6			0			0.01	0.3			Clear.	
Swatara, Nagasaki, Japan †	29.95	760.7	52	11.1	79	NE			1		2		Calm			Mod.	NE	D.clouds	
Tennessee, New Orleans, La	30.23	767.8	49	9.4	54	WSW	2	0.9			0			0	0	Sm'h		Clear.	
Ticonderoga, N. Yard, Mare Id., Cal.	30.06	763.5	52	11.1	93	NW			1		0			0	0			Clear.	
Trenton, Villafranca, France *	30.14	765.5	63	17.2	42	SE			2		2			0	0	Sm'h		Fair	
Vandalia. N. 18° 12′, W. 64° 55′	30.10	764.5	78	25.6	86	ESE			2		5		E					Fair	
Wabash, Boston, Massachusetts	30.08	764.0	4	—15.6	22	NW	18	8.0			0			0	0			Clear.	
Wachusetts, N. 7° 00′, W. 80° 15′ *.	29.59	751.6	77	25.0	91	NNW			4		5		N			Sm'h		Fair	
Wyoming, Villafranca, France	30.16	766.1	58	14.4	70	SE			2		2		SSW			Sm'h		Clear.	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
N. 12° 40′, W. 35° 45′	30.09	764.3	75	23.9	80	NNE			6		10							Misty	Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 14° 55′, W. 67° 49′	30.06	763.5	79.5	26.4	76	ENE			4		0							Blue sky	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang ‡																			Capt. H. Youlden.
S. S. Cipero,																			
N. 37° 50′, W. 38° 10′	30.21	767.3	58	14.4		ENE			2		10					3	N; NW	Overcast	W. N. Lailey.
City of Agra, ‡																			
N. 0° 45′, W. 33° 02′	29.96	761.0	85.3	29.6	79	ESE			2		4							D. clouds	Capt. T. Young.
Barque Commewyne, ‡																			
N. 48° 20′, W. 25° 24′	30.29	769.4	56	13.3	64	SE			4		2							Blue sky	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
N. 0° 58′, W. 25° 00′	29.97	761.2	84	28.9	79	SSW			2		8							D. clouds	Capt. H. Spalding.
Ship Ellen Stuart, ‡																			
S. 5° 39′, E. 87° 50′	29.89	759.2	82.5	28.1	91	W			3		4							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope, ‡																			
S. 18° 20′, W. 35° 05′	30.04	763.0	80.1	26.7	91	NE			3	rock		W				4	N	D. clouds	Capt. Jas. Campbell.
Ship Iron Cross,																			
N. 36° 58′, W. 19° 10′	29.94	760.5	59.5	15.3		N			6		7					6	N; NNE	D. clouds	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 34° 06′, W. 73° 06′	30.09	764.3	50.7	10.4	79	NNW			8		10							Overcast	Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee ‡																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡																			
N. 32° 52′, W. 16° 23′	29.72	754.9	61.5	16.4	89	NNW			6		6							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡																			
N. 0° 30′, E. 68° 00′	29.88	758.9	82	27.8	83	NE			2		5							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire,																			
N. 31° 45′, W. 55° 15′	30.04	763.0	67	19.4	84	WSW			5		10					4	SSW	Raining	
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian ‡																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia,																			
N. 47° 28′, W. 38° 05′	29.96	761.0	47	8.3	77	WNW			2		8		NW	0	0	H'vy	NW	Cloudy	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, ‡																			
N. 41° 03′, W. 65° 58′ †	29.74	755.4	28	— 2.2		WNW			6		8		WNW			Mod.	WNW	Cloudy	Capt. J. W. Jennings.
S. S. Baltic ‡																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, ‡																			
N. 45° 38′, W. 39° 09′ †	30.24	768.1	45	7.2		N			1		5?		N	0	0	Mod.	NW	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Undütsch.
S. S. Hermann																			Capt. H. Maur.
S. S. Köln																			
S. S. Leipzig ‡																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg,																			
N. 46° 48′, W. 36° 10′	30.14	765.5	49.1	9.5		NNW			4		8		NW	6 hours		Long	WNW	Cloudy	
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolph Fredholm ‡																			Capt Albert Fredholm.
Ship Peru, ‡																			
N. 25° 25′, W. 79° 59′	30.19	766.8	70.2	21.2	78	N			4		1							Misty	Capt. O. F. Sköterbrand.

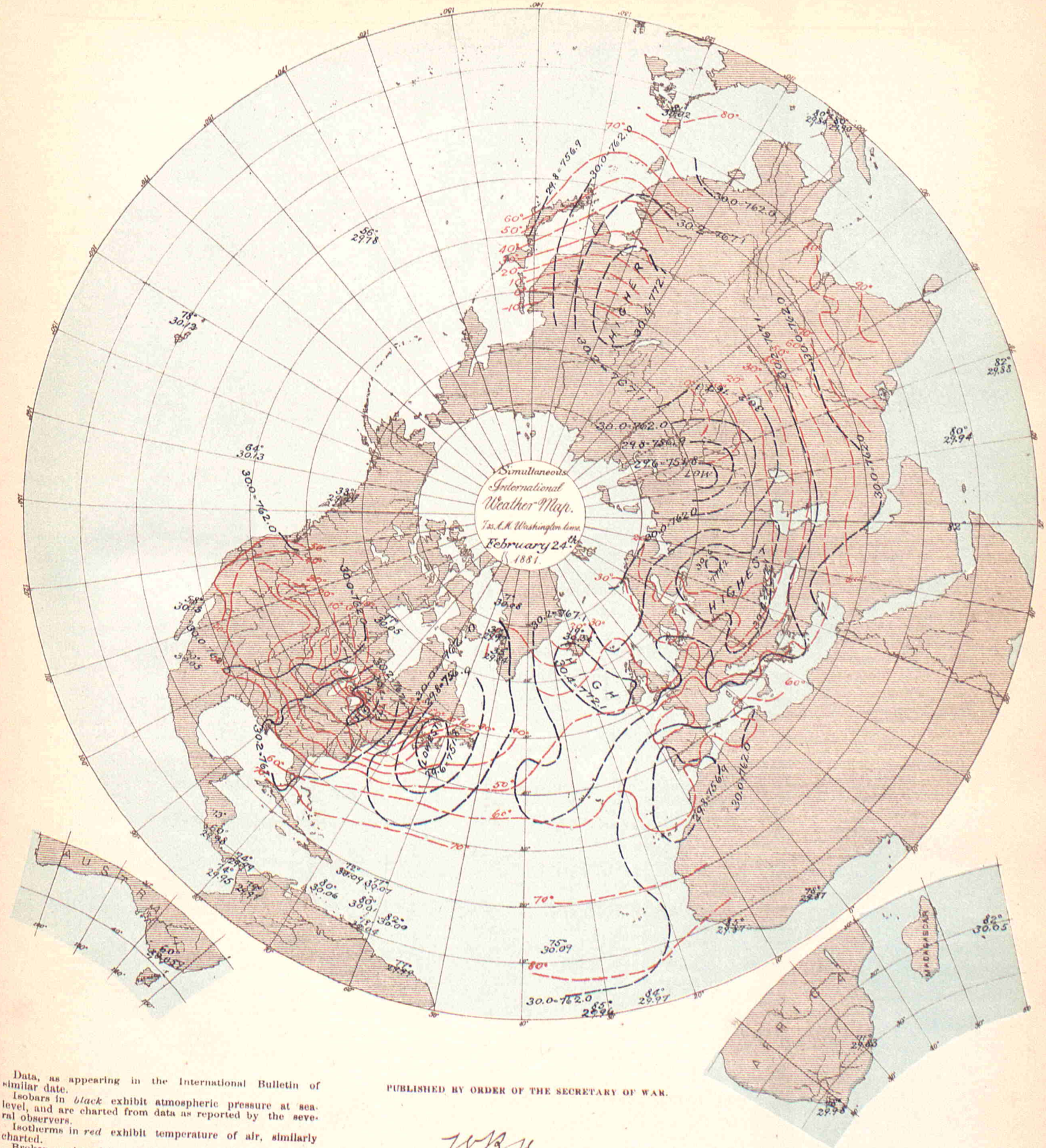
UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 51° 43′, W. 8° 17′	30.31	769.9	48	8.9	92	N			3		2		N			Sm'h		Fine	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 39° 19′, W. 71° 40′ †*	30.00	762.0	28	— 2.2	66	NW			6		8		NW	Sn	ow	R'gh	N	Cloudy	Capt. R. W. Sargent.
S. S. Ohio, ‡ Liverpool, England †*	30.40	772.1	44	6.7	92	N			2		2		N	0	0			Fair	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, N. 50° 17′, W. 25° 57′ †	30.23	767.8	54	12.2	80	S			3		5?		SW	0	0	Sm'h	ESE	Cloudy?	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 34° 00′, W. 118° 56′ †	30.07	763.8	53	11.7	86	E			2		10		SE	0	0	G'tl	W	Foggy	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 38° 29′, W. 141° 17′ †	30.13	765.3	64	17.8	58	W			3		8		WSW	0	0	Mod.	wsw	Cloudy..	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China †*	30.12	765.0	73	22.8	85	SW			2		10		SW					Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 32° 11′, E. 172° 14′	29.78	756.4	56	13.3	75	NW			6		8		W	0.12	3.0	High	wsw to W	Squally	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, Astoria, Oregon †	29.95	760.7	49	9.4	89	SSE			2		10		SSE					Cloudy	Capt. Fred. Bolles
S. S. Oregon																			Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal. †	30.04	763.0	50	10.0	93	W			1		0							Clear	Capt. J. N. Ingalls.
S. S. Idaho, Seattle, Wash. Ter. †	29.92	760.0	52	11.1	93	SE			2		10		SW					Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba.																			
S. S. Senator, N. 34° 05′, W. 119° 10′ †	30.06	763.5	55	12.8	100	ESE			1		10					Sm'h		Foggy	Thos. Wallace.
S. S. State of California, Portland, Oregon †	30.03	762.7	50	10.0	93	NE			4		10		S	0	0			Cloudy	Capt. G. Debney.
S. S. Victoria																			J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, S. 33° 40′, W. 152° 54′ †	29.96	761.0	74	23.3	90	W			5		10		W	Ra	in			Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 26° 41′, W. 114° 05′ †	30.13	765.3	58	14.4	100	NW			4		10		NW	0	0	Sm'll	N		Capt. D. S. Austin.
S. S. City of Peking, Yokohama; Japan †	29.77	756.1	62	16.7	77	S			6		10		SSW	Li	ght	Sm'h		Rainy	Capt. G. G. Berry.
S. S. City of Sidney, N. 19° 00′, W. 158° 42′ †	30.12	765.0	78	25.6	65	ENE			4	5c		NE		0	0	Mod.	NE	Fair	Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ Panama, Panama †	29.99	761.7	74	23.3	86	NNE			3		2		NE	0	0			Clear	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada																			
S. S. Zealandia, Sydney, N. S. W	30.19	766.8	66	18.9	68	W			5		5?		SW					Cloudy?	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland ‡																			Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland, ‡ N. 41° 34′, W. 63° 53′	29.63	752.6	33	0.6		W			6		10		W	0.2	5.	Mod.	W	Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 49° 44′, W. 9° 10′	30.34	770.6				NE			5		8		NE	Sprin	kles	Cross	NE	Cloudy	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Jacksonville, Florida †	30.14	765.5	65	18.3		Calm			0		0			0	0			Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, New Point Comfort, Va	30.25	768.3	24	— 4.4	61	N	16	7.2			0			0	0			Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, Martinique, W. I. †	30.01	762.2	80	26.7		NE			1		8		NE	Sho	wers			Cloudy	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 42° 40′, W. 12° 50′ †*	30.10	764.5	58	14.4		NE			5		5		NE			Long	NW	Fair	Capt B. F. Woodbury.
Brigantine George ‡																			Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	30.27	768.8	26	— 3.3		NNW	4	1.8		0	0			0	0			Clear	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 23° 59′, W. 60° 18′ †	30.14	765.5	78	25.6	100	SSE			5		5		SE	Lig	ht	Mod.	E	Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 25, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

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

ALGERIAN SERIES.

Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.

Mogador, Morocco			29.89	759.2	60.4	15.8	83	SW			3		7			0.433	11.0	Very cloudy	Dr. Ollive.
Nemours			29.85	758.2	73.8	23.2	78	S			4		4			Inap.	Inap.	Cloudy	Raynard.
Algiers			29.87	758.7	61.9	16.6	73	ESE			4		10			0.205	5.2	Covered	Nicolas.
La Calle			29.97	761.1	64.4	18.0	82	S			5		3			0	0	Pretty fair	Fonfrède.
Tunis			30.02	762.4															Jacques.
Sfax			30.08	764.0															Gau.
Saida			29.77	756.1	55.2	12.9	45	S			9		9			0	0	Covered	Dumas.
Tebessa			30.06	763.4	56.8	13.8	51	S			4		7			0	0	Very cloudy	Watrin.
Gerlville																			Lonchamp.
Laghouat			29.97	761.3	55.0	12.8	38	S			5		3			Inap.	Inap.	Pretty fair	Herbin.
Biskra																			Baudassé.

AUSTRALIAN SERIES.

Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.

Melbourne, Victoria	30.18	766.6	30.27	768.8	57.0	13.9	70	SE	12	5.4			3			0	0	Very fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania																			Francis Abbott, F.R.A.S.

AUSTRO-HUNGARIAN SERIES.

Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.

Agram	29.53	750.0	30.11	764.7	32.0	0.0	82	S			2		2			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.25	743.0	30.06	763.4	31.6	— 0.2	90	SW	1.8	0.8			0			0	0		Dr. Wiersbicki.
Eperies	29.22	742.2	30.14	765.5	36.0	2.2	61	N			3		0			0	0		Julius Mikolik.
Gratz ‡	28.76	730.6	30.06	763.6	35.4	1.9	57	SSW			2		5			0	0		Andreas Rospini.
Hermannstadt	28.63	727.3	30.14	765.6	30.4	— 0.9	74	E			2		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.65	727.7	30.06	763.6	29.5	— 1.4	88	Calm			0		10			0	0		The Staff.
Lemberg	29.03	737.4	30.07	763.7	30.9	— 0.6	68	SE			1		1			0	0		Dr. T. Stanecki.
Pola	29.97	761.3	30.09	764.2	48.2	9.0	66	WSW			1		5			0.118	3.00		I. R. Hydrographic Office.
Szathmar	29.67	753.7	30.13	765.2	33.4	0.8	88	SW			2		2			0	0	Dense fog	Beicht Peter, S. J.
Szegedin	29.83	757.7	30.13	765.2	32.7	0.4	85	S			2		0			0	0		Karl Stancel.
Trieste	30.02	762.4	30.12	765.0	43.9	6.6	57	Calm			0		0			0	0	Clear	P. Busin.
Vienna	29.34	745.3	30.09	764.3	33.4	0.8	65	SE			1		9			0	0		I. R. Central Met. Obs'y.

BELGIAN SERIES.

Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.

Brussels	29.88	759.0	30.09	764.2	37.6	3.1	72	NNE			3		10	NE		0	0		Royal Observatory.
Furnes	30.07	763.8	30.10	764.4	39.0	3.9	73	E			4		10			0	0		M. E. de Cae.
Maeseyck	29.98	761.4	30.10	764.6	36.7	2.6	73	N			2		10			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 28, 1882.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.93	760.2	30.03	762.7	37.3	2.9	85	NNW	7	3.1			7			0.200	5.08	D. clouds	W. Boswell.
Armagh, Observatory	29.89	759.2	30.13	765.3	43.9	6.6	77	W	8	3.6			5					D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.13	765.3	39	3.9	75	SW	17	7.6			10					Overcast	John Hartnup.
Bolton, Sharples	29.55	750.6	30.10	764.5	32.8	0.4	88	NNE	1	0.4			10					Snowing	Thomas Mackereth.
Bradford, Yorkshire	29.75	755.6	30.14	765.5	34.1	1.2	92	NE			1		7			0.02	0.5	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.96	761.0	29.99	761.7	78	25.6	82				4		6					Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			30.11	764.8	38.4	3.6	72	N			0.2		8					Overcast	John McLaren.
Chatham, School M. E.	30.00	762.0	30.14	765.5	38.5	3.6	70	NE			1		10					Fair	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.95	760.7	30.18	766.6	37.2	2.9	64	NE			3		10					Overcast	The Staff.
Fort Napier, Natal	27.60	701.0	29.81	757.2	69.1	20.6	96	NE			0		10					Raining	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	85	29 4	83	W			1		3					D. clouds	C. E. Keane.
Galway, Queen's College			30.06	763.5				N			2		6					D. clouds	J. O'Donaghadue.
Gibraltar, Mediterranean	29.56	750.8	29.62	752.3	60.6	15.9	93	NNE			3		8					Gloomy	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.83	757.7	30.04	763.0	41.5	5.3	78	W			3		9k					Gloomy	D. G. MacLean.
Greenwich, Royal Obs'y	29.98	761.5	30.16	766.1	37.8	3.2	65	NE			1		10					Overcast	The Staff.
Guernsey	29.87	758.7	30.09	764.3	40	4.4	86	NE			2		8					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.13	765.3	30.17	766.3	37.3	2.9	68	NNE	6	2.7			10					Gloomy	The Met'g'l Office.
Leicester, Museum	29.87	758.7	30.13	765.3	39.0	3.9	40	SW			2		9					Misty	J. E. Carryer.
Malta, Mediterranean	29.96	761.0	30.03	762.7	58.8	14.9	70	E			3		7					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	30.13	765.3	30.17	766.3	72.0	22.2	70	NE			3		8					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.62	752.3	30.16	766.1	43.1	6.2	64	Calm			0		10					Misty	Robert Pate.
Oxford, Radcliffe Obs'y	29.94	760.5	30.20	767.1	36.0	2.2	65	N			2		10					Overcast	The Staff.
Plymouth	30.09	764.3	30.16	766.1	37.5	3.1	67	ENE			3		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.03	762.7	40	4.4	98	W	7	3.1			8					D. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.07	763.8	30.14	765.5	40.4	4.7	64	NE			2		9					D. clouds	Serg't W. H. Lyne.
Sheffield	29.85	758.2	30.14	765.5	39.2	4.0	75	SW			1		10			0.03	0.8	Snowing	W. F. Cooper.
Silloth Rectory	30.03	762.7	30.06	763.5	44.5	6.9	82	W			2		0			0.200	5.08	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.12	765.9	35.1	1.7	87	SW	9	4.0			10					Drizzling	Rev. S. J. Perry.
Strathfield Turgiss	29.94	760.5	30.17	766.3	36.6	2.6	68	NE			1		10					D. clouds	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	30.06	763.5	30.15	765.8	43	6.1	75	NE			4		4					D. clouds	W. Newcombe.
Valencia, Observatory	30.22	767.6	30.24	768.1	43.6	6.4	62	NE	4	1.8			7					D. clouds	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.92	760.0	29.95	761.0	— 5	—20.6	100	W	6	2.7		0	0			0.025	0.64	Clear	H. J. Cundall, C. E.
Chatham, N. B.*	29.90	759.4	29.97	761.2	— 8	—22.2	87	SW	6	2.7		0	0			0	0	Clear	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.07	763.8	30.09	764.3	—19	—28.3	80	NW	15	6.7		0	0			0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	28.95	735.3	29.85	758.2	6	—14.4	93	SE	5	2.2			Hz			0	0	Hazy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.95	760.7	30.10	764.5	3	—16.1	91	W	8	3.6		5cs	0			0	0	Fair	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.75	755.6	30.12	765.0	— 1	—18.3	97	N	7	3.1		0	0			0.01	0.3	Clear	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.96	761.0	30.19	766.8	— 2	—18.9	90	NE	1	0.4			10s			1.00	25.40	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	29.37	746.0	30.15	765.8	1	—17.2	77	E	3	1.3		2k	5ks	SW	SW	0.03	0.8	Fair	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.36	745.7	30.12	765.0	10	—12.2	100	NW	5	2.2			10n			0.40	10.2	Cloudy	H. Morgan.
Port Stanley, Ontario	29.41	747.0	30.12	765.0	12	—11.1	84	NW	1	0.4			10n		NW	0.42	10.7	Light snow	M. Payne.
Quebec, Quebec*	29.81	757.2	30.19	766.8	—15	—26.1	44	NW			5	0	5s		NW	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.65	753.1	30.17	766.3	— 3	—19.4	77	Calm	0	0			10n			Inap.	Inap.	Light snow	K. Stewart.
Saugeen, Ontario*	29.36	745.7	30.15	765.8	3	—16.1	92	E	3	1.3			10ks			0	0	Cloudy	W. H. McIntyre.
St. Andrews	30.10	764.5	30.16	766.1	— 3	—19.4	87	NW	3	1.3		Hz	Hz			0	0	Clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.89	759.2	29.94	760.5	1	—17.2	88	W	12	5.4		0	0			0.05	1.3	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.72	754.9	29.14	740.1	7	—13.9	91	SW	7	3.1			10n			0.25	6.3	Light snow	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.07	763.8	30.14	765.5	11	—11.7	61	NW	13	5.8		8k	0.	W		0	0	Fair	Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. John's, Newfoundland	29.64	752.8	29.91	759.7	23	— 5.0	81	S	1	0.4		0	0			0.052	1.32	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape St. Francis Lt. House	29.72	754.9			69.5	20.8	91	E	18.2	8.1			3k			0.070	1.78		John Duthie.
Cape Town, C. G. H. Obs'y	29.79	756.7	29.83	757.7	76.5	24.7	55	W	6.8	3.0		4	4s		S	0	0		The Staff, for D. Gill.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	30.24	768.2	30.27	768.9	39.7	4.3	94	NE	2.2	1.0			1cn			0.628	15.9	Raining	M. Marc Dechevrens, S. J.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
COSTA RICA SERIES. By authority of the Minister of Foreign Affairs. Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.25	666.7	29.97	761.2	60.4	15.8	91	SE			3		0			0	0	Clear	Federico Maison.
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.85	758.2	29.90	759.4	29.3	—1.5	82	NW	18	8			10						Oversergent Fischer.
Fanöe	29.95	760.7	29.97	761.2	33.6	0.9	84	W			4		10						Overloerer Lauridsen.
Godthaab, Greenland	30.17	766.2	30.21	767.3	33.1	0.6	71	ENE			2		9						S. Kleinschmidt.
Stykkisholm, Iceland	30.60	777.3	30.65	778.4	14.0	—10.0	61	E			7		2						A. O. Thorlacius.
Thorshavn	30.21	767.3	30.24	768.2	32.0	0.0	83	N	25	11			5						Overloerer Bergh.
Vestervig	29.82	757.5	29.92	759.9	32.0	0.0		Calm			0		1						Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.26	743.1	29.90	759.5	59.0	15	60	SSE			1		nk	N	NW	0	0		M. Labroue, Director.
Alençon	29.53	750.0	30.08	764.0	38.1	3.4	96	NW			2		10		NE	0	0	Misty	M. Nicot, Director.
Arras, Engineer School	29.82	757.4	30.09	764.2	35.2	1.8	89	ENE			1	0							M. Klein, Commandant.
Avignon, Normal School	29.94	760.4	30.02	762.4	56.3	13.5	52	N			1		2			0	0	Slightly cl'dy	M. Giraud, Director.
Bar-sur-Seine	29.45	747.9	30.02	762.4	43.0	6.1	91	E			1		10			0	0	Covered	M. Saillard, Director.
Beauvais, Normal School	29.82	757.5	30.10	764.6	36.5	2.5	86	NE			2		10		ENE	0	0	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.10	739.1	30.00	762.1	50.9	10.5	81	WNW			1		k		ESE	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.63	752.7	29.85	758.3	50.7	10.4	76	SE			1		10		ESE	0	0	Covered	M. Rayet, Director.
Bourges, Normal School	29.39	746.4	29.94	760.5	50.7	10.4	66	NE			1				NE	0	0		M. Postel, Director.
Brest, Naval Observatory	29.83	757.7	30.15	765.9	41.4	5.2	90	ENE			2		10		ENE	0	0		M. de Rermaree, Dir.
Caen, Normal School	29.93	760.2	30.01	762.2	39.4	4.1	100	NNE			1		10			0	0	Covered	M. Bietrix, Director.
Châlons-sur-Marne, N.Sch'l	29.71	754.7	30.04	763.0	46.4	8.0	86	NW			1		10			0	0	Covered	M. Jadot, Director.
Charleville, Normal School	29.53	750.0	30.09	764.3	36.7	2.6	75	E			1		10					Snowing	M. Grimard.
Clermont-Ferrand Obs'y	28.58	725.8	29.92	760.0	55.0	12.8	38	E			1	20	0			0	0	Clear	M. Alluard, Director.
Cluny, Normal School	29.12	739.7	29.97	761.2	56.8	13.8	64	ENE			1		0			0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.14	740.1	30.02	762.5	45.0	7.2	74	SE			1		kn	SE	SE	0	0		Dr. Coulet, Director.
Gap, Normal School	27.48	698.1	30.05	763.6	44.6	7	31	N			1		2		N	0	0	¼ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.91	734.3	30.05	763.3	55.2	12.9	45	SE			1		8		SE	0	0	¾ covered	M. Kina, Director.
Grenoble, Normal School	29.26	743.1	30.03	762.7	52.9	11.6	53	W			1		2k			0	0	Slightly cl'dy	M. Ablard, Director.
Guéret, Normal School	28.42	721.9	30.01	762.2	53.6	12	57	SW			1	20				0	0	Slightly cl'dy	M. Rivoir, Director.
Lamballe, Normal School	29.74	755.4	30.02	762.5	40.1	4.5	93	NNE			1		Fg		NNE	0	0	Foggy	M. Ollitrault, Director.
Lescar, Normal School	29.32	744.6	29.98	761.5	59.7	15.4	75	N			1		5			0	0	Cloudy	M Chauvin, Director.
Lorient, Naval Observatory	29.96	760.9	30.06	763.5	42.4	5.8	85	NE			3		10			0.20	5.	Covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.92	734.5	29.94	760.5	54.0	12.2	54	SSE			1		Sk			0	0	Light smoke	M. André, Director.
Mans, Normal School	29.75	755.6	30.06	763.6	40.8	4.9	90	E			3		10			0	0	Covered	M. Piboeu, Director.
Marseille, Observatory	29.73	755.2	30.00	762.0	57.4	14.1	49	ESE			1		7		ENE	0	0		M. Stephan, Director.
Montlouis l'Instituteur																			M. Cave, for Dr. Fines.
Montpellier, Normal School	29.89	759.2	30.00	762.0	53.6	12	74	E			2		5		SE	0	0	Cloudy	M. Galzin, Director.
Nancy, Normal School	29.23	742.5	30.02	762.5	39.9	4.4	77	WNW			1		10			0	0	Covered	M. Hasse.
Nantes, Observatory	29.86	758.4	30.02	762.5	43.5	6.4	93	ENE			2		10			0	0	Covered	M. Larocque, Director.
Nice	30.00	762.1	30.04	763.0	54.3	12.4	63	SE			4		5	SE	SE	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.84	757.8	29.94	760.5	54.1	12.3	79	E	13.0	5.8			8		SE	0.874	22.2		Dr. Fines.
Pic-du-Midi, Plantade	22.33	567.3			31.8	—0.1							10		SE	0.091	2.3	Snowy	M. Bayiac, for Gen'l de Nansouty.
Privas, Normal School	28.93	734.9	30.00	762.0	56.1	13.4	52	Calm			0		2k	SW	S	0	0	Slightly cl'dy	M. Tallieu.
Puy de Dôme O s'y, Summit	25.03	635.7			34.7	1.5	76	SE			3		0			0	0	Clear	M. Alluard, Director.
Rochefort, Naval Obs'y	29.97	761.2	30.00	762.0	51.3	10.7	77	E			1		0			0.04	1.	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.78	755.5	30.00	762.1	44.6	7	88	NNE			2		10			0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	27.78	705.7	29.94	760.4	49.6	9.8	56	E			2	20				0	0		M. Richard, Director.
Rouen, Normal School	29.98	761.4	30.06	763.6	37.8	3.2	80	NE			3		5		S	0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.89	759.2	30.05	763.2	40.3	4.6	87	E			2		5		E	0	0	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.87	758.8	30.04	763.0	39.6	4.2	91	NNE			2		10		ENE	0	0	Foggy	M. Renou, Director.
Toulouse, Observatory	29.22	742.2	29.94	760.5	54.1	12.3	71	SSE			4		2			0	0	Slightly cl'dy	M. Baillaud, Director.
Tours	29.79	756.7	29.99	761.7	44.6	7.0	85	NE			2		10	Calm	E	0	0	Covered	M. de Tastes.
Versailles, Observatory	29.54	750.4	30.04	762.9	36.0	2.2	100	NE			2		10			0	0	Covered	Dr. A. Bérigny, Director
Sub-Series. Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.13	740.0	30.00	761.9	35.6	2.0	80	NW			3		5ks			0.004	0.1	Foggy	Prof. Dr. Hoh.
Berlin	29.81	757.1	29.99	761.7	33.1	0.6	89	NW			2		10			0.004	0.1	Snowing	Prof. Dr. Arndt.
Breslau	29.47	748.6	30.00	762.1	38.1	3.4	50	WSW			2		9						Royal University Obs'y.
Carlsruhe	29.59	751.6	30.04	762.9	37.0	2.8	89	E			0		10			0.059	1.5	Rain & sleet	Albert Senz.
Cassel	29.41	747.1	30.02	762.6	34.2	1.2	81	N			2		8	NW		0.004	0.10		Dr. H. Möhl.
Frankfort on the Main	29.76	755.8	30.14	765.5	36.5	2.5	89	SW			1		10			0.020	0.5	Foggy	Physical Society.
Friedrichshafen	28.54	724.9	30.00	762.1	44.2	6.8	78	SW			2		0			0	0		Chief Telegrapher Wilhelm.
Hamburg	29.98	761.4	30.05	763.2	31.3	—0.4	87	NW			2		10			Inap.	Inap.		Dr. R. Kleeman.
Kiel	29.98	761.6	30.00	762.0	33.3	0.7	80	W			4		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.60	751.8	30.04	763.0	33.1	0.6	89	NW			2		10					Snowing	Prof. Dr. Bruhns.
Magdeburg	29.79	756.6	30.02	762.6	32.2	0.1	96	WNW			2		10			0.012	0.3	Foggy	Dr. Assmann.
Memel	29.86	758.5	29.91	759.7	27.0	—2.8	87	S			2	10	10ks	NW					Reinbrecht & Issermann.
Munich	28.14	714.8	30.00	762.0	42.3	5.7	73	NW			2		4	NW		0	0		Central Station.
Neufahrwasser	29.87	758.6	29.88	759.0	34.0	1.1	83	SSW			2		3			0.004	0.1		A Lothes.
Neustadt, Palatinate	29.46	748.2	29.98	761.6	37.4	3.0	95						10			0	0	Light fog	Dicknether.
Stuttgart	29.04	737.7	29.97	761.2	37.4	3.0	91	NE			1		10			0.008	0.2	Foggy	Prof. Dr. Schoder.
Thorn	29.70	754.4	29.89	759.1	37.0	2.8	64	SW			1		9			0.002	0.05		Dr. O. Cunerth.
Weissenburg, Bavaria	28.45	722.5	29.95	760.8	43.3	6.3	65	W			2		1			0	0		Prof. Kemlein.
Wustrow	29.95	760.7	29.98	761.4	30.4	—0.9	94	WNW			4		10s			0	0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.75	755.6	30.15	765.8	46.4	8.0		NE			1.5		10					Covered	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.89	759.2	29.94	760.5	78.3	25.7	74	SW	24.0	10.7			0			0	0	Blue sky	
Deesa	29.47	748.4	29.94	760.4	88.4	31.3	25	NE	7.7	3.4			3	SW		0	0	D. clouds	
Bombay	29.85	758.2	29.89	759.1	83.5	28.5	73	NNW	23.0	10.3			0			0	0	Blue sky	
Poona, Yarrowda	28.05	712.6	29.88	759.0	88.1	31.2	20	SSE	5.0	2.2			0			0	0	Blue sky	
Belgaum	27.36	694.9	29.84	757.9	88.4	31.3	15	SE	6.0	2.7			0			0	0	Blue sky	
Lahore	29.27	743.5	30.04	763.0	66.6	19.2	64	N	2.2	1.0			2			0.17	4.3	Blue sky	
Roorkee	29.11	739.3	30.02	762.5	74.8	23.8	69	Calm	3.0	1.3			2			0.12	3.0		
Agra	29.33	745.0	29.90	759.4	81.7	27.6	49	S	5.7	2.6			0			0	0		
Nagpur	28.88	733.4	29.90	759.4	92.0	33.3	29	Calm	3.3	1.5			8		SW	0	0	D. clouds	
Jubbulpore	28.61	726.6	29.97	761.2	83.0	28.3	35	N	2.9	1.3			6			0	0	D. clouds	
Lucknow	29.62	752.3	30.00	762.0	79.2	26.2	49	NNE	2.3	1.0			9	E		0.04	1.0	D. clouds	
Allahabad	29.65	753.1	29.96	761.0	83.7	28.7	43	N	1.6	0.7			5	W		0	0	D. clouds	
Patna	29.76	755.9	29.94	760.5	81.9	27.7	68	W	0.8	0.4			4	W	W	0	0	D. clouds	
Hazaribagh	27.93	709.4	29.94	760.5	79.8	26.6	37	NW	4.6	2.1			0			0	0	Blue sky	
Cuttack	29.83	757.6	29.91	759.7	87.8	31.0	33	SSW	1.0	0.4			0			0	0	Blue sky	
Calcutta, Alipore	29.88	759.0	29.91	759.6	84.5	29.2	52	NW	1.0	0.4			0			0	0	Blue sky	
Goalpara	29.46	748.3	29.87	758.6	79.9	26.6	43	WNW	3.3	1.5			0			0	0	Blue sky	
Chittagong	29.88	758.9	29.97	761.2	78.3	25.7	87	SW	3.0	1.3			1			0	0	Blue sky	
Sibsagar	29.62	752.3	29.96	761.1	68.9	20.5	90	NE	2.9	1.3			6	W	W	0.03	0.8	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.68	753.9	30.10	764.6	44.1	6.7	49	SW	0.7	0.3			2			0	0		Prof. Giovanni Clodig.
Milan	29.54	750.3	30.07	763.8	45.9	7.7	51	ENE	3.1	1.4			0			0	0		Prof. Schiaparelli.
Padua	29.99	761.8	30.11	764.7	43.3	6.3	65	SSE	1.8	0.8			6	WNW		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.12	739.7	30.01	762.2	46.0	7.8	51	ESE	2.5	1.1			0			0	0		Prof. P. F. Denza.
Genoa	29.86	758.5	30.06	763.5	48.4	9.1	50	N	1.8	0.8			10	SE		0	0		Prof. G. M. Garibaldi.
Mondovi	28.11	714.1	30.10	764.6	39.4	4.1	55	N			2		1	SW		0	0		Prof. D. C. Bruno.
Pesaro	30.05	763.3	30.10	764.6	42.8	6.0	82	NW	4.3	1.9			2	SW		0	0		Prof. Luigi Guidi.
Florence	29.82	757.3	30.08	763.9	46.4	8.0	68	NW			2		10			0	0		Cav. F. Meucci.
Leghorn	29.91	759.6	29.99	761.8	50.4	10.2	58	NE	3.8	1.7			10	N		0	0		Prof. P. Monte.
Rome	29.88	759.0	30.06	763.5	56.5	13.6	35	W	1.8	0.8			7			0	0		Prof. P. S. Ferrari.
Lecce	29.85	758.3	30.11	764.9	53.4	11.9	40	NNE	3.1	1.4			2			0	0		Prof. C. de Giorgi.
Cosenza	29.19	741.5	30.10	764.6	50.7	10.4	67	SSE	1.8	0.8			3	SE		0	0		Prof. D. Conti.
Cagliari	29.73	755.2	29.93	760.1	56.3	13.5	88	ESE			2		10			0.492	12.5		Prof. A. Pacinotti.
Palermo	29.82	757.3	30.07	763.7	56.8	13.8	42	ENE	6.3	2.8			3			0	0		Prof. G. Ciaccatore.
Syracuse	30.05	763.3	30.10	764.4	56.1	13.4	64	ESE	9.8	4.4			10			0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.53	750.1	30.07	763.7	55.0	12.8	51	NW	0	0			3			0	0		Prof. F. Brioschi.
Stelvio	22.04	559.9			24.1	— 4.4	72	ESE			2		0			0	0	Misty	P. F. Denza.
Valdobbia	22.04	559.7			23.0	— 5.0	64	SE			2		0			0	0	Clear	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.22	767.6	30.24	768.1	40.5	4.7	71	NNE	7.4	3.3			7cs			0	0	Clear	K. Sasaki.
Kioto	30.03	762.7	30.22	767.6	35.0	1.7	91						1s			0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.92	759.9	30.13	765.3	45.2	7.3	74	NE	4.2	1.9			10s			0	0	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	30.15	765.8	30.22	767.6	41.7	5.4	83	ENE	3.3	1.5			10s			0.005	0.13	Overcast	The Staff.
Wakayama	30.16	766.0	30.21	767.3	41.1	5.1	75	NNE	18.5	8.3			0			0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.87	758.7	30.06	763.4	82.2	27.9	62	E	16.0	7.2			0	6		E	0.01	0.3	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.47	621.6	30.22	767.6	55.0	12.8	80	NW			1		2c	0		0	0	Clear	Prof. M. Leal.
Mazatlan	29.76	755.8	30.02	762.5	67.5	19.7	79	ESE	0	0			6cs	0		0	0	½ cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.12	587.0	30.30	769.6	50.0	10.0	74	Calm	0	0			2c	0		0.087	2.2	Foggy	The Staff.
Pabellon, Aguascallentes	23.93	607.9	29.96	761.0	59.4	15.2	47	SW			3	0	1s			0	0	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.49	594.2	30.23	767.8	48.2	9.0	44	Calm	0	0		0	0			0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.22	615.2	30.10	764.5	61.7	16.5	49	W	0.9	0.4		0	0			0	0	Clear	G. Barroeta, M. D.
Tlacotalpam	29.94	760.5	29.96	760.8	65.5	18.6	95	S	0.9	0.4		0	0			0	0	Foggy	Prof. M. Cházaro.
Zacatecas	22.58	573.5	30.30	769.7	48.2	9.0		Calm	0	0		0	3cs		W	0	0	Clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.13	765.3	30.13	765.3	40.3	4.6		ESE			3					0	0		
Groningen	30.07	763.6	30.12	765.0	36.5	2.5		WNW			1					0	0		
Helder	30.10	764.5	30.10	764.5	36.5	2.5		SSW			1					0	0		
Hellevoetsluis	30.11	764.8	30.11	764.8	36.9	2.7	83	ENE			1					0	0		
Utrecht	30.07	763.8	30.12	765.0	39.7	4.3	62	N			2		8			0.004	0.1	Very cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instru'm'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. h'r	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.89	759.3	29.95	760.9	34.2	1.2	78	Calm	0	0			8			0	0		
Christiania	29.71	754.6	29.85	758.5	35.1	1.7	69	Calm	0	0			10			0.161	4.1	Light fog	
Gjesvær	29.96	761.0	29.98	761.6	15.6	— 9.1		NNE			6		10						
Lodingen	29.85	758.1	29.89	759.3	25.9	— 3.4	71	N			6		10			0.059	1.5		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores																			Dr. J. A. Sampaio.
Campo Major	28.64	727.6	29.64	752.9	57.6	14.2	59	NNE	9.8	4.4			9			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.80	756.8	29.89	759.1	60.6	15.9	53	WSW	5.6	2.5			6			0.142	3.6		Capt. D. A. de Cunha.
Lisbon, Observatory	29.33	745.0	29.69	754.1	56.8	13.8	65	NE	22.4	10.0			3	SE		0	0		The Staff.
Ponta Delgada, Azores	29.97	761.2	30.04	763.0	55.8	13.2	71	ESE	1.3	0.6			10			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.45	722.7	29.62	752.3	6.8	—14.0	100	WSW	56	25			10			Blank			Capt. Lasarew.
Archangel	29.66	753.4	29.68	753.9	16.2	— 8.8	91	SSW	13	6			10						Capt. Sseliwerstow.
Astrakhan	30.53	775.4	30.45	773.3	20.7	— 6.3	66	N	2	1			0						Capt. Wisganow.
Barnaul ‡	29.36	745.7	29.89	759.3	15.8	— 9.0	82	SW	22	10			10						Meteorological Obs'y.
Dorpat	29.73	755.1	29.99	761.7	24.6	— 4.1	53	SSE	4	2			3k						Observatory.
Ekaterinburg	28.87	733.2	29.93	760.2	0.3	—17.6	54	NNW	7	3			0						Meteorological Obs'y.
Kasan	29.82	757.3	30.11	764.7	19.0	— 7.2	78	W	13	6			0						Observatory.
Kertch	30.22	767.5	30.24	768.0	28.0	— 2.2	81	ENE	2	1			0						Lagorio.
Kieff	29.61	752.0	30.30	769.7	14.2	— 9.9	80	ESE	4	2			10n					Light snow	Cand. Fatjanow.
Lugan	30.13	765.2	30.35	770.9	16.9	— 8.4	70	E	9	4			0			Blank			Meteorological Obs'y.
Moscow	29.74	755.3	30.34	770.6	16.2	— 8.8	69	S	4	2			0						Meteorological Obs'y.
Nertchinsk	28.03	712.0	30.68	779.2	—13.2	—25.1	44	Calm	0	0			0						Meteorological Obs'y.
Nikolaiev	30.27	768.9	30.34	770.7	19.4	— 7.0	84	NE	9	4			8cu	ska					1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.58	751.2	29.66	753.4	— 7.6	—22.0	70	W	9	4			10n						Lieut. Iwanow.
Nukuss	30.21	767.3	30.46	773.6	28.4	— 2.0	88	W	2.2	1.0			4s						Dr. Dobrochotow.
Pekin, China	30.21	767.3	30.35	770.9	29.5	— 1.4	53	S	4	2			2k						Physical Observatory.
St. Petersburg	29.97	761.2	29.98	761.6	25.3	— 3.7	47	SSE	9	4			0						Central Physical Obs'y.
Tashkend, Laboratory	28.80	731.4	30.46	773.7	33.8	1	89						3						Teich, A. M.
Tiflis	28.89	733.8	30.39	771.9	33.6	0.9	73	SE	4	2			10						Physical Observatory.
Warsaw	29.57	751.1	30.01	762.3	32.0	0.0	60	SSE	9	4			0						Astronomical Obs'y.
Wilna	29.63	752.5	30.07	763.8	24.6	— 4.1	66	S	4	2			8					Light clouds	Berg, Assistant.
Yeniseisk	29.78	756.4	30.10	764.5	5.2	—14.9	74	Calm	0	0			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.05	763.3	41.8	5.4	68	W			2		4k			0.04	1.0	Light clouds	Andrew Gibb.
Monach Lt. House, Hebrides			30.05	763.3	44	6.7	92	N			7		10			0.1	3.	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds			29.92	760.0				W			2	3	4	NW		0	0		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.80	756.9	29.91	759.6	52.5	11.4	86	E	5.1	2.3			8			0.676	17.17	Raining	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.83	757.7	29.89	759.1	62.6	17.0	54	SE	0.7	0.3		3	3	SE		0	0	Cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.89	683.1			46.4	8.0	79	NE	5.4	2.4		0	4			0.020	0.5	Cloudy	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.55	699.8	29.80	756.8	49.5	9.7	80	NE	11.2	5.0			10			0.031	0.8	Covered	The Staff.
Murcia, Met. Obs'y ‡	29.55	750.6	29.71	754.5	55.2	12.9	89	ENE	11.4	5.1		5	5	W		0.740	18.8	Raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.82	732.0	29.70	754.4	59.4	15.2	61	SE	6.3	2.8			7			0	0	Cloudy	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.08	764.0	30.15	765.7	61.2	16.2	81	Calm	0	0		10k	s	W		0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.99	761.7	30.04	763.0	81.0	27.2	69	NE	0.4	0.2						0	0	Fair	Federico Faura, S. J
San Fernando, Naval Obs'y	29.45	748.0	29.55	750.5	53.4	11.9	90	ENE	22.9	10.3			10	E		0.408	10.4	Raining	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.98	761.6	30.08	763.9	73.8	23.2	89	S	0	0		2c	0	E		0	0	Clear	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.92	759.9	30.05	763.6	79.3	25.3	72	S	2.1	1.0			s			0	0	Fair	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.80	756.9	29.84	757.9	17.6	— 8.0	100	E			2		10			0	0		
Umea	29.72	754.8	29.78	756.3	27.7	— 2.4	96	Calm			0		0			0.028	0.7		
Hernosand	29.77	756.1	29.82	757.4	27.1	— 2.7	85	Calm			0		8			0.012	0.3		
Stockholm	29.64	752.8	29.82	757.3	22.6	— 5.2	98	NNE			2		10			0	0		
Wisby	29.74	755.3	29.80	756.8	32.4	0.2	85	SSW			2		10			0	0		
Sub-Series.																			
Upsala	29.71	754.6	29.80	756.8	19.0	— 7.2	100	NNW	2.9	1.3			10			0.016	0.40	Light fog	Nils Ekholm.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.55	725.2	30.00	752.1	45.7	7.6	58	NNE			2		0			0	0	Clear	The Observatory.
Zurich	28.34	719.7	30.00	752.1	44.2	6.8	80	W			2		3			0	0	Clear	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —0.5 mm.; Ther. +2°.6 cent.; Hum. —10 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.21	767.2	39.2	4.0	54	NE	13	6.0			10		N	0	0		The Observatory.
Valona			30.04	763.1	55.0	12.8		W			1		5			0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.86	758.4	57.4	14.1	63	N			1		0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.05	763.3	30.14	765.5	10	—12.2	79	NE	7	3.1			10n		Calm	0.20	5.1	Light snow.	
Alpena, Michigan	29.46	748.3	30.20	767.1	—11	—23.9	76	NW	7	3.1		0	0			0.20	5.1	Clear.	
Atlanta, Georgia	28.94	735.1	30.10	764.5	49	9.4	77	SW	10	4.5		Hz	Hz			0	0	Hazy	
Atlantic City, New Jersey	29.97	761.2	29.98	761.5	34	1.1	90	SW	4	1.8		10k	0	W		0.02	0.5	Cloudy	
Atton Id., Alaska‡	29.45	748.0			32	0.0	79	S	6	2.7			10s		SW	0	0	Cloudy	
Augusta, Georgia	29.99	761.7	30.20	767.1	45	7.2	92	SE	3	1.3			Fg		Calm	0	0	Dense fog	
Baltimore, Maryland	29.97	761.2	30.02	762.5	35	1.7	70	SE	2	0.9			10s		Calm	0.03	0.8	Cloudy	
Barnegat, New Jersey	29.94	760.5	29.96	761.0	33	0.6	100	S	6	2.7			10s		W	0.05	1.3	Threatening	
Benton, Montana	26.69	677.9			30	— 1.1	78	NW	8	3.6			10s		Calm	0	0	Cloudy	
Bismarck, Dakota	27.79	705.8	29.65	753.1	23	— 5.0	86	SE	4	1.8			10s		Calm	0.01	0.3	Cloudy.	
Boise City, Idaho	26.93	684.0	29.89	759.2	44	6.7	84	E	4	1.8			10s		Calm	0	0	Cloudy	
Boston, Massachusetts	30.01	762.2	30.18	766.6	9	—12.8	100	SE	5	2.2			10n		Calm	0.03	0.8	Light snow.	
Brackettville, Texas	28.78	731.0	29.82	757.4	58	14.4	88	E	6	2.7			10s		Calm	0	0	Cloudy	
Brownsville, Texas	29.92	760.0	29.97	761.2	61	16.1	100	Calm	0	0		8ck	Fg	Calm	Calm	0	0	Fair	
Buffalo, New York	29.32	744.7	30.10	764.5	5	—15.0	75	N	1	0.4		0	Sk			0.13	3.3	Clear	
Burlington, Vermont	29.84	757.9	30.17	766.3	3	—16.1	73	E	3	1.3			10n		E	0.02	0.5	Light snow.	
Cairo, Illinois	29.71	754.6	30.12	765.0	38	3.3	72	N	8	3.6		0	0			0	0	Clear	
Campo, California	27.46	697.5	30.04	763.0	27	— 2.8	88	SE	4	1.8		2c	0	W		0	0	Fair	
Camp Thomas, Arizona	27.22	691.4			34	1.1	61	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	29.96	761.0	29.97	761.2	45	7.2	84	SW	22	9.8		10ck	0		Calm	0	0	Cloudy	
Cape May, New Jersey																			
Castroville, Texas	29.19	741.4	29.89	759.2	61	16.1	94	S	3	1.3			10s		Calm	0	0	Threatening.	
Cedar Keys, Florida	30.18	766.6	30.20	767.1	58	14.4	82	SE	6	2.7		5c	0	Calm		0	0	Fair	
Champaign, Illinois	29.30	744.2	30.16	766.1	14	—10.0	63	NE	9	4.0		0	0			0	0	Clear	
Charleston, S. Carolina	30.14	765.5	30.20	767.1	52	11.1	86	S	5	2.2		0	0			0	0	Clear	
Charlotte, N. Carolina	29.18	741.2	30.01	762.2	43	6.1	92	SW	7	3.1		5cs	Fg	Calm	Calm	0	0	Fair	
Chattanooga, Tennessee	29.26	743.2	30.07	763.8	52	11.1	60	SW	16	7.2		Hz	Hz	Calm	Calm	0	0	Dense haze.	
Cheyenne, Wyoming	23.84	605.5	29.78	756.4	40	4.4	19	NW	16	7.2		0	0			0	0	Clear	
Chicago, Illinois	29.42	747.3	30.18	766.6	9	—12.8	78	Calm	0	0		0	0			0.12	3.0	Clear	
Chincoteague, Virginia	30.00	762.0	30.02	762.5	35	1.7	90	W	9	4.0		2cs	2s	W	W	Inap.	Inap.	Fair	
Cincinnati, Ohio	29.44	747.8	30.11	764.8	36	2.2	61	N	8	3.6			10ks		N	0	0	Cloudy	
Cleveland, Ohio	29.36	745.7	30.15	765.8	13	—10.6	90	W	5	2.2			10n		Calm	0.15	3.8	Light snow.	
Coleman City, Texas	28.17	715.5	29.82	757.4	54	12.2	87	SW	4	1.8			10s		Calm	0	0	Cloudy	
Columbus, Ohio	29.22	742.2	30.10	764.5	28	— 2.2	78	N	6	2.7			10s		N	0	0	Cloudy	
Concho, Texas	28.03	711.9	29.73	755.1	43	6.1	92	Calm	0	0			10s		Calm	0	0	Cloudy	
Corsicana, Texas	29.56	750.8	30.03	762.7	57	13.9	81	Calm	0	0			10s		Calm	0	0	Cloudy	
Davenport, Iowa	29.47	748.5	30.18	766.6	7	—13.9	77	NE	3	1.3		0	1s		Calm	0	0	Clear	
Dayton, Washington T'y	27.95	709.9	29.59	751.6	45	7.2	84	S	12	5.4			10s		Calm	0.10	2.5	Cloudy	
Deadwood, Dakota	25.04	636.0			40	4.4	31	S	6	2.7		0	0			0	0	Clear	
Decatur, Texas	28.75	730.2	29.92	760.0	51	10.6	59	SE	8	3.6		0	0			0	0	Clear	
Delaware Breakwater, Del.	29.96	761.0	29.99	761.7	34	1.1	70	S	10	4.5			10ks		SW	0.01	0.3	Cloudy	
Denison, Texas	29.15	740.4	29.94	760.5	53	11.7	86	S	8	3.6		0	0			0	0	Clear	
Denver, Colorado	24.63	625.6	29.85	758.2	33	0.6	51	SE	4	1.8		0	0			0	0	Clear	
Des Moines, Iowa	29.21	741.9	30.16	766.1	14	—10.0	82	NE	1	0.4			10s		Calm	0	0	Cloudy	
Detroit, Michigan	29.41	747.0	30.17	766.3	12	—11.1	100	NW	5	2.2		Hz	0	Calm		0.56	14.2	Dense haze.	
Dodge City, Kansas	27.31	693.7	29.68	753.9	30	— 1.1	78	N	1	0.4		0	0			0	0	Clear	
Dubuque, Iowa	29.42	747.3	30.22	767.6	— 4	—20.0	82	NW	1	0.4		2k	Fg	Calm	Calm	0.06	1.5	Fair	
Duluth, Minnesota	29.34	745.2	30.07	763.8	11	—11.7	80	W	1	0.4		0	9s		Calm	0.06	1.5	Cloudy	
Eagle Pass, Texas	29.18	741.2	29.91	759.7	56	13.3	87	Calm	0	0			10s		Calm	0	0	Cloudy	
Eagle Rock, Idaho	25.19	639.8	29.84	757.9	23	— 5.0	86	N	6	2.7			10s		SW	0	0	Cloudy	
Eastport, Maine	30.10	764.5	30.17	766.3	— 2	—18.9	67	W	11	4.9			10s		W	0	0	Cloudy	
El Paso, Texas																			
Erie, Pennsylvania	26.19	665.2			54	12.2		NW	6	2.7		0	5s		W	0	0	Fair	
Escanaba, Michigan	29.33	745.0	30.11	764.8	10	—12.2	79	N	2	0.9			10s		Calm	0.16	4.1	Cloudy	
Florence, Arizona	29.45	748.0	30.21	767.3	—11	—23.9	52	NW			1	2c	0	NW		0.14	3.6	Clear	
Fort Apache, New Mexico	28.45	722.6	30.05	763.3	47	8.3	62	W	3	1.3		0	1s		Calm	0	0	Clear	
Fort Assinniboine, Montana	25.01	635.2	30.45	773.4	26	— 3.3	75	NE	3	1.3		0	0			0	0	Clear	
Fort Bennett, Dakota	25.75	679.4			36	2.2	71	SW	12	5.4			10s		SW	Inap.	Inap.	Cloudy	
Fort Buford, Dakota	28.04	712.2			28	— 2.2	77	S	2	0.9		0	0			0	0	Clear	
Fort Custer, Montana	27.50	698.5	29.36	745.7	25	— 3.9	87	S	8	3.6		0	8s		W	0	0	Cloudy	
Fort Davis, Texas	25.42	671.1			33	0.6	90	W	12	5.4			10s		Calm	0	0	Cloudy	
Fort Elliott, Texas	25.16	639.0	30.12	765.0	45	7.2	76	Calm	0	0		0	0			0	0	Clear	
Fort Gibson, Indian T'y	27.20	690.9	29.57	751.1	29	— 1.7	78	NW	4	1.8		0	0			0	0	Clear	
Fort Grant, Arizona	29.42	747.3	29.98	761.5	35	1.7	80	Calm	0	0		0	0			0	0	Clear	
Fort Griffin, Texas	25.16	639.0	29.96	761.0	46	7.8	28	NE	4	1.8		0	0			0	0	Clear	
Fort Keogh, Montana	28.62	726.9	29.91	759.7	41	5.0	74	W	5	2.2		0	0			0	0	Clear	
Fort McKavett, Texas	27.04	686.8			27	— 2.8	77	Calm	0	0			10s		Calm	0.02	0.5	Cloudy	
Fort Macon, North Carolina	27.69	703.3	29.58	751.3	57	13.9	94	S	8	3.6			10s		Calm	0	0	Cloudy	
Fort St. Michaels	30.09	764.3	30.10	764.5	51	10.6	93	SW	15	6.7		Hz	Sk	Calm	Calm	0	0	Light haze.	
Fort Missoula, Montana	29.92	760.0	29.95	760.7	5	—15.0	100	N	4	1.8		0	0			0	0		
Fort Shaw, Montana	25.36	669.5			34	1.1	50	SE	5	2.2			10s		Calm	0	0	Cloudy	
Fort Sill, Indian Territory	25.88	657.3			41	5.0	57	W	25	11.2		5cs	0	Calm		0	0	Fair	
Fort Stevenson, Dakota	28.72	729.5	29.85	758.2	39	3.9	91	N	11	4.9		0	0			0	0	Clear	
Fort Verde, Arizona	27.59	700.8			26	— 3.3	75	SE	12	5.4		0	0			0.06	1.5	Clear	
Fredericksburg, Texas					34	1.1	42	W			2	0	0			0	0	Clear	
Galveston, Texas	28.22	716.8	29.76	755.9	59	15.0	94	W	10	4.5			10s		Calm	0	0	Cloudy	
Grand Haven, Michigan	30.00	762.0	30.04	763.0	61	16.1	88	SE	7	3.1		8cs	2s	Calm	SW	0	0	Cloudy	
Hatteras, North Carolina	29.48	748.8	30.20	767.1	5	—15.0	100	Calm	0	0			10n		Calm	0.55	14.0	Light snow.	
Helena, Montana	30.05	763.3	30.07	763.8	48	8.9	78	SW	18	8.0		0	Hz		Calm	0	0	Clear	
Henrietta, Texas	25.37	644.4			37	2.8	38	S	12	5.4			10n		S	0.12	3.0	Heavy rain	
Indianapolis, Indiana	28.93	734.8	29.88	758.9	40	4.4	56	NW	3	1.3		0	0			0	0	Clear	
Indianola, Texas	29.30	744.2	30.13	765.3	23	— 5.0	86	N	4	1.8		1c	Sk	NW	Calm	0	0	Clear	
Jacksboro, Texas	29.95	760.7	29.98	761.5	60	15.6	94	S	5	2.2		0	5s		W	Inap.	Inap.	Fair	
Jacksonville, Florida	28.78	731.0	29.92	760.0	49	9.4	71	SW	1	0.4		0	0			0	0	Clear	
Keokuk, Iowa	30.18	766.6	30.22	767.6	48	8.9	85	NE	6	2.7		2cs	Fg	Calm		0	0	Fair	
Key West, Florida	29.42	747.3	30.12	765.0	25	— 3.9	75	E	7	3.1			10s		Calm	0	0	Cloudy	
Kittyhawk, North Carolina	30.08	764.0	30.11	764.8	66	18.9	79	NE	6	2.7		5k	0	SW		0	0	Fair	
Knoxville, Tennessee	30.02	762.5	30.04	763.0	44	6.7	84	W	16	7.2		8cs	0	W		0	0	Cloudy	
La Crosse, Wisconsin	29.04	737.6	30.05	763.3	46	7.8	69	SW	6	2.7		5cs	0	W		0	0	Fair	
La Mesilla, New Mexico	29.36	745.7	30.19	766.8	— 4	—20.0	65	S	4	1.8			10s		Calm	0.13	3.3	Cloudy	
Laredo, Texas	26.08	662.4	30.23	767.8	38	3.3	45	N	1	0.4		0	8s		Calm	0	0	Cloudy	
Leavenworth, Kansas	29.52	749.8	29.86	758.4	59	15.0	94	Calm	0	0		0	0			0	0	Clear	
Lewiston, Idaho	29.16	740.7	30.05	763.3	29	— 1.7	89	SE	4	1.8			10s			0	0	Cloudy	
Little Rock, Arkansas	28.85	732.8	29.48	748.8	50	10.0	77	NW	2	0.9			10s		Calm	0	0	Cloudy	
Los Angeles, California	29.73	755.1	30.06	763.5	47	8.3	77	W	4	1.8		0	0			0	0	Clear	
Louisville, Kentucky	29.73	755.1	30.10	764.5	52	11.1	93	Calm	0	0			Fg		Calm	0	0	Dense fog	
Lynchburg, Virginia	29.50	749.3	30.08	764.0	35	1.7	70	N	9	4.0		0	1s		Calm	0	0	Clear	
Madison, Wisconsin	29.28	743.7	29.98	761.5	38	3.3	63	SW	1	0.4		0	0			0	0	Clear	
Marquette, Michigan	29.08	738.6	30.19	766.8	— 1	—18.3	68	N	2	0.9		2cs	0	Calm		0.45	11.4	Fair	
Mason, Texas	29.36	745.7	30.14	765.5	6	—14.4	76	W	8	3.6			10s		W	0.03	0.8	Cloudy	
	28.34	719.8	30.08	764.0	59	15.0	88	S	2	0.9			10ks		SE	0	0	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.72	754.9	30.06	763.5	51	10.6	65	S	4	1.8		2cs	Sk	Calm	Calm	0	0	Light smoke	
Milwaukee, Wisconsin	29.39	746.5	30.20	767.1	5	—15.0	75	W	4	1.8			10s		Calm	0.52	13.2	Cloudy	
Mobile, Alabama	30.09	764.3	30.16	766.1	48	8.9	93	W	4	1.8		5c	Fg	W		0	0	Fair	
Montgomery, Alabama	29.95	760.7	30.19	766.8	50	10.0	86	S	2	0.9		0	0			0	0	Clear	
Moorhead, Minnesota	28.84	732.5	29.86	758.4	13	—10.6	90	SE	28	12.5			10s		SE	0.03	0.8	Cloudy	
Morgantown, W. Virginia	29.05	737.9	30.07	763.8	37	2.8	63	N	10	4.5			10s		Calm	0.11	2.8	Cloudy	
Mt. Washington, N. H.	23.33	592.6	29.69	754.1	—10	—23.3	77	NW	40	17.9			Fg		NW	0	0	Light fog	
Nashville, Tennessee	29.52	749.8	30.07	763.8	40	4.4	82	Calm	0	0			Fg		Calm	0	0	Dense fog	
New Haven, Connecticut	29.97	761.2	30.10	764.5	9	—12.8	100	NE	8	3.6			10n		Calm	0.18	4.6	Heavy snow	
New London, Connecticut	30.06	763.5	30.11	764.8	13	—10.6	81	N	3	1.3			10n		N	0.03	0.8	Light snow.	
New Orleans, Louisiana	30.08	764.0	30.14	765.5	51	10.6	86	E	7	3.1		0	Sk		E	0	0	Clear	
Newport, Rhode Island	30.06	763.5	30.12	765.0	14	—10.0	82	NE	7	3.1			10n		Calm	0.15	3.8	Heavy snow	
New River, N. Carolina					53	11.7	87	SW			4	Hz	0	Calm				Light haze	
New Shoreham, Rhode I'd	30.06	763.5	30.09	764.3	24	— 4.4	100	E	14	6.3			10n		E	0.17	4.3	Heavy snow	
New York, New York	29.84	757.9	30.04	763.0	22	— 5.6	100	N	10	4.5			10n;fg		Calm	0.30	7.6	Light snow.	
Norfolk, Virginia	29.95	760.7	30.01	762.2	40	4.4	73	SW	14	6.3		10cs	Sk	Calm	Calm	0	0	Cloudy	
North Platte, Nebraska	26.90	683.2	29.50	749.3	34	1.1	84	S	12	5.4		0	0			0	0	Clear	
Olympia, Washington T'y	29.58	751.3	29.62	752.3	45.5	7.5	92	S	8	3.6			10n		Calm	1.02	25.9	Light rain	
Omaha, Nebraska	28.85	732.8	30.02	762.5	19	— 7.2	69	SE	1	0.4		0	8s		Calm	0	0	Fair	
Oswego, New York	29.71	754.6	30.06	763.5	9	—12.8	78	E	2	0.9		Hz	2s		Calm	0.13	3.3	Fair	
Pensacola, Florida	30.16	766.1	30.20	767.1	52	11.1	79	SE	3	1.3		1cs	Hz	W	Calm	0	0	Clear	
Philadelphia, Pa	29.95	760.7	30.01	762.2	23	— 5.0	86	NE	5	2.2			10n		Calm	0.06	1.5	Light snow.	
Phœnix, Arizona	28.83	732.3	30.69	779.5	42	5.6	58	E	1	0.4		5c	0	S		0	0	Fair	
Pike's Peak, Colorado	17.58	446.5	29.79	756.7	10	—12.2	58	NW	28	12.5		0	0			0	0	Clear	
Pilot Point, Texas	29.18	741.2	30.03	762.7	50	10.0	93	S	8	3.6		0	5s		Calm	0	0	Fair	
Pioche, Nevada	23.92	607.6	29.69	754.1	35	1.7	36	S	3	1.3		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.22	742.2	30.07	763.8	29	— 1.7	89	NW	8	3.6			10s		NW	0.19	4.8	Cloudy	
Port Huron, Michigan	29.43	747.5	30.16	766.1	4	—15.6	74	N	5	2.2		0	0			0.34	8.6	Clear	
Portland, Maine	30.14	765.5	30.19	766.8	8	—13.3	78	NW	5	2.2			10n		Calm	Inap.	Inap.	Light snow.	
Portland, Oregon	29.68	753.9	29.75	755.6	48	8.9	89	S	12	5.4			10n		S	0.16	4.1	Light rain	
Portsmouth, N. Carolina					54	12.2	87	NE	17	7.6		5k	Hz	W	Calm	0	0	Fair	
Prescott, Arizona	24.74	628.4	30.10	764.5	32	0.0	50	S	6	2.7		0	0			0	0	Clear	
Punta Rassa, Florida	30.17	766.3	30.18	766.6	60	15.6	88	NE	8	3.6		8c	2ks	W	E	0	0	Cloudy	
Red Bluff, California	29.65	753.1	30.00	762.0	52.5	11.4	76	S	10	4.5			10s		Calm	0	0	Cloudy	
Rio Grande City, Texas	29.75	755.6	29.97	761.2	61	16.1	88	SE	6	2.7		0	0			0	0	Clear	
Rochester, New York	29.42	747.3	30.09	764.3	8	—13.3	78	SE	2	0.9		0	1s		Calm	0.28	7.1	Clear	
Roseburg, Oregon	29.37	746.0	29.93	760.2	47.5	8.6	77	SW	6	2.7		0	8ks		SW	0.17	4.3	Fair	
Sacramento, California	30.03	762.7	30.10	764.5	52	11.1	86	SE	6	2.7			10s		Calm	0	0	Cloudy	
St. Louis, Missouri	29.53	750.0	30.14	765.5	27	— 2.8	88	NE	8	3.6		0	0			0	0	Clear	
St. Paul, Minnesota	29.16	740.7	30.05	763.3	12	—11.1	80	E	3	1.3			10s		Calm	0.24	6.1	Cloudy	
Salt Lake City, Utah	25.45	646.4	29.78	756.4	43	6.1	36	SE	3	1.3		0	7s		Calm	0	0	Fair	
San Antonio, Texas	29.29	744.0	29.99	761.7	61	16.1	94	Calm	0	0			10s		Calm	0	0	Threatening	
San Diego, California	30.07	763.8	30.15	765.8	53	11.7	73	E	3	1.3			10s		Calm	0	0	Cloudy	
Sandusky, Ohio	29.43	747.5	30.17	766.3	10	—12.2	79	W	6	2.7		0	0			0.18	4.6	Clear	
Sandy Hook, New Jersey	29.98	761.5	30.01	762.2	29	— 1.7	100	N	3	1.3			10n		Calm	0.05	1.3	Light snow.	
San Francisco, California	30.07	763.8	30.13	765.3	55	12.8	93	SW	7	3.1			10n		SW	0.07	1.8	Light rain	
Santa Fé, New Mexico	23.19	589.2	29.73	755.1	31	— 0.6	58	NE	1	0.4		0	0			0	0	Clear	
Savannah, Georgia	30.12	765.0	30.22	767.6	50	10.0	86	SW	4	1.8		8k	Fg	SW	Calm	0	0	Fair	
Shreveport, Louisiana	29.82	757.4	30.07	763.8	52	11.1	86	Calm	0	0		0	8s		W	0	0	Fair	
Silver City, New Mexico	24.23	615.4	30.60	777.2	33	0.6	79	Calm	0	0		0	0			0	0	Clear	
Smithville, North Carolina	30.13	765.3	30.17	766.3	53	11.7	93	SW	10	4.5			10s		Calm	0	0	Cloudy	
Socorro, New Mexico	25.40	645 2	29.46	748.3	29	— 1.7	34	Calm	0	0		0	0			0	0	Clear	
Springfield, Illinois	29.46	748.3	30.18	766.6	21.5	— 5.8	71	NE	6	2.7		0	0			0	0	Clear	
Springfield, Massachusetts	30.00	762.0	30.15	765.8	7	—13.9	54	N	5	2.2			10n		Calm	0.05	1.3	Light snow.	
Stockton, Texas	26.91	683.5	29.91	759.7	45	7.2	92	SE	4	1.8		0	1s		Calm	0	0	Clear	
St. Vincent, Minnesota	28.90	734.0	29.75	755.6	8	—13.3	89	S	12	5.4			10s		Calm	0	0	Cloudy	
Thatcher's Island, Mass	30.11	764.8	30.17	766.3	12	—11.1	86	N	1	0.4			10n		NW	0.01	0.3	Light snow.	
Toledo, Ohio	29.40	746.7	30.14	765.5	13	—10.6	81	W	2	0.9		0	Sk			0.19	4.8	Clear	
Tucson, Arizona	27.51	698.7	30.06	763.5	49	9.4	37	SE	2	0.9		0	0			0	0	Clear	
Umatilla, Oregon	29.39	746.5	29.88	758.9	39	3.9	95	NW	6	2.7		0	2s		W	0.10	2.5	Clear	
Uvalde, Texas	29.00	736.6	29.81	757.2	60	15.6	94	S	2	0.9			10s		Calm	0	0	Cloudy	
Vicksburg, Mississippi	29.87	758.7	30.13	765.3	51	10.6	79	SE	7	3.1		0	1s		Calm	0	0	Clear	
Visalia, California	29.71	754.6	30.08	764.0	50	10.0	86	NW	6	2.7		0	5s		Calm	0	0	Fair	
Washington, D. C.	29.90	759.4	30.02	762.5	31	— 0.6	89	SW	1	0.4			10s		W	Inap.	Inap.	Cloudy	
Wickenburg, Arizona					36	2.2	71	W			1	2c	0	Calm		0	0	Clear	
Wilmington, N. Carolina	30.06	763.5	30 11	764.8	55	12.8	74	SW	14	6.3		Hz	Hz	Calm	Calm	0	0	Dense haze	
Winnemucca, Nevada	25.46	646.7	29.82	757.4	43	6.1	59	SW	8	3.6		0	8ks		SW	0	0	Cloudy	
Wood's Holl, Mass	30.08	764.0	30.12	765.0	13	—10.6	100	E	9	4.0			10n		NE	0.02	0.5	Light snow.	
Yankton, Dakota	28.61	726.7	29.98	761.5	18	— 7.8	84	S	10	4.5			10s			0	0	Cloudy	
Yuma, Arizona	29.79	756.7	29.94	760.5	49	9.4	64	S	3	1.3		0	2s		Calm	0	0	Fair	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8			53.5	11.9	82	Calm	0	0			10n			1.75	44.5	Cloudy	Thomas Herman.
Buff Bay Town, Jamaica‡																			
Havana, Cuba, W. I.	30.09	764.3	30.14	765.5	67	19.4	64	SE	2.4	1.1		0	0			0	0	Clear	Charles Hasselbrink.
Jakobshavn, Greenland	30.23	767.8	30.29	769.3	30.6	— 0.8		SW			6		5			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	72.1	22.3	77	N			1	0	0			0	0		Robert Johnstone.
Navassa, W. I.	29.95	760.7	30.03	762.7	75.5	24.2	73	NE	8	3.6		8c	5s		NE	0	0	Cloudy	F. M. Everett.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	78	25.6	86	SE			2		8ks	E		0.310	7.87	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.42	747.3	29.98	761.5	78	25.6	84	Calm			0		10s		N	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					73.4	23		E			2	0	1ks		E	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.04	763.0	30.07	763.8	72	22.2	81	N	3.6	1.6		8cs	0	NW		0.42	10.7	Cloudy	Robert Mason.
St. Thomas, W. I.																			G. O. Gellich.
Upernavik, Greenland	29.92	759.9	29.98	761.5	27.1	— 2.7		W			2		0			0	0		K. Elberg.
York Factory, B. A.	29.91	759.7	29.95	761.0	— 25.0	—31.7		W	4	1.8		0	0			0	0	Clear	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.07	763.8	59.5	15.3	67	ESE			2		7							D. clouds	Capt. Lord Walter Kerr
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 30° 32′, E. 47° 51′	29.90	759.4	64	17.8	73	ESE			3-4		8	NE						D. clouds	Comm. G. Haud.
H. M. S. Bittern, Constantinople, Turkey			41	5.0		NE			1		8	NE				1	NE	D. clouds	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.90	759.4	76	24.4	86	E			2		10	SE				1	E	Overcast	Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 34° 28′, E. 134° 18′	30.23	767.8	41	5.0	83	NNE			1		0							Blue sky	Capt. J. W. East.
H. M. S. Condor, Syra, Grecian Archipelago	30.08	764.0	49.5	9.7	68	NNE			5-6	5c						6	NNE	Squally	Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer, N. 37° 10′, E. 15° 24′	30.08	764.0	58	14.4		ESE			4		4	E				3	ENE	D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa, Shanghai, China	30.12	765.0	45	7.2	92	N			1-2		10							Raining	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.26	768.6	59	15.0	82	WNW			1		2							D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 34′, E. 81° 14′	29.93	760.2	82	27.8		NE			1		4	NE				1	NE	D. clouds	Comm. John Hext.
H. M. S. Eclipse, N. 11° 13′, E. 82° 52′ †	30.07	753.8	77	25.0		NE			2		3					1		D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria																			Capt. W. H. Maxwell.
H. M. S. Emerald																			Comm. C. Johnstone.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.81	757.2	82	27.8	71	WNW			3-4		0							Squally	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 17° 35′, W. 64° 27′	30.09	754.3	76	24.4		E			3		4	E				1	ENE	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Panama, Panama	29.98	761.5	74	23.3	81	NW			2		1							Blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 59′, W. 58° 29′	29.99	761.7				S			4									D. clouds	Capt. L. F. Jones.
H. M. S. Griffon																			Capt. J. Inglis.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 1° 17′, E. 103° 51′	29.93	760.2	80	26.7	87	NE			1-2		2	NE				1	NE	D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Africa	29.92	760.0	83	28.3	83	SW			1		9	SW						Raining	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 26° 09′, E. 119° 41′	30.12	765.0	52.4	11.3	89	NE			1		10					1	SSE	Misty	Capt. R. H. Napier.
H. M. S. Malabar																			Capt. J. F. G. Grant.
H. M. S. Minataur, Vigo, Spain	29.71	754.6	62.5	16.9	68	Calm			0		2	NE						D. clouds	Capt. H. Rawson.
H. M. S. Modeste, N. 1° 17′, E. 103° 51′	29.91	759.7	82	27.8	83	NE			1		3					5	NE	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Alexandretta, Turkey, Asia	29.93	760.2	57	13.9	52	N			1		1	N				Sm'h		Blue sky	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Pt. Royal, Jamaica, W.I.	29.97	761.2	75	23.9	81	Calm			0		1							Blue sky	Capt. E. Drummond.
H. M. S. Orontes, N. 35° 26′, W. 28° 20′	30.06	763.5	58.5	14.7	97	NNW			4		10	W				2	WNW	Showery	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, Elmina, Gold Coast, Africa.	29.86	758.4	76	24.4	95	SW			3		10					4	SSW	Overcast	Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman, N. 45° 32′, W. 12° 52′			51	10.6		E			6		8	E				5	E	Raining	Capt. P. H. W. Mayow.
H. M. S. Rocket																			Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.89	759.2	81	27.2	91	Calm			0		5			Blank				D. clouds	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	29.66	753.4	61	16.1	82	ENE			3		4							D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 42′, E. 49° 35′	29.48	748.8	82	27.8	96	ESE			2	5ck				Blank		3	ESE	Misty	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	30.00	762.0	71	21.7	90	ESE			2		8	SSE				1	SW	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos, N. 12° 42′, W. 60° 09′	30.04	763.0	80	26.7	82	ENE			3		3					3	ENE	D. clouds	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo Bay, Chili, S.A.	29.99	761.7	65.5	18.6	81	SE			1		0							Blue sky	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 11° 50′, E. 64° 00′	29.91	759.7	82	27.8		E			3		2	E				2	E	D. clouds	Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Aba, Shehr, Arabia	29.91	759.7	71.5	21.9	64	SW			1		8?							Blue sky?	Capt. F. Negham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
RioLima, Santiago, Cape Verd I'ds.	30.03	762.8	73.0	22.8	95	NE			2		3					2		D. clouds	S. C. da Silva Costa, Comd't.
Sado. St. Paul de Loando, Africa.	29.87	758.6	83.5	28.6	72	NNW			1		1							Blue sky	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
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H. M. Frigate Vanadis, ‡																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

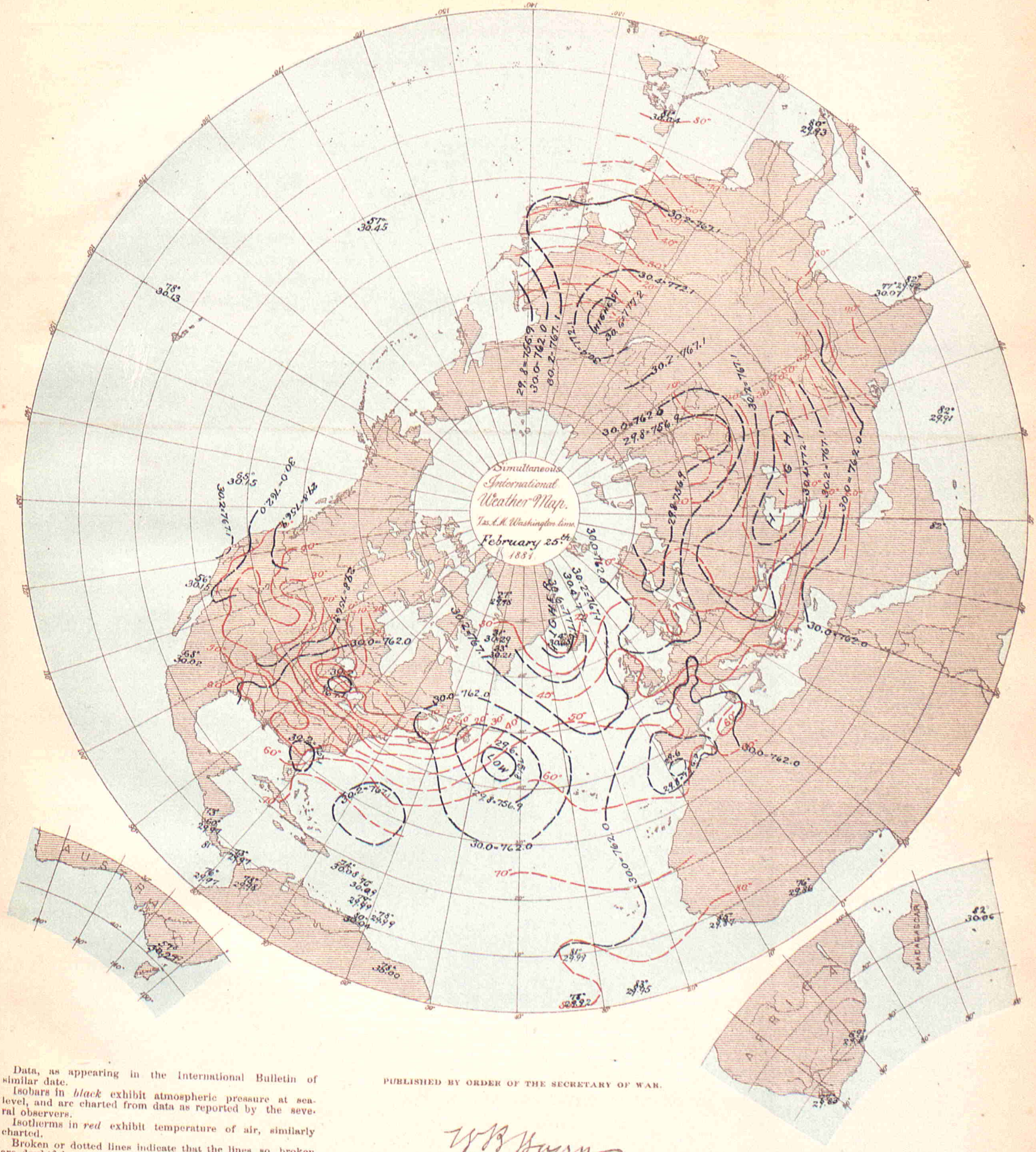
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.20	767.1	65	18.3	84	SE	3	1.3			0			0	0			Clear.	
N. Yard, Portsmouth, N. H.	30.18	766.6	4	—15.6	100	NW	2	0.9			10		NW					Snowing	
Naval Hospital, Yokohama, Japan	29.98	761.5	43	6.1	75	NE			1		10		NE	0	0			Gloomy	
Adams, Panama, Panama	29.99	761.7	75	23.9	81	N			2		2		NW			Sm'h		Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.03	762.7	55	12.8	100	W			3		10							Showery	
Alert, Hong-Kong, China *.	29.90	759.4	72	22.2	76	E			2		8		S	0	0	Sm'h		Fair	
Alliance, New Orleans, La	30.14	765.5	52	11.1	86	Calm			0		2			0	0	Sm'h		Clear	
Ashuelot, Tientsin, China	30.36	771.1	30	— 1.1	78	SSE			1		5		SE					Fair	
Colorado, New York, N. Y	30.05	763.3	21	— 6.1	71	NE	2	0.9			10							Snowing	
Constitution, N. Yard, League I'd., Pa	29.96	761.0	25	— 3.9		NE	1	0.4			10							Hazy	
Franklin, Norfolk, Va	29.97	761.2	39	3.9	73	SSW	10	4.5			8		NW	0	0			Cloudy.	
Galena, Syra Id., Grecian Arch.	30.07	763.8	50	10.0	65	NNE			5		0					Sm'h		Clear	
Independence, N. Yard, Mare I'd, Cal	30.09	764.3	57	13.9	?	SW	2.4	1.1			0			0	0			Clear.	
Jamestown, Sitka, Alaska *	29.67	753.6	20	— 6.7		NE			1		0			0.01	0.3	Sm'h		Clear	
Kearsarge, New Orleans, La	30.10	764.5	52	11.1	79	Calm			0		0					Sm'h		Foggy	
Marion, S. 51° 58′, W. 67° 57′ *†	30.36	771.1	51	10.6	79	ENE			3		2		Calm			Sm'h		Clear	
Michigan, Erie, Pennsylvania	30.08	764.0	8	—13.3		ENE	1	0.4			10		E					Cloudy	
Minnesota, New York, N. Y	30.02	762.5	23	— 5.0		NNE			3		10							Snowing	
Monocacy, Shanghai, China	30.25	768.3	42	5.6	91	NNE			2		10		Calm					Overcast	
New Hampshire, Port Royal, S. C	30.19	765.8	52	11.1	86	WSW	7	3.1			5		WSW	0	0			Fair	
Nipsic, Valencia, Spain	29.83	757.7	57	13.9	81	ENE			4		10					Sm'h		Overcast	
Onward, Callao, Peru †	29.92	760.0	70	21.1	100	SSE			2		8					Long	N;W	Cloudy	
Palos, Shanghai, China	30.26	768.6	40	4.4	100	NE			2		10							Rainy	
Passaic, Washington, D. C	30.05	763.3	34	1.1	71	WNW			1		10		Calm					Cloudy	
Pensacola, N. 3° 34′, W. 80° 22′	29.97	761.2	76	24.4	91	NNE			1–2		10			0	0	Sm'h		Cloudy.	
Powhatan, New York, N. Y	30.02	762.5	28	— 2.2	77	NE			2		10							Heavy snow	
Quinnebaug, Villafranca, France	30.01	762.2	56	13.3	51	SE			2		5		Calm			Long	SSW	Fair	
Richmond, Hong-Kong, China	30.04	763.0	72	22.2	95	E			2		5		E	0	0			Cloudy.	
Saratoga, Alexandria, Va	29.95	760.7	34	1.1	86	Calm			0		10		Calm	Light				Cloudy	
Shenandoah, Montevideo, Uruguay *	30.13	765.3	71	21.7	75	E			3		2		E			Sm'h		Fair	
St. Louis, League Island, Pa	30.08	764.0	22	— 5.6	100	NE	2	0.9			10			0	0			Cloudy	
Swatara, Nagasaki, Japan †	30.05	763.3	49	9.4	78	NNE			3		10		Calm			Mod.	NNE	Overcast	
Tennessee, New Orleans, La	30.16	766.1	50	10.0	100	ENE	1	0.4			2		Calm	0	0	Sm'h		Misty	
Ticonderoga, N. Yard, Mare Id., Cal.	30.08	764.0	55	12.8	93	SSW			3		10		SW	0.02	0.5			Rainy	
Trenton, Villafranca, France *	30.01	762.2	60	15.6	50	SE			2		5			0	0	Sm'h		Fair	
Vandalia, Frederichstad, W. I.	30.16	766.1	78	25.6	78	E			2		1		ESE					Clear.	
Wabash, Boston, Massachusetts	30.19	766.8	12	—11.1	?	SSE	6	2.7			10		Calm					Snowing	
Wachusetts, N. 7° 15′, W. 82° 15′ *.	29.60	751.8	81	27.2	78	NNW			3		2		N			Sm'h		Clear	
Wyoming, Villafranca, France	30.01	762.2	58	14.4	82	ESE			1		5?		Calm			Sm'h		Clear?	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda, ‡																			
N. 16° 05′, W. 38° 10′	30.09	764.3	76	24.4	68	ENE			6		3							D. clouds	Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle,																			
N. 14° 03′, W. 70° 14′	30.02	762.5	77.5	25.3	86	E			4		2							D. clouds	Capt. A. J. Brown.
British Merchant, ‡																			Capt. E. J. Molony.
Chin Yang ‡																			Capt. H. Youlden.
S. S. Cipero,																			
N. 40° 35′, W. 34° 50′	29.85	758.2	61	16.1		WNW			5		7					3	WNW: NNW	Misty	Capt W. N. Lailey.
City of Agra, ‡																			
N. 1° 50′, W. 33° 03′	29.92	760.0	78.2	25.7	98	SE			2		8							Raining	Capt. T. Young.
Barque Commewyne, ‡																			
N. 50° 17′, W. 24° 43′	30.24	768.1	50	10.0	75	ENE			5		10							Overcast	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡																			
N. 1° 36′, W. 25° 01′	29.95	760.7	83	28.3	73	S			6		10							Overcast	Capt. H. Spalding.
Ship Ellen Stuart,																			
S. 6° 28′, E. 87° 30′	29.90	759.4	82.5	28.1	91	W			3		0							Blue sky	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope,																			
S. 19° 12′, W. 35° 50′ ‡	30.03	762.7	80.0	26.7	89	NE			3	ick		WNW						D. clouds	Capt. Jas. Campbell.
Ship Iron Cross,																			
N. 33° 42′, W. 18° 15′	29.94	760.5	59.5	15.3		NNW			5		4					6	N	D. clouds	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomeno																			Capt. W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
N. 34° 38′, W. 73° 05′	30.15	765.8	60.8	16.0	77	SSW			6		5							D. clouds	Capt. H. W. Dyke.
Barque Merlola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee, ‡																			
S. 11° 31′, W. 33° 21′	29.99	761.7	81.0	27.2	87	ESE			4		2					Sm'h		D. clouds	Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡																			
N. 30° 44′, W. 17° 12′	29.91	759.7	61.5	16.4	72	NW			5		5							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton,																			
S. 0° 49′, E. 72° 21′	29.89	759.2	82	27.8	83	NE			2		3							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire,																			
N. 32° 05′, W. 58° 55′	30.19	766.8	63	17.2	62	WNW			5		8					6	SSW	D. clouds	
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia,																			
N. 45° 22′, W. 44° 41′ †	29.51	749.5	54	12.2	100	SE			3		10		SE	Sho	wers	Mod.	S	Cloudy	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic,																			
Off Fire Island, N. Y. †	29.90	759 4	28	— 2.2		NNE			5		8		W			Sm'h	NW	Cloudy	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britanic																			Capt. H. Perry.
S. S. Celtic,																			
N. 40° 27′, W. 69° 36′ †	30.03	762.7	25	— 3.3		E			2		10		E	0	0	Sm'h		Overcast	Capt. Benj. Gleadell.
S. S. Germanic,																			
N. 48° 06′, W. 31° 53′ †	29.95	760.7	54	12.2		ESE			6		8?		SE	0	0	Mod.	SE	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Köln ‡																			
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg,																			
N. 45° 26′, W. 42° 05′	29.58	751.3	52.7	11.5		NW			2		8		W	6 hours		Long	NW	Cloudy	
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			Capt. Albert Fredholm.
Ship Peru, ‡																			
N. 27° 05′, W. 79° 45′	30.19	756.7	70 7	21.5	82	ENE			5		5							D. clouds	Capt. O. F. Skördelrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, ‡ N. 51° 12′, W. 160° 34′	30.31	769.9	48	8.9	85	E			3		5		E			Sm'h	E	Clear	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 40° 22′, W. 65° 18′ †|	30.09	764.3	31	— 0.6	68	N			3		5		N	Snow		Mod.	N	Cloudy	Capt. R. W. Sargent.
S. S. Ohio, Liverpool, England †*	30.20	767.1	43	6.1	92	W			2		10		W	Light rain				Cloudy	Wm. Shakford, 1st Off'r
S. S. Pennsylvania, N. 51° 04′, W. 180° 56′ †|	30.24	768.1	47	8.3	92	E			3		8		E	0	0	Sm'h	E	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 36° 22′, W. 122° 00′ †|	30.22	767.6	55	12.8	87	NNW			3		2		NW	0	0	Mod.	WNW	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 38° 19′, W. 135° 15′ †|	30.15	765.8	65	18.3	78	SW			5		10		SW	Drizzles		Mod.	WSW	Overcast	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China *†		30.18	765.3	71	21.7	85	E			2		10		E					Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 31° 45′, E. 168° 44′		30.45	773.4	57	13.9	58	N			1		8		NNW	0.02	0.5	Sl't	NW	Fine	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 42° 52′, W. 124° 48′ †|	29.90	759.4	52	11.1	93	SSW			6		8		SSW			Mod.	SW	Cloudy	Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal. †|	30.08	764.0	55	12.8	93	S			1		10		S					Rainy	Capt. J. N. Ingalls.
S. S. Idaho, ‡ Tacoma, Wash. Ter. †|	29.58	751.3	45	7.2	92	ESE			2		8		SW					Raining	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, N. 32° 45′, W. 117° 20′ †|	30.14	765.5	54	12.2	87	S			1		10					Sm'h		Foggy	Thos. Wallace.
S. S. State of California, Portland, Oregon †|	29.73	755.1	48	8.9	85	SW			3		5		SW	0	0			Fair	Capt. G. Debney.
S. S. Victoria																			J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, S. 33° 44′, W. 157° 24′ †|	29.97	761.2	70	21.1	90	S			5		10		S	0	0	Mod.	S	Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 29° 53′, W. 116° 26′ †|	30.15	765.8	56	13.3	75	NW			5		10		NW	0	0	Long	W	Cloudy	Capt. D. S. Austin.
S. S. City of Peking, Yokohama, Japan †|	29.14	740.1	45	7.2	76	NE			4		10		NE	0	0	Sm'h		Overcast	Capt. G. G. Berry.
S. S. City of Sidney, N. 14° 33′, W. 160° 41′ †|	30.13	765.3	78	25.6	69	ENE			5	5c		NE		0	0	High	NE	Fair	Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer.
S. S. Colima, Panama, Panama †|	29.97	761.2	73	22.8	81	NNW			2		5		N	0	0			Fair	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada																			
S. S. Zealandia, Sydney, N. S. Wales		30.27	768.8	67	19.4	64	SW			3		5		SW					Cloudy	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland ‡																			Capt. Sam'l Jackson.
S. S. Nederland ‡																			Capt. S. Stokes.
S. S. Rhynland, ‡ N. 40° 45′, W. 68° 43′		30.11	764.8	29	— 1.7		ENE			2		10		SW	0.1	3.	Sm'h	W	Snowy	Capt. W. Geo. Randle.
S. S. Vaderland, N. 50° 10′ W. 3° 55′		30.18	766.6				ENE			3		10			0	0	Sm'h	ENE	Cloudy	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, ‡ Jacksonville, Florida †|	30.18	766.6	55	12.8		Calm			0		10			0	0			Misty	Capt. A. Mehaffey.
Sch'r Addie Fuller, Stingray Point, Va		29.97	761.2	40	4.4	82	W	6	2.7			8cs		W	0	0			Fair	Capt J. Jorgensen.
Sch'r Annie R. Lewis, Martinique, W. I		29.99	761.7	79	26.1		Calm			0		10		ENE	H'vy rain				Raining	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 42° 56′, W. 11° 00′ †*		29.95	760.7	61	16.1		NE			5		2		NE			Mod.	NE	Fair	Capt. B. F. Woodbury.
Brigantine George ‡																			Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va. †|	30.04	763.0	40	4.4	82	S	3	1.3		2s	5k			0	0			Cloudy	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 24° 30′, W. 63° 06′ †|	30.20	767.1	74	23.3	100	NNE			6		10		NE	Heavy		Cross	NE, NW	Rainy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 26, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.80	756.8	63.7	17.6	78	W			1		1			0.354	9.0	Very fair	Dr. Ollive.
Nemours			29.53	750.1	68.5	20.3	71	SE			4		4			0.110	2.8	Cloudy	Raynard.
Algiers			29.71	754.6	62.2	16.8	76	N			1		9			Inap.	Inap.	Covered	Nicolas.
La Calle			29.97	761.3	68.0	20.0	71	SE			5		4			0.039	1.0	Cloudy	Fonfréde.
Tunis			29.90	759.4															Jacques.
Sfax			29.94	760.5															Gau.
Saida			29.67	753.5	58.3	14.6	52	W			1		8			0.591	15.0	Very cloudy	Dumas.
Tebessa			29.97	761.1	60.4	15.8	37	Calm			0		4			0	0		Watrin.
Geriville																			Lonchamp.
Laghouat			29.88	759.0	55.0	12.8	88	S			1		3			0.280	7.1	Pretty fair	Herbin.
Biskra																			Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.15	765.8	30.24	768.1	60.1	15.6	86	SSE	3	1.3			8			0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania																			Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.39	746.5	29.96	761.0	37.9	3.3	71	SE			1		3			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.15	740.4	29.95	760.6	36.5	2.5	91	NNW	0.7	0.3			9			0	0		Dr. Wiersbicki.
Eperies	29.05	737.8	29.96	761.0	33.4	0.8	59	Calm			0		5cs			0	0		Julius Mikolik.
Gratz‡	28.63	727.2	29.91	759.7	38.3	3.5	69	SW			2		0			0	0		Andreas Rospini.
Hermannstadt	28.53	724.6	30.02	762.6	31.5	—0.3	87	ESE			1		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.49	723 6	29.88	758.9	33.4	0.8	85	Calm			0		0			0	0		The Staff.
Lemberg	28.93	734.9	29.97	761.2	29.1	—1.6	63	S			1		1			0	0		Dr. T. Stanecki.
Pola	29.84	757.9	29.95	760.8	48.9	9.4	76	ENE			2		9			0	0		I. R. HydrographicOffice.
Szathmar	29.57	751.0	30.02	762.5	34.2	1.2	76	SW			2		0			0	0		Beicht Peter, S. J.
Szegedin	29.71	754.7	30.01	762.2	33.8	1.0	75	S			1		4			0	0		Karl Stancol.
Trieste	29.88	759.0	29.98	761.6	45.7	7.6	83	Calm			0		10			0	0	Cloudy	P. Busin.
Vienna	29.20	741.7	29.95	760.6	34.9	1.6	56	SE			2		0			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.65	753.0	29.85	758.3	34.9	1.6	66	ENE			2	9		WNW		0	0		Royal Observatory.
Furnes	29.84	757.8	29.86	758.4	40.3	4.6	67	NE			4		2			0	0		M. E. de Cae.
Maeseyck	29.71	754.6	29.84	757.8	34.5	1.4	93	NE			2		10			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 29, 1882.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.82	757.4	29.93	760.2	36.7	2.6	89	ENE	20	8.9			10			0.190	4.83	Raining	W. Boswell.
Armagh, Observatory	29.60	751.8	29.84	757.9	37.7	3.2	76	NNE	13	5.8			10			Blank		Gloomy	S. Call.
Bidston, Liverpool Obs'y			29.75	755.6	38	3.3	87	WSW	8	3.6			9					Overcast	John Hartnup.
Bolton, Sharples	29.19	741.4	29.74	755.4	33.8	1.0	93	SW					10					Overcast	Thomas Mackereth.
Bradford, Yorkshire	29.48	748.8	29.87	758.7	36.3	2.4	96	SW			1		10			0.24	6.1	Overcast	J McLandsborough, F.R.S
Bridgetown, Barbadoes	29.93	760.2	29.96	761.0	81	27.2	66				3		8					Overcast	Pvt. J. Surgenor, A. H. C.
Cardington			29.79	756.7	43.0	6.1	75	SW			0.4		7					Overcast	John McLaren.
Chatham, School M. E.	29.73	755.1	29.86	758.4	43.1	6.2	81	W			5		3						Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.61	752.1	29.84	757.9	41.9	5.5	81	NNW			1		6					Overcast	The Staff.
Fort Napier, Natal	27.46	697.5	29.67	753.6	85.4	29.7	86	SW			2		3					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.88	758.9	84	28.9	83	NW			1		5					D. clouds	C. E. Keane.
Galway, Queen's College			29.82	757.4				N			3		4					D. clouds	J. O'Donaghadue.
Gibraltar, Mediterranean	29.57	751.1	29.63	752.6	60.0	15.6	96	NE			2		6					Showery	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.63	752.6	29.84	757.9	36.9	2.7	81	NE			3		10					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.68	753.9	29.85	758.2	41.8	5.4	56	SW			1		4					D. clouds	The Staff.
Guernsey	29.64	752.8	29.86	758.4	42	5.6	70	NNE			2		4					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.82	757.4	29.86	758.4	39.0	3.9	57	NNE	9	4.0			6					Misty	The Met'g'l Office.
Leicester, Museum	29.52	749.8	29.78	756.4	40.7	4.8	83	S			3		9					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.68	753.9	29.75	755.6	61	16.1	87	E			3		10					Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas	30.10	764.5	30.14	765.5	73.0	22.8	63	NE			3		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.25	742.9	29.79	756.7	36.8	2.7	84	S			2		10					Misty	Robert Pate.
Oxford, Radcliffe Obs'y	29.58	751.3	29.84	757.9	40.1	4.5	72	S			2		7					D. clouds	The Staff.
Plymouth	29.77	756.1	29.84	757.9	35.1	1.7	91	NE			1		10					Raining	John Merrifield.
Sandwick Manse, Orkneys			30.05	763.3	37	2.8	90	E	30	13.4			0					Blue sky	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.98	761.5	30.05	763.3	46.4	8.0	60	NNE			2		1					Blue sky	Serg't W. H. Lyne.
Sheffield	29.51	749.5	29.80	756.9	39.2	4.0	85	SW			1		8			0.14	3.6	Overcast	W. F. Cooper.
Silloth Rectory	29.78	756.4	29.81	757.2	38.8	3.8	94	E			6		10			0.113	2.87	Snowing	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.74	755.4	33.3	0.7	97	NW	1	0.4			10					Snowing	Rev. S. J. Perry.
Straithfield Turgiss	29.60	751.8	29.82	757.4	42.4	5.8	65	SE			1		5					D. clouds	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	29.74	755 4	29.82	757.4	49	9.4	78	NW			6		5					D. clouds	W. Newcombe.
Valencia, Observatory	29.90	759 4	29.93	760.2	42.2	5.7	68	NE	11	4.9			5					D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.99	761.7	30.04	763.0	4	—15.6	87	W	10	4.5		0	0			0	0	Clear	H. J. Cundall, C. E.
Chatham, N. B.*	30.04	763.0	30.11	764.8	— 2	—18.9	94	SW	2	0.9		0	0			0	0	Clear	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.21	767.3	30.23	767.8	7	—13.9	62	NW	2	0.9		0	0			0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	28.89	733.8	29.78	756.4	8	—13.3	96	NE	10	4.5			10n		NE	0.040	1.02	Cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.99	761.7	30.14	765.5	6	—14.4	84	W	5	2.2		2c	0	W		0	0	Fair	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.00	762.0	30.38	771.6	0	—17.8	85	E	5	2.2		2ck	0	Calm		0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.20	767.1	30.43	772.9	2	—16.7	86	SW	8	3.6			Sk			0.40	10.2	Smoky	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	29.48	748.8	30.24	768.1	10	—12.2	79	S	18	8.0			10n		S	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.49	749.0	30.26	768.6	7	—13.9	95	N	5	2.2		8c	0	W		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.51	749.5	30.22	767.6	13	—10.6	81	E	1	0.4		5ck	0	W		0.01	0.3	Fair	M. Payne.
Quebec, Quebec*	30.03	762.7	30.40	772.1	— 4	—20.0	64	W			5	0	0			0	0	Clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.85	758.2	30.37	771.4	— 8	—22.2	100	E	2	0.9		8ck	0	NW		0	0	Fair	K. Stewart.
Saugeen, Ontario*	29.41	747.0	30.18	766.6	16	— 8.9	95	SE	15	6.7			10ks			0	0	Cloudy	W. H. McIntyre.
St. Andrews	30.20	767.1	30.25	768.3	4	—15.6	87	NW	8	3.6		0	0			0	0	Clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.92	760.0	29.96	761.0	—10	—23.3	100	Calm	0	0		2c	0			0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.86	758.4	30.28	769.1	17	— 8.3	87	E	13	5.8			8n		NE	0.01	0.3	Cloudy	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.16	766.1	30.23	767.8	14	—10.0	71	NW	8	3.6		5k	0	NW		0	0	Fair	Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. John's, Newfoundland	29.65	753.1	29.93	760.2	11	—11.7	100	NE	1	0.4		5k	5s			Inap.	Inap.	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony					67.5	19.7	91	WSW	13.8	6.2			2k			0	0		John Duthie.
Cape St. Francis Lt. House	29.69	754.1			73.6	23.1	54	S	6.2	2.8		0	0			0	0	Clear	The Staff, for D. Gill.
Cape Town, C. G. H. Obs'y	29.85	758.2	29.89	759.2															
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	30.23	767.7	30.25	768.3	45.1	7.3	96	ENE	5.1	2.3			10			0.05	1.3	Covered	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Tempera-ture of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direc-tion. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.26	667.0	29.98	761.5	58.6	14.8	86	NE			2		0			0	0	Clear	Federico Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.84	757.9	29.89	759.1	34.3	1.3	72	N	9	4			8						Oversergent Fischer.
Fanöe	29.93	760.1	29.95	760.6	27.7	—2.4	96	N			1		10					Foggy	Overloerer Lauridsen.
Godthaab, Greenland	29.95	760.6	29.99	761.7	27.1	—2.7	68	S			2		0						S. Kleinschmidt.
Stykkisholm, Iceland	30.52	775.1	30.56	776.2	28.8	—1.8	86	E			2		8						A. O. Thorlacius.
Thorshavn	30.37	771.5	30.41	772.4	34.9	1.6	68	NE	25	11			4						Overloerer Bergh.
Vestervig	29.85	758.2	29.95	760.6	25.0	—3.9		Calm			0		1					Foggy	Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.08	738.5	29.73	755.1	53.2	11.8	83	SE			1		on		W	0	0		M. Labroue, Director.
Alençon	29.34	745.1	29.89	759.1	35.6	2	86	NW			1		8n		NE	0	0	Very cloudy	M. Nicot, Director.
Arras, Engineer School	29.58	751.4	29.85	758.2	37.2	2.9	59	E			3	ck							M. Klein, Commandant.
Avignon, Normal School	29.74	755.4	29.82	757.4	52.2	11.2	68	N			1		10		SSE	0	0	Covered	M. Giraud, Director.
Bar-sur-Seine	29.26	743.1	29.83	757.7	40.3	4.6	89	ENE			1		10			0	0	Covered	M. Saillard, Director.
Beauvais, Normal School	29.60	751.7	29.87	758.7	35.4	1.9	74	NE			1		10		ENE	0.016	0.40	Covered	M. Frère Eugene Marie.
Besançon, Normal School	28.98	736.0	29.88	759.0	53.1	11.7	56	SSW			1		k		W	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.45	748.0	29.71	754.6	55.9	13.3	89	SSE			3		8		SSE	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.13	739.9	29.69	754.0	45.3	7.4	83	NE			1		n; fg		NE	0	0	Foggy	M. Postel, Director.
Brest, Naval Observatory	29.65	753.0	29.89	759.2	45.3	7.4	62	NE			1		3		NE	0	0		M. de Rermaree, Dir.
Caen, Normal School	29.74	755.4	29.82	757.4	40.6	4.8	100	NE			1		5		S	0	0	Cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.50	749.3	29.83	757.6	39.2	4.0	87	N			1		10			0	0	Covered	M. Jadot, Director.
Charleville, Normal School	29.28	743.8	29.86	758.4	37.0	2.8	74	E			1		10			0.20	5.	Covered	M. Grimard.
Clermont-Ferrand Obs'y	28.39	721.2	29.74	755.3	54.1	12.3	41	SE			1		k			0	0	Clear	M. Allnard, Director.
Cluny, Normal School	28.95	735.2	29.79	756.6	60.4	15.8	56	S			1		2		SE	0	0		M. de Villemontée, Dir.
Commercy, Normal School	28.92	734.5	29.79	756.7	43.0	6.1	85	E			1		km	E	E	0	0		Dr. Coulet, Director.
Gap, Normal School	27.29	693.1	29.86	758.4	42.1	5.6	21	W			3		8		W	0	0	¼ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.72	729.5	29.86	758.5	49.5	9.7	73	SE			3		10		E			Raining	M. Kina, Director.
Grenoble, Normal School	29.04	737.6	29.80	757.0	52.9	11.6	50	NE			1	ck			NNE	0	0		M. Ablard, Director.
Guéret, Normal School	28.20	716.2	29.78	756.3	50.7	10.4	76	SSW			1		5s		NNE	0	0	Cloudy	M. Rivoir, Director.
Lamballe, Normal School	29.63	752.6	29.92	760.0	42.8	6	65	NE			1				NE	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.19	741.4	29.86	758.4	55.8	13.2	75	E			1		8			0.016	0.40	Very cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	29.79	756.6	29.89	759.2	44.2	6.8	57	ENE			3		5		ENE	0	0	½ covered	Lt. T Carré, Director.
Lyon Obs'y, Park Station	28.73	729.8	29.75	755.6	55.0	12.8	47	S			1		k			0	0		M. André, Director.
Mans, Normal School	29.54	750.4	29.86	758.5	37.9	3.3	73	NE			3		8		E	0	0	Very cloudy	M. Pihoen, Director.
Marseille, Observatory	29.52	749.8	29.80	756.8	50.2	10.1	83	ESE			1		10		SE	0.181	4.60	Raining	M. Stephan, Director.
Montlouis l'Instituteur	24.58	624.3	29.82	757.3	38.8	3.8	96	SE	5.6	2.5			8		E	0.382	9.7		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.69	754.2	29.80	757.0	52.5	11.4	75	NE			2		5		SE	0	0	Raining	M. Galzin, Director.
Nancy, Normal School	29.00	736.6	29.78	756.5	43.9	6.6	77	WNW			1		8k		W	0	0	Very cloudy	M. Hasse.
Nantes, Observatory	29.68	753.9	29.84	758.0	40.6	4.8	84	NNE			2		10			0	0	Covered	M. Larocque, Director.
Nice	29.82	757.4	29.85	758.2	55.8	13.2	62	E			3		5	E	E	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.64	752.8	29.74	755.5	51.1	10.6	80	NE	13.0	5.8			10		E	0.248	6.3		Dr. Fines.
Pic-du-Midi, Plantade	22.19	503.5			28.2	—2.1							10		SE	0.228	5.8	Snowy	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.77	730.7	29.84	757.8	51.8	11	63	Calm			0		5	S	S	0	0	Fair	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.87	631.8			35.6	2.0	69	SE			2		2k			0	0	Foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.78	756.3	29.81	757.1	54.5	12.5	74	NE			1		5		NE	0	0	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.59	751.5	29.80	757.0	41.0	5	90	N			1		10			0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	27.65	702.2	29.79	756.7	50.4	10.2	62	E			2	5c			E	0	0		M. Richard, Director.
Rouen, Normal School	29.77	756.2	29.86	758.4	37.8	3.2	67	NE			1		5		NE	0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.72	754.8	29.87	758.8	37.8	3.2	69	E			1		5		NE	0	0	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.67	753.6	29.84	757.8	35.6	2.0	88	N			1		10			0	0		M. Renou, Director.
Toulouse, Observatory	29.04	737.7	29.76	756.0	50.2	10.1	84	SSE			1		10			0.114	2.9	Sprinkling	M. Baillaud, Director.
Tours	29.63	752.5	29.82	757.5	38.8	3.8	87	E			1		10		E	0	0	Covered	M. de Tastes.
Versailles, Observatory	29.34	745.1	29.83	757.6	34.5	1.4	89	N			1		10			0	0	Covered	Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.96	735.5	29.82	757.3	35.6	2.0	88	W			3		7k	W		0.157	4.0		Prof. Dr. Hoh.
Berlin	29.74	755.5	29.93	760.1	34.2	1.2	65	N			1		8			0	0		Prof. Dr. Arndt.
Breslau	29.39	746.4	29.91	759.8	33.1	0.6	87	SE			1		10			0.013	0.32	Snowy	Royal University Obs'y.
Carlsruhe	29.37	746.1	29.81	757.1	39.4	4.1	86	NE			0		10			0	0		Albert Senz.
Cassel	29.24	742.6	29.84	758.0	35.2	1.8	75	NE			2		8	N		0	0		Dr. H. Möhl.
Frankfort on the Main	29.54	750.3	29.92	760.0	35.2	1.8	84	NNE			1		10			0.209	5.3	Snowing	Physical Society.
Friedrichshafen	28.37	720.5	29.83	757.6	42.1	5.6	79	SSE			1		0			0	0		Chief Telegrapher Wilhelm.
Hamburg	29.86	758.4	29.93	760.2	34.7	1.5	81	WSW			2		10			0.016	0.4		Dr. R. Kleeman.
Kiel	29.90	759.5	29.92	759.9	32.0	0.0	90	Calm			0		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.48	748.8	29.92	760.0	31.8	— 0.1	85	NE			1		10			0	0		Prof. Dr. Bruhns.
Magdeburg	29.68	753.9	29.91	759.8	33.6	0.9	59	Calm			0		4k	ESE		0	0		Dr. Assmann.
Memel	29.77	756.2	29.82	757.4	29.1	—1.6	90	WNW			4-5		10k						Reinbrecht & Issermann.
Munich	27.97	710.3	29.81	757.2	45.9	7.7	56	E			1		1			0	0		Central Station.
Neufahrwasser	29.88	759.0	29.90	759.4	33.6	0.9	87	WSW			2		4			0	0		A Lothes.
Neustadt, Palatinate	29.24	742.7	29.76	756.0	37.6	3.1	90						10			0.059	1.5		Dicknether.
Stuttgart	28.84	732.5	29.75	755.6	42.4	5.8	88	N			1		8	W		0	0		Prof. Dr. Schoder.
Thorn	29.72	754.8	29.90	759.5	33.8	1.0	80	W			1		10			0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	28.27	718.1	29.82	757.4	49.1	9.5	58	W			2		5	SW		0	0		Prof. Kemlein.
Wustrow	29.91	759.6	29.93	760.3	29.1	—1.6	100	WNW			2		10			0.008	0.2		Profs. Brandes & Reimer.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction, Upper.	CLOUDS. Direction, Lower.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.70	754.3	30.10	764.5	50.7	10.4		NE			1.0		0					Clear.	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.02	762.6	30.07	763.9	68.0	20.0	58	NE	58.0	25.9		10		SW		0	0	Misty.	
Deesa	29.48	748.8	29.95	760.8	83.2	28.4	35	NE	8.7	3.9		8		WSW	WSW	0	0	D. clouds	
Bombay	29.84	758.0	29.88	759.0	84.7	29.3	77	WSW	14.0	6.3		0				0	0	Blue sky	
Poona, Yarrowda	28.04	712.2	29.86	758.5	89.8	32.1	22	ENE	9.0	4.0		0				0	0	Blue sky	
Belgaum	27.37	695.1	29.85	758.2	87.6	30.9	14	ENE	4.0	1.8		0				0	0	Blue sky	
Lahore	29.33	745.0	30.10	764.5	67.5	19.7	62	W	3.4	1.5		10				0	0	Overcast	
Roorkee	29.11	739.3	30.03	762.8	69.8	21.0	85	NW	2.3	1.0		9				0	0		
Agra	29.46	748.4	30.04	763.0	76.3	24.6	36	SW	4.3	1.9		0				0	0		
Nagpur	28.88	733.6	29.91	759.6	91.7	33.2	35	SE	3.9	1.7		2		W		0	0	D. clouds	
Jubbulpore	28.60	726.4	29.97	761.3	79.8	26.6	45	N	4.4	2.0		10				0	0	Overcast	
Lucknow	29.62	752.3	30.00	762.1	74.2	23.4	38	NNE	5.4	2.4		5		E		0	0	D. clouds	
Allahabad	29.67	753.5	29.98	761.5	79.8	26.6	41	NW	3.1	1.4		9		W		0	0	D. clouds	
Patna	29.74	755.5	29.93	760.1	82.1	27.8	68	W	1.7	0.8		2		W		0	0		
Hazaribagh	27.94	709.6	29.96	761.0	76.6	24.8	27	WNW	10.2	4.6		1				0	0	D. clouds	
Cuttack	29.86	758.4	29.94	760.4	90.1	32.3	40	Calm	0.8	0.4		0				0	0	Blue sky	
Calcutta, Alipore	29.90	759.3	29.92	759.9	85.9	29.9	42	N	0.5	0.2		0				0	0	Blue sky	
Goalpara	29.49	748.9	29.89	759.2	78.0	25.6	41	Calm	4.0	1.8		0				0	0	Blue sky	
Chittagong	29.85	758.1	29.94	760.4	80.6	27.0	83	W	2.7	1.2		0				0	0	Blue sky	
Sibsagar	29.60	751.9	29.95	760.6	69.9	21.1	80	NE	2.9	1.3		4				0.04	1.0	Blue sky	
ITALIAN SERIES. By authority of the MINISTER OF AGRICULTURE, INDUSTRY AND COMMERCE. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.58	751.2	30.00	761.9	42.1	5.6	62	Calm	0	0			10			0	0		Prof. Giovanni Clodig.
Milan	29.44	747.7	29.97	761.2	44.6	7.0	75	ENE	1.3	0.6			9			0	0		Prof. Schiaparelli.
Padua	29.88	758.9	29.99	761.8	42.3	5.7	71	ENE	3.8	1.7			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.03	737.3	29.95	760.8	43.9	6.6	68	E			4		10			0	0		Prof. P. F. Denza.
Genoa	29.73	755.2	29.93	760.2	44.6	7.0	77	N	8.7	3.9			10	SE		0.362	9.2		Prof. G. M. Garibaldi.
Mondovi	28.01	711.5	30.00	762.0	40.5	4.7	58	W			2		9			0	0		Prof. D. C. Bruno.
Pesaro	29.91	759.6	29.96	760.9	45.7	7.6	83	NW	9.8	4.4			9	SW		0	0		Prof. Luigi Guidi.
Florence	29.65	752.2	29.91	759.8	53.6	12.0	61	NE			2		10			0	0		Cav. F. Meucci.
Leghorn	29.82	757.4	29.91	759.6	49.1	9.5	85	NE	9.4	4.2			10			0	0		Prof. P. Monte.
Rome	29.73	755.1	29.91	759.6	56.8	13.8	41	NNW	0.7	0.3			10			0.020	0.5		Prof. P. S. Ferrari.
Lecce	29.75	755.7	30.01	762.3	55.4	13.0	43	S	6.3	2.8			4	SW		0	0		Prof. C. de Giorgi.
Cosenza	29.04	737.6	29.95	760.7	51.3	10.7	71	WNW	1.3	0.6			9	NW		0	0		Prof. D. Conti.
Cagliari	29.52	749.7	29.71	754.6	60.8	16.0	81	SE			4		10			0.157	4.0		Prof. A. Pacinotti.
Palermo	29.58	751.3	29.83	757.7	60.8	16.0	51	SSE	6.9	3.1			10			0	0		Prof. G. Cacciatore.
Syracuse	29.86	758.5	29.91	759.6	56.7	13.7	72	ESE	15.0	6.7			10	S		0	0		Prof. Vincenzo Guiliano.
SUB-SERIES.																			
Naples, S. R	29.39	746.5	29.92	759.9	54.7	12.6	63	NW	1.8	0.8			5	W		0	0		Prof. F. Brioschi.
Stelvio	21.96	557.9			19.9	— 6.7	76	SW			7		1			0	0	Misty.	P. F. Denza.
Valdobbia	21.94	557.3			20.3	— 6.5	81	E			2		8k		WNW	0	0	Misty.	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y†	30.27	768.8	30.28	769.1	40.7	4.8	78	NNE	5.9	2.6			0			0	0	Clear.	K. Sasaki.
Kioto	30.10	764.5	30.29	769.3	33.9	1.1	90						0			0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.98	761.5	30.19	766.8	44.7	7.1	74	NE	3.7	1.7			0			0	0	Clear.	S. Takehayashi.
Tokei Obs'y, Yeddo	30.18	766.6	30.26	768.6	38.1	3.4	80	NE	4.0	1.8			10s			0	0	Cloudy	The Staff.
Wakayama	30.23	767.8	30.28	769.1	40.0	4.4	78	NNE	5.9	2.6			0			0	0	Clear.	Y. Kuwamura.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.84	757.9	30.02	762.6	81.3	27.4	60	E	12.0	5.4		0	3		ESE	0.02	0.5	Fine.	A. N. Figon.
MEXICAN SERIES. By authority of the SECRETARY of PUBLIC WORKS. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.41	620.0	30.14	765.6	55.0	12.8	76	N			1	8c	0	NW		0	0	Cloudy	Prof. M. Leal.
Mazatlan	29.66	753.5	29.93	760.2	64.0	17.8	83	ENE	1.6	0.8		2cs	0			0	0	Clear.	F. Quijano, C. E.
Mexico, Central Obs'y	23.05	585.4	30.13	765.2	51.8	11.0	77	Calm	0	0		0	3ks			0	0	Fair.	The Staff.
Pabellon, Aguascalientes	23.85	605.9	29.93	760.1	50.0	10.0	57	Calm				0	1s			0	0	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.32	592.3	30.25	768.3	52.5	11.4	51	Calm	0	0		0	7		SE	0	0	Cloudy	Prof. P. Spina.
San Luis Potosi	24.12	612.7	30.27	768.9	59.2	15.1	50	WSW	0.9	0.4		0	5			0	0	Fair.	G. Barroeta, M. D.
Tlacotalpam	29.81	757.2	29.83	757.5	70.7	21.5	93	Calm	0	0		2	7	S	SE	0	0	Very cloudy	Prof. M. Cházaro.
Zacatecas	22.48	571.1	30.19	766.9	46.2	7.9	58	Calm	0	0		2c	1s	W	W	0	0	Clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.89	759.1	29.89	759.1	39.9	4.4		E			3					0	0		
Groningen	29.87	758.6	29.92	760.0	36.0	2.2		NE			1					0	0		
Helder	29.90	759.4	29.90	759.4	37.6	3.1		S			1					0	0		
Hellevoetsluis	29.88	759.0	29.88	759.0	43.3	6.3	62	ENE			1					0	0		
Utrecht	29.85	758.3	29.90	759.5	38.5	3.6	55	N			2		8			0	0	Very cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Tempera-ture of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direc-tion. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.90	759.5	29.97	761.1	31.6	— 0.2	63	Calm	0	0			0			0	0		
Christiania	29.81	757.1	29.96	761.0	32.9	0.5	47	NNE	11	5			10			0	0		
Gjesvær	30.04	762.9	30.06	763.5	12.9	— 10.6		NNE			4		9						
Lodingen	30.07	763.7	30.11	764.9	18.9	— 7.3	70	ESE			2		2			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores																			Dr. J. A. Sampaio.
Campo Major	28.63	727.1	29.61	752.2	59.0	15.0	60	ESE	9.4	4.2			8			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.80	757.0	29.89	759.2	62.8	17.1	44	WSW	7.4	3.3			2			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.32	744.8	29.68	753.9	55.9	13.3	73		1.8	0.8			9			0	0		The Staff.
Ponta Delgada, Azores	29.79	756.6	29.86	758.4	61.5	16.4	83	WNW	11.9	5.3			3			0.071	1.8		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.15	740.4	30.36	771.1	1.1	—18.4	83	SW	18	8			5			Blank			Capt. Lasarew.
Archangel	29.86	758.5	29.88	759.0	13.6	—10.2	90	SE	4	2			10						Capt. Sseliwerstow.
Astrakhan	30.40	772.1	30.32	770.0	27.1	— 2.7	60	ESE	7	3			0						Capt. Wiganow.
Barnaul‡	29.80	757.0	30.37	771.4	— 4.5	—20.3	72	SW	22	10			9						Meteorological Obs'y.
Dorpat	29.47	748.4	29.72	754.9	25.7	— 3.5	89	SSW	9	4			10n					Light snow.	Observatory.
Ekaterinburg	29.11	739.3	30.14	765.5	17.1	— 8.3	76	W	4	2			10						Meteorological Obs'y.
Kasan	30.01	762.3	30.31	769.8	14.5	— 9.7	67	WSW	2	1			0						Observatory.
Kertch	30.13	765.4	30.15	765.9	27.9	— 2.3	81	NW	2	1			4						Lagorio.
Kieff	29.43	747.4	30.12	765.0	13.8	—10.1	76	SSW	9	4		0	5ks					Light clouds	Cand. Fatjanow.
Lugan	30.00	761.9	30.22	767.5	23.7	— 4.6	77	ENE	13	6			10						Meteorological Obs'y.
Moscow	29.57	751.0	30.17	766.2	14.0	—10.0	67	S	4	2			0						Meteorological Obs'y.
Nertchinsk	28.03	712.0	30.73	780.6	—22.2	—30.1	77	Calm	0	0			0						Meteorological Obs'y.
Nikolaiev	30.17	766.3	30.24	768.1	17.8	— 7.9	97	ENE	4	2			10n						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.60	751.7	29.68	753.9	— 7.6	—22.0	54	W	4	2			5k						Lieut. Iwanow.
Nukuss	30.22	767.5	30.46	773.7	42.1	5.6	43	ENE	6.7	3.0			0						Dr. Dobrochotow.
Pekin, China	30.34	770.7	30.48	774.3	27.3	— 2.6	62	SW	4	2			1k						Physical Observatory.
St. Petersburg	29.71	754.7	29.73	755.1	14.7	— 9.6	91	SE	11	5			10n					Snowing	Central Physical Obs'y.
Tashkend, Laboratory	28.87	733.3	30.52	775.1	40.1	4.5	43	N	9	4			0						Teich, A. M.
Tiflis	28.69	728.8	30.16	766.1	39.6	4.2	63	SSE	4	2			10n					Light snow.	Physical Observatory.
Warsaw	29.51	749.6	29.95	760.8	32.0	0.0	74	SW	7	3			10ks						Astronomical Obs'y.
Wilna	29.47	748.6	29.92	759.9	20.5	— 6.4	80	S	11	5			10					Heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.81	757.2	30.12	765.1	13.3	—10.4	61	SE	7	3			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.86	758.4	36.0	2.2	90	NE			3		10k			0.31	7.9	Snowy	Andrew Gibb.
Monach Lt. House, Hebrides			29.98	761.5	38	3.3	91	E			6	5	5	E		0.2	5.	D. clouds	J. Youngclause.
North Unst, Shetland Isl'ds			30.14	765.5				NE			7		7			Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.60	751.8	29.71	754.5	57.2	14	70	NE	5.8	2.6			8			0.925	23.50	Almost cov'd	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.67	753.5	29.72	754.9	62.6	17.0	60	SW	2.0	0.9		3	5	E		0	0	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.74	679.3			46.4	8.0	72	NE	3.6	1.6		0	6			0.138	3.5	Cloudy	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.43	696.6	29.64	752.9	53.4	11.9	61	NE	9.8	4.4		0	8			0.134	3.4	Very cloudy	The Staff.
Murcia, Met. Obs'y‡	29.47	748.4	29.62	752.3	59.4	15.2	72	S	3.6	1.6		5	5			0.193	4.9	Raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.73	729.7	29.61	752.1	58.1	14.5	57	SE	4.9	2.2			7			0	0	Cloudy	R. Gil Villanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.00	762.1	30.07	763.8	66.2	19.0	85	SE	2.7	1.2		0'	0			0	0	Clear	Benito Vines, S. J.
Manilla, Phillippine Islands	29.97	761.2	30.02	762.5	80.8	27.1	70	ESE	8.8	4.0						0	0	Fair	Federico Faura, S. J
San Fernando, Naval Obs'y	29.54	750.3	29.64	752.8	58.3	14.6	77	ENE	1.9	0.8			10		SE	0.114	2.9		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.99	761.8	30.08	764.1	72.3	22.4	94	SE	0	0		30	0	SE		0	0	Clear	Enrique Gadea, Chief Engineer.
Tagnegarao, Philippine Ids	29.91	759.8	30.06	763.5	77.9	25.5	80	SW	1.5	0.7						0	0	Very fair	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.97	761.3	30.01	762.3	11.5	—11.4	71	NE			4		8			0.114	2.9		
Umea	29.87	758.7	29.92	760.0	17.6	— 8.0	83	NE			6		8			0	0		
Hernosand	29.87	758.7	29.92	760.0	28.6	— 1.9	82	NE			6		10			0.008	0.2		
Stockholm	29.61	752.2	29.79	756.7	21.6	— 5.8	80	N			4		10			0.028	0.7		
Wisby	29.70	754.4	29.76	755.9	24.8	— 4.0	87	NNW			4		10			0.043	1.1	Snowing	
Sub-Series.																			
Upsala	29.71	754.7	29.80	756.9	18.7	— 7.4	84	N	17.0	7.6			7		N	0.015	0.37		Nils Ekholm.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.37	720.7	29.82	757.4	48.6	9.2	47	N			2		1			0	0		The Observatory.
Zurich	28.17	715.5	29.83	757.7	46.8	8.2	65	W			2		1			0	0	Clear	The Observatory.

At Geneva the corresponding departures from the normal values are: Bar. —5.0 mm.; Ther. +1°.1 cent.; Hum. —20 per cent.

TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.10	764.6	40.8	4.9	56	NE	19	8.5			0			0	0		The Observatory.
Valona			29.99	761.8	57.0	13.9		SW			1		10			0	0	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.01	762.3	59.9	15.5	55	W			1		1k		W	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.43	772.9	30.52	775.2	9	—12.8	57	NE	2	0.9		0	0			0.06	1.5	Clear.	
Alpena, Michigan	29.41	747.0	30.10	764.5	17	— 8.3	83	SE	12	5.4		0	5s		Calm	0	0	Fair.	
Atlanta, Georgia	28.96	735.6	30.11	764.8	52	11.1	59	S	8	3.6		8k	0	S		0	0	Cloudy	
Atlantic City, New Jersey	30.45	773.4	30.46	773.7	22	— 5.6	86	N	9	4.0		10k	0	NW		0	0	Cloudy.	
Atton Id., Alaska ‡	29.40	746.7			25	— 3.9	63	S	30	13.4			10s		SW	0.11	2.8	Cloudy	
Augusta, Georgia	30.02	762.5	30.23	767.8	45	7.2	92	Calm	0	0			Fg		Calm	0	0	Dense fog	
Baltimore, Maryland	30.40	772.1	30.45	773.4	30	— 1.1	78	NE	5	2.2		Hz	Hz	Calm	Calm	0	0	Light haze.	
Barnegat, New Jersey	30.43	772.9	30.46	773.7	26	— 3.3	75	E	12	5.4		5k	5s	Calm	Calm	0	0	Cloudy	
Benton, Montana	27.07	687.6			3	—16.1	73	Calm	0	0		0	0			0.02	0.5	Clear.	
Bismarck, Dakota	27.92	709.2	29.78	756.4	13	—10.6	81	NW	14	6.3			10s		Calm	0.01	0.3	Cloudy	
Boise City, Idaho	27.04	686.8	30.00	762.0	36	2.2	80	SE	8	3.6			10s		Calm	0.06	1.5	Cloudy	
Boston, Massachusetts	30.27	768.8	30.44	773.2	8	—13.3	78	W	9	4.0		0	0			0.05	1.3	Clear.	
Brackettville, Texas	28.58	725.9	29.60	751.8	63	17.2	94	SE	10	4.5			10s		SE	0	0	Cloudy	
Brownsville, Texas	29.75	755.6	29.79	756.7	69	20.6	90	SE	4	1.8			10ks		SE	0	0	Cloudy	
Buffalo, New York	29.47	748.5	30.24	768.1	10	—12.2	79	E	8	3.6		10cs	Sk	W		0	0	Cloudy	
Burlington, Vermont	30.15	765.8	30.48	774.2	1	—17.2	71	E	1	0.4		0	0			0.01	0.3	Clear.	
Cairo, Illinois	29.53	750.0	29.92	760.0	53	11.7	73	S	8	3.6		10cs	0	S		0	0	Cloudy	
Campo, California	27.43	696.7	30.00	762.0	35	1.7	90	NW	7	3.1		2c	0	NW		0	0	Fair	
Camp Thomas, Arizona	27.15	689.6			33	0.6	70	Calm				0	0			0	0	Clear.	
Cape Henry, Virginia	30.33	770.4	30.35	770.9	38	3.3	81	NE	20	8.9		1c	0	Calm		0	0	Clear	
Cape May, New Jersey																			
Castroville, Texas	28.98	736.1	29.66	753.4	64	17.8	94	S	16	7.2			10s		Calm	0	0	Threatening	
Cedar Keys, Florida	30.16	766.1	30.18	766.6	61	16.1	82	E	6	2.7		2ck	0	Calm		0	0	Clear	
Champaign, Illinois	29.04	737.6	29.85	758.2	38	3.3	71	S	13	5.8			10s		S	0	0	Cloudy	
Charleston, S. Carolina	30.15	765.8	30.21	767.3	54	12.2	74	SW	2	0.9		0	0			0	0	Clear.	
Charlotte, N. Carolina	29.36	745.7	30.20	767.1	42	5.6	74	NE	10	4.5		5cs	Hz	Calm	Calm	0	0	Fair	
Chattanooga, Tennessee	29.30	744.2	30.12	765.0	43	6.1	83	Calm	0	0			Sk;fg		Calm	0	0	Dense fog	
Cheyenne, Wyoming	23.73	602.7	29.67	753.6	30	— 1.1	47	N	12	5.4		0	0			0	0	Clear	
Chicago, Illinois	29.13	739.9	29.83	757.7	37	2.8	81	SE	8	3.6		2c	0	SE		0	0	Clear	
Chincoteague, Virginia	30.38	771.6	30.40	772.1	33	0.6	89	NE	13	5.8		8k	0	NW		0	0	Cloudy	
Cincinnati, Ohio	29.40	746.7	30.07	763.8	39	3.9	73	E	2	0.9		4c	Sk	Calm	E	0	0	Dense smoke	
Cleveland, Ohio	29.39	746.5	30.16	766.1	20	— 6.7	85	SE	12	5.4		5c	0	W		Inap.	Inap.	Fair	
Coleman City, Texas	27.93	709.4	30.55	776.0	57	13.9	87	SW	4	1.8		0	5s		Calm	0	0	Fair	
Columbus, Ohio	29.21	741.9	30.09	764.3	31	— 0.6	79	E	6	2.7		5cs	0	Calm		0	0	Fair	
Concho, Texas	27.78	705.6	29.40	746.7	59	15.0	88	S	18	8.0		0	0			0	0	Clear	
Corsicana, Texas	29.34	745.2	29.79	756.7	64	17.8	83	S	8	3.6			10s		Calm	0	0	Cloudy	
Davenport, Iowa	29.07	738.4	29.71	754.6	38	3.3	81	S	3	1.3		2cs	2s	Calm	SW	0	0	Fair	
Dayton, Washington T'y	28.04	712.2	29.72	754.9	37	2.8	80	S	2	0.9		0	0			0.04	1.0	Clear	
Deadwood, Dakota	25.03	635.8			31	— 0.6	100	NE	1	0.4			10n		Calm	0.08	2.0	Light snow.	
Decatur, Texas	28.50	723.9	29.62	752.3	62	16.7	88	SE	18	8.0			10s		Calm	0	0	Cloudy	
Delaware Breakwater, Del.	30.40	772.1	30.42	772.7	27	— 2.8	76	NE	6	2.7		0	0			0	0	Clear	
Denison, Texas	28.91	734.3	29.67	753.6	63	17.2	89	S	12	5.4			10ks		S	0	0	Cloudy	
Denver, Colorado	24.50	622.3	29.72	754.9	38	3.3	31	NW	16	7.2		0	0			0	0	Clear	
Des Moines, Iowa	28.71	729.2	29.59	751.6	37	2.8	81	S	1	0.4		0	8s		Calm	0	0	Fair	
Detroit, Michigan	28.38	720.8	30.12	765.0	21	— 6.1	86	E	7	3.1		0	1Hz		Calm	0	0	Clear	
Dodge City, Kansas	26.90	683.2	29.16	740.7	36	2.2	71	NW	12	5.4		0	0			0.02	0.5	Clear	
Dubuque, Iowa	28.98	736.1	29.69	754.1	34	1.1	79	SE	3	1.3			10ks		S	0	0	Threatening	
Duluth, Minnesota	28.94	735.1	29.64	752.8	24	— 4.4	87	SW	1	0.4			10s		Calm	0.01	0.3	Cloudy	
Eagle Pass, Texas	28.98	736.1	29.68	753.9	66	18.9	89	S	12	5.4			10s		Calm	0	0	Cloudy	
Eagle Rock, Idaho	25.07	636.8	29.72	754.9	27	— 2.8	88	SW	8	3.6			10s		Calm	0	0	Cloudy	
Eastport, Maine	30.21	767.3	30.28	769.1	3	—16.1	73	NW	8	3.6		0	0			0	0	Clear.	
Edinburg, Texas																			
El Paso, Texas	26.07	662.2			48	8.9	10	NW	12	5.4		0	0			0	0	Clear.	
Erie, Pennsylvania	29.43	747.5	30.19	766.8	23	— 5.0	86	S	7	3.1		0	0			0.01	0.3	Clear.	
Escanaba, Michigan	29.15	740.4	29.83	757.7	22	— 5.6	86	S			4	2cs	5s	E	S	0	0	Cloudy	
Florence, Arizona	28.43	722.1	30.03	762.7	46	7.8	47	E	1	0.4		1c	0	Calm		0	0	Clear	
Fort Apache, New Mexico	24.90	632.4	30.35	770.9	28	— 2.2	66	NE	4	1.8		0	0			0	0	Clear	
Fort Assiniboine, Montana	27.05	687.1			5	—15.0	100	NW	3	1.3			10n		NW	0.02	0.5	Light snow.	
Fort Bennett, Dakota	28.10	713.7			23	— 5.0	73	N	17	7.6			10s		Calm	0	0	Cloudy	
Fort Buford, Dakota	27.88	708.1	29.90	759.4	4	—15.6	74	NW	12	5.4		2cs	0	NW		0	0	Fair	
Fort Custer, Montana	26.63	676.4			17	— 8.3	83	N	14	6.3			10s		Calm	0	0	Cloudy	
Fort Davis, Texas	24.99	634.7	29.95	760.7	53	11.7	25	SW	13	5.8		0	0			0	0	Clear	
Fort Elliott, Texas	26.86	682.2	29.12	739.6	40	4.4	65	W	8	3.6		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.12	739.6	29.64	752.8	61	16.1	77	S	14	6.3		0	5s		S			Fair	
Fort Grant, Arizona	25.11	637.8	29.91	759.7	49	9.4	24	N	12	5.4		0	0			0	0	Clear	
Fort Griffin, Texas	28.30	718.8	29.51	749.5	62	16.7	77	S	16	7.2		0	0			0	0	Clear	
Fort Keogh, Montana	27.34	694.4			14	—10.0	82	NW	11	4.9			10s		Calm	0.03	0.8	Cloudy	
Fort McKavett, Texas	27.49	698.2	29.34	745.2	62	16.7	88	S	12	5.4			10s		Calm	0	0	Cloudy	
Fort Macon, North Carolina	30.23	767.8	30.24	768.1	48	8.9	85	N	9	4.0		Hz	0	Calm		0	0	Clear	
Fort St. Michaels	29.82	757.4	29.86	758.4	0	—17.8	100	NE	7	3.1		0	0						
Fort Missoula, Montana	26.49	672.8			30	— 1.1	89	Calm	0	0		0	0			0.03	0.8	Clear	
Fort Shaw, Montana	26.17	664.7			7	—13.9	77	NE	4	1.8		2cs	0	Calm		Inap.	Inap.	Clear	
Fort Sill, Indian Territory	28.39	721.1	29.46	748.3	55	12.8	93	S	17	7.6			10s		S	0	0	Cloudy	
Fort Stevenson, Dakota	27.92	709.2			13	—10.6	81	NW	16	7.2			10ks		NW	0	0	Cloudy	
Fort Verde, Arizona					37	2.8	53	NW			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.01	711.4	29.50	749.3	63	17.2	89	SW	17	7.6			10ks		SW	0	0	Cloudy	
Galveston, Texas	29.83	757.7	29.87	758.7	65	18.3	94	S	11	4.9			10s		SW	0	0	Cloudy	
Grand Haven, Michigan	29.24	742.7	29.92	760.0	25	— 3.9	87	E	9	4.0		10k	0	SW		Inap.	Inap.	Cloudy	
Hatteras, North Carolina	30.23	767.8	30.25	768.3	51	10.6	86	E	14	6.3		0	5s		NE	0	0	Fair	
Helena, Montana	25.51	647 9			32	0.0	25	W	8	3.6		0	0			0.03	0.8	Clear	
Henrietta, Texas	28.63	727.2	29.52	749.8	57	13.9	94	SE	10	4.5		0	5s		Calm	0	0	Fair	
Indianapolis, Indiana	29.16	740.7	29.95	760.7	39	3.9	68	SE	8	3.6		4k	1k;sk	SW	C;SW	0	0	Fair	
Indianola, Texas	29.81	757.2	29.83	757.7	63	17.2	94	S	10	4.5			10s		Calm			Cloudy	
Jacksboro, Texas	28.50	723.9	29.59	751.6	60	15.6	88	SE	13	5.8		0	5s		S	0	0	Fair	
Jacksonville, Florida	30.15	765.8	30.20	767.1	52	11.1	86	SE	2	0.9		2ks	Fg	Calm		0	0	Fair	
Keokuk, Iowa	29.03	737.3	29.68	753.9	42	5.6	74	SE	4	1.8			10s		SW	0	0	Cloudy	
Key West, Florida	30.08	764.0	30.12	765.0	68	20.0	84	E	6	2.7		0	0			0	0	Clear	
Kittyhawk, North Carolina	30.29	769.4	30.32	770.1	41	5.0	91	NE	15	6.7		2k	0	N		0	0	Clear	
Knoxville, Tennessee	29.12	739.6	30.15	765.8	40	4.4	82	N	3	1.3		1c	Sk	Calm	Calm	0	0	Clear	
La Crosse, Wisconsin	28.88	733.5	29.62	752.3	32	0.0	79	S	9	4.0			10s		S	0	0	Cloudy	
La Mesilla, New Mexico	25.96	659.4	30.11	764.8	37	2.8	31	W	2	0.9		0	0			0	0	Clear	
Laredo, Texas	29.35	745.5	29 68	753.9	68	20.0	90	SE	1	0.4			10s		SE	0	0	Cloudy	
Leavenworth, Kansas	28.69	728.7	29.51	749.5	48	8.9	93	S	4	1.8			10s		SW	0	0	Cloudy	
Lewiston, Idaho	28.98	736.1	29.62	752.3	38	3.3	80	W	4	1.8		0	2s		W	Inap.	Inap.	Clear	
Little Rock, Arkansas	29.55	750.6	29.86	758.4	59	15.0	88	S	7	3.1			10ks		SW	0	0	Cloudy	
Los Angeles, California	29.73	755.1	30.10	764.5	48	8.9	78	NE	9	4.0		0	4s		NE	0	0	Fair	
Louisville, Kentucky	29.43	747.5	30.00	762.0	40	4.4	73	NE	1	0.4		10c	Sk	Calm	Calm	0	0	Cloudy	
Lynchburg, Virginia	29.67	753.6	30.39	771.9	34	1.1	70	NE	1	0.4		0	0			0	0	Clear	
Madison, Wisconsin	28.71	729.2	29.71	754.6	33	0.6	79	S	13	5.8		0	8s		S	0	0	Cloudy	
Marquette, Michigan	29.05	737.9	29.79	756.7	20	— 6.7	85	S	11	4.9			10s		Calm	0.02	0.5	Cloudy	
Mason, Texas	28.18	715.8	29.88	758.9	65	18.3	83	SW	14	6.3			10s		Calm	0	0	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0–10	Clouds. Amount and kind. Up'er 0–10	Lo'er 0–10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.59	751.6	29.92	760.0	57	13.9	100	SE	1	0.4			10n		Calm	0.13	3.3	Light rain	
Milwaukee, Wisconsin	29.08	738.6	29.82	757.4	35	1.7	90	SE	9	4.0			10s		W	0	0	Threatening	
Mobile, Alabama	29.98	761.5	30.05	763.3	52	11.1	86	SE	3	1.3		5cs	Hz	Calm		0	0	Dense haze.	
Montgomery, Alabama	29.90	759.4	30.14	765.5	50	10.0	86	SE	1	0.4		8k	0	SW		0	0	Fair	
Moorhead, Minnesota	28.62	726.9	29.61	752.1	18	— 7.8	92	N	12	5.4			10s		N	0.40	10.2	Cloudy	
Morgantown, W. Virginia	29.15	740.4	30.20	767.1	30	— 1.1	78	N	1	0.4		2cs	Hz	Calm		0	0	Dense haze.	
Mt. Washington, N. H.	23.53	597 7	29.89	759.2	— 5	—20.6	44	NW	46	20.6		0	0			0	0	Clear	
Nashville, Tennessee	29.50	749.3	30.05	763.3	42	5.6	83	Calm	0	0		2cs	Sk	Calm	Calm	0	0	Dense smoke	
New Haven, Connecticut	30.34	770.6	30.47	773.9	10	—12.2	79	N	4	1.8		0	0			0.12	3.0	Clear	
New London, Connecticut	30.42	772.7	30.47	773.9	13	—10.6	62	N	5	2.2		1c	0	Calm		0.16	4.1	Clear	
New Orleans, Louisiana	29.93	760.2	29.99	761.7	58	14.4	88	SE	6	2.7		10cs	0	SW		0	0	Cloudy	
Newport, Rhode Island	30.39	771.9	30.44	773.2	14	—10.0	73	N	10	4.5		0	0			0	0	Clear	
New River, N. Carolina					45	7.2	85	N			2	Hz	0	Calm				Light haze.	
New Shoreham, Rhode I'd.	30.42	772.7	30.46	773.7	16	— 8.9	66	N	16	7.2		0	0			0.09	2.3	Clear	
New York, New York	30.29	769.4	30.49	774 4	17	— 8.3	67	NE	10	4.5		2cs	Fg	Calm	Calm	Inap.	Inap.	Fair	
Norfolk, Virginia	30.29	769.4	30.35	770.9	38	3.3	72	NE	8	3.6		0	0			0	0	Clear	
North Platte, Nebraska	26.66	677.2	29.19	741.4	37	2.8	81	SW	14	6.3		5cs	0	Calm		0	0	Fair	
Olympia, Washington T'y	29.63	752.6	29.67	753.6	41.5	5.3	96	N	2	0.9			10n		Calm	0.37	9.4	Light rain	
Omaha, Nebraska	28.38	720.8	29.46	748.3	39	3.9	100	S	4	1.8			Fg			0	0	Dense fog	
Oswego, New York	30.03	762.7	30.39	771.9	7	—13.9	77	SE	7	3.1		5ck	Hz	NW		Inap	Inap.	Fair	
Pensacola, Florida	30.06	763.5	30.09	764.3	59	15.0	94	NE	5	2.2		9k	Hz	S	Calm	0	0	Cloudy	
Philadelphia, Pa	30.42	772 7	30.48	774.2	20	— 6.7	70	NE	6	2.7		10k	0	W		Inap.	Inap.	Cloudy	
Phœnix, Arizona	28.80	731.5	30.64	778.2	45	7.2	68	E	3	1.3		8ck	0	Calm		0	0	Cloudy	
Pike's Peak, Colorado	17.33	440.2	29.54	750.3	0	—17.8	70	W	24	10.7		2cs	0	Calm		0	0	Clear	
Pilot Point, Texas	28.93	734.8	29.75	755.6	62	16.7	88	S	17	7.6			10ks		S	0	0	Cloudy	
Ploche, Nevada	23.92	607.6	29.68	753.9	34	1.1	52	W	3	1.3		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.36	745.7	30.22	767.6	26	— 3.3	73	NE	5	2.2			10s		Calm	0	0	Cloudy	
Port Huron, Michigan	29.43	747.5	30.15	765.8	14	—10.0	82	SE	6	2.7		5c	0	Calm		0	0	Fair	
Portland, Maine	30.35	770.9	30.40	772.1	10	—12.2	58	NW	5	2.2		0	2s		Calm	0.04	1.0	Clear	
Portland, Oregon	29.63	752.6	29.70	754.4	47	8.3	92	S	4	1.8		0	5s		SW	0.47	11.9	Fair	
Portsmouth, N. Carolina					48	8.9	78	NE	18	8.0		2k	Hz	Calm	Calm	0	0	Dense haze.	
Prescott, Arizona	24.68	626.9	30.04	763.0	33	0.6	61	S	3	1.3		0	0			0	0	Clear	
Punta Rassa, Florida	30.10	764.5	30.12	765.0	63	17.2	78	NE	9	4.0		1ck	0	E		Inap.	Inap.	Clear	
Red Bluff, California	29.62	752.3	29.97	761.2	51.5	10.8	93	SE	20	8.9			10n		Calm	0.09	2.3	Light rain	
Rio Grande City, Texas	29.60	751.8	29.81	757.2	69	20.6	85	Calm	0	0			10s		Calm	0	0	Cloudy	
Rochester, New York	29.64	752.8	30.33	770.4	8	—13.3	78	SE	9	4.0		1c	1s	NW	Calm	0.01	0.3	Clear	
Roseburg, Oregon	29.28	743.7	29.84	757.9	48	8.9	92	S	5	2.2			10ks		SW	0.40	10.2	Cloudy	
Sacramento, California	30.02	762.5	30.10	764.5	52	11.1	93	SE	13	5.8			10n		Calm	0.48	12.2	Light rain	
St. Louis, Missouri	29.22	742.2	29.79	756.7	48	8.9	77	SE	13	5.8		10c;k	0	C;W		0	0	Cloudy	
St. Paul, Minnesota	28.72	729.5	29.56	750.8	26	— 3.3	75	SE	8	3.6			10s		SE	0	0	Cloudy	
Salt Lake City, Utah	25.53	648.5	29.86	758.4	38	3.3	63	NE	3	1.3			10s		Calm	0.08	2.0	Cloudy	
San Antonio, Texas	29.10	739.1	29.78	756.4	65	18.3	100	S	18	8.0			10n		Calm	0.10	2.5	Light rain	
San Diego, California	30.05	763.3	30.12	765.0	48	8.9	77	N	5	2.2		0	0			0	0	Clear	
Sandusky, Ohio	29.40	746.7	30.12	765.0	20	— 6.7	85	E	10	4.5		1c	Fg	Calm	Calm	0	0	Fair	
Sandy Hook, New Jersey	30.44	773.2	30.48	774.2	19	— 7.2	85	NE	12	5.4		8ck	0	Calm		0.48	12.2	Cloudy	
San Francisco, California	30.02	762.5	30.09	764.3	57	13.9	94	S	7	3.1			10n		Calm	0.30	7.6	Light rain	
Santa Fé, New Mexico	22.95	582.9	29.53	750.0	33	0.6	70	W	2	0.9		0	0			0	0	Clear	
Savannah, Georgia	30.11	764.8	30.20	767.1	54	12.2	87	SW	3	1.3		0	Fg		Calm	0	0	Clear	
Shreveport, Louisiana	29.61	752.1	29.85	758.2	60	15.6	82	SE	5	2.2			10s		Calm	0	0	Cloudy	
Silver City, New Mexico	24.10	612.1	30.26	768.6	45	7.2	24	NW	1	0.4		0	0			0	0	Clear	
Smithville, North Carolina	30.20	767.1	30.24	768.1	48	8.9	93	N	7	3.1		Hz	Hz			0	0	Dense haze.	
Socorro, New Mexico	25.22	640.6	29.29	744.0	38	3.3	38	N	2	0.9		0	0			0	0	Clear	
Springfield, Illinois	29.13	739.9	29.80	756.9	43	6.1	67	S	15	6.7		5c	2s	W	S	0	0	Fair	
Springfield, Massachusetts	30.35	770.9	30.50	774.7	4	—15.6	48	N	1	0.4		0	Hz		Calm	0.08	2.0	Clear	
Stockton, Texas	29.74	679.2	29.74	755.4	45	7.2	39	SW	4	1.8		0	1s		Calm	0	0	Clear	
St. Vincent, Minnesota	28.85	732.8	29.69	754.1	10	—12.2	79	NW	28	12.5			10s		Calm	0	0	Cloudy	
Thatcher's Island, Mass	30.36	771.1	30.42	772.7	13	—10.6	62	NW	11	4.9		0	0			0.04	1.0	Clear	
Toledo, Ohio	29.39	746.5	30.13	765.3	17	— 8.3	83	NE	2	0.9		2c	Sk	Calm		0	0	Dense smoke	
Tucson, Arizona	27.45	697.2	30.00	762.0	41	5.0	41	S	2	0.9		0	0			0	0	Clear	
Umatilla, Oregon	29.45	748.0	29.94	760.5	40.5	4.7	91	E	2	0.9			10n		Calm	0.03	0.8	Light rain	
Uvalde, Texas	28.79	731.3	29.58	751.3	65	18.3	89	SE	3	1.3			10s		Calm	0	0	Cloudy	
Vicksburg, Mississippi	29.71	754.6	29.97	761.2	59	15.0	82	SE	8	3.6			10s		S	Inap.	Inap.	Threatening	
Visalia, California	29.76	755.9	30.14	765.5	48	8.9	93	SE	2	0.9			10s		Calm	0	0	Cloudy	
Washington, D. C.	30.31	769.9	30.43	772.9	28	— 2.2	77	NE	3	1.3		0	8s;hz		SW;C	0	0	Cloudy	
Wickenburg, Arizona					36	2.2	45	W			1	0	0			0	0	Clear	
Wilmington, N. Carolina	30.20	767.1	30.25	768.3	44	6.7	84	NE	1	0.4		Hz	Hz	Calm	Calm	0	0	Dense haze.	
Winnemucca, Nevada	25.47	646.9	29.83	757.7	37	2.8	90	SW	16	7.2			10n		Calm	0.04	1.0	Light rain	
Wood's Holl, Mass	30.37	771.4	30.41	772.4	13	—10.6	81	N	12	5.4			1s		NW	0.15	3.8	Clear	
Yankton, Dakota	28.19	716.0	29.47	748.5	35	1.7	80	W	8	3.6		0	0			0	0	Clear	
Yuma, Arizona	29.75	755.6	29.90	759.4	50	10.0	72	S	2	0.9		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.05	560.1			52.5	11.4	79	Calm	0	0			10n			0.12	3.0	Cloudy	Thomas Herran.
Buff Bay Town, Jam ica	29.85	758.2	30.16	766.1	69	20.6	95	N				k	k						
Havana, Cuba, W. I.	30.03	762.7	30.08	764.0	68	20.0	75	SE	1.2	0.5		0	0			0	0	Clear	Charles Hasselbrink.
Jakobshavn, Greenland	30.23	767.8	30.29	769.3	25.2	— 3.8		W			4		0			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	30.01	762.2	30.02	762.5	72.0	22.2	75	N	2	0.9		0	2s		E	0.04	1.0		Robert Johnstone.
Navassa, W. I.	29.93	760.2	30.01	762.2	77	25.0	71	NE	7	3.1		5k	5s	E	NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	78	25.6	82	E			2		8ks	E		0.230	5.84	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.41	747.0	29.97	761.2	78	25.6	80	N			1		10s		N	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua								SE			3	0	1ks		SE	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.01	762.2	30.04	763.0	73	22.8	81	NW	2.4	1.1		8ck	0	NW		0	0	Cloudy	Robert Mason.
St. Thomas, W. I.					73.4	23													G. O. Gellich.
Upernavik, Greenland	30.23	767,7	30.29	769.3	27.1	— 2.7		WNW			4		8			0	0		K. Elberg.
York Factory, B. A.	29.87	758.7	29.93	760.2	—10.0	—23.3	78	SW	12	5.4		40k	3s	SW	SW	0.01	0.3	Cloudy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.85	758.2	60.5	15.8	82	ESE			3		9	E						Overcast	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 30° 32′, E 47° 51′	29.71	754.6	60	15.6	88	N			1–4		8	N						Squally	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			53	11.7		NE			1		2	NE				1	NE	D. clouds	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.67	753.6	81.5	27.5	83	NE			2		6	ENE				2	E	D. clouds	Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gerfoll.
H. M. S. Comus, Kobe, Japan	30.26	768.6	46	7.8	77	Calm			0		0							Blue sky	Capt. J. W. East.
H. M. S. Condor, N. 37° 59′, E. 26° 50′	30.08	764.0	49.5	9.7	68	Calm			0		3cs							D. clouds	Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 37° 20′, E. 15° 31′	29.90	759.4	58	14.4		SE			4		7	E				4	E	D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa, Shanghai, China	30.14	765.5	48	8.9	100	ENE			2–3		10							Overcast	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.18	766.6	65	18.3	73	WNW			1–2		2							D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 34′, E. 81° 14′	29.87	758.7	82	27.8		NE			1		4	NNE				1	NE	D. clouds	Comm. John Hext.
H. M. S. Eclipse, N. 14° 12′, E. 83° 55′ †	30.08	764.0	79	26.1		Calm			0		0					0		Blue sky	Comm. E. St. J. Garforin.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Bombay, India	29.83	757.7	82	27.8	87	W			2–3		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 17° 32′, W. 64° 18′	30.05	763.3	77	25.0		ESE			3		10	ESE				3	SE	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Panama, Panama	29.94	760.5	73	22.8	85	NW			1–2		1							Blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 54′, W. 58° 37′	29.99	761.7				Calm			0									Blue sky	Capt. L. F. Jones.
H. M. S. Griffon																			Capt. J. Inglis.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 1° 17′, E. 103° 51′	29.93	760.2	80	26.7	87	NE			1–2		1	NE				2	E	D. clouds	Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Zanzibar, Africa	29.84	757.9	82	27.8	91	WNW			1		8	W						Raining	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 25° 29′ E. 119° 29′	30.13	765.3	54.6	12.6	93	NE			2		10							Misty	Capt. R. H. Napier.
H. M. S. Malabar																			Capt. J. F. G. Grant.
H. M. S. Minatour, Vigo, Spain	29.63	752.6	60.5	15.8	76	Calm			0		1	W						Blue sky	Capt. H. Rawson.
H. M. S. Modeste, N. 1° 17′, E. 103° 51′	29.95	760.7	81	27.2	87	NE			2–3		0					2	NE	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Alexandretta, Turkey, Asia	29.98	761.5	56	13.3	47	W			1		1	W				Sm'h		Blue sky	Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Pt. Royal, Jamaica, W.I.	29.95	760.7	74	23.3	86	Calm			0		2							D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes, N. 34° 20′, W. 32° 53′	30.13	765.3	60.5	15.8	85	WNW			4		8	NW				3	NW	D. clouds	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, Elmina, Gold Coast, Africa.	29.89	759.2	78	25.6	91	SSW			1		3					2	S	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman, N. 44° 01′, W. 14° 16′			53	11.7		ENE			6		6	E				6	E	D. clouds	Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.90	759.4	79	26.1	100	Calm			0		10							Rain & mist.	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	29.65	753 1	61	16.1	77	Calm			0		9							D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 42′, E. 49° 35′	29.45	748.0	81	27.2	96	SE			3	5ck				Blank		4	ESE	Misty	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	29.94	760.5	70	21.1	95	Calm			0		9	NE				1	S	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 13° 05′, W. 59° 36	30.05	763.3	77.5	25.3	71	ENE			3		2					Sm'h		D. clouds	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo Bay, Chili, S.A.	30.01	762.2	64	17.8	86	Calm			0		10							Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 9° 56′, E. 67° 30′	29.90	759.4	83	28.3		E			1		2					Sm'h		D. clouds	Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Aba, Shehr, Arabia	29.74	755.4	58.5	14.7	94	ESE			5–6		0?							Th'nd'r st'm.	Capt. R. D. Cummin.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
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PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, Cape Verd Id's	30.02	762.4	73.8	23.2	73	NE			4		8					2	ENE	D. clouds	S. C. da Silva Costa, Comd't.
Sado, St. Paul de Loando, Africa	29.88	759.0	84.9	29.4	75	NW			3		3		NW			1	NW	D. clouds	G. A. de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
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H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	29.91	759.7	67	19.4	84	ESE	12	5.4		10			SW	0	0			Cloudy	
N. Yard, Portsmouth, N. H.	30.39	771 9	6	—14.4	100	NW	3	1.3		0				0	0			Hazy	
Naval Hospital, Yokohama, Japan	30.06	763.5	39.5	4.2	73	ENE			2		10		NE	0.01	0.3			Drizzling	
Adams, Panama, Panama	29.96	761.0	74	23.3	90	NW			2		2		NW			Sm'h		Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.04	763.0	55	12.8	93	SW			2		10		S					Rainy	
Alert, N. 22° 22′, E. 114° 59′...*	29.89	759.2	70	21.1	90	E			3		0			0	0	Sm'h	E	Misty	
Alliance, New Orleans, La	30.00	762.0	61	16.1	88	SE			1		5			0	0	Sm'h		Fair	
Ashuelot, Tientsin, China	30.51	774.9	29	— 1.7	100	E			2		2		Calm					Fair	
Colorado, New York, N. Y.	30.36	771.1	17	— 8.3	83	NW	4	1.8			8?			0	0			Clear?	
Constitution, N. Yard, League I'd., Pa	30.42	772.7	23	— 5.0		NE	3	1.3			5		ESE					Fair	
Franklin, Norfolk, Va	30.26	768.6	39	3.9	73	ENE	6	2.7			2			0	0			Fair	
Galena, Syra Id., Grecian Arch.	30.08	764.0	51	10.6	65	NNW			2		2					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal.	30.07	763.8	56	13.3	94	SSW	15.6	7.0			10		SSW	0.12	3.0			Overcast	
Jamestown, Sitka, Alaska ...*	29.59	751.6	24	— 4.4		ENE			1		10			0.07	1.8	Sm'h		Cloudy	
Kearsarge, New Orleans, La	29.96	761.0	59	15.0	88	SE			1		10					Sm'h		Cloudy	
Marion, S. 52° 05′, W. 63° 58′...*†	30.09	764.3	49	9.4	93	N			5		5?					Sm'h	N	Cloudy?	
Michigan, Erie, Pennsylvania	30.15	765.8	18	— 7.8		S	2	0.9			0							Clear	
Minnesota, New York, N. Y.	30.45	773.4	19	— 7.2		NE			3		5							Hazy	
Monocacy, Shanghai, China	30.29	769.4	48	8.9	85	ENE			4		10							Overcast	
New Hampshire, Port Royal, S. C.	30.18	766.6	54	12.2	93	Calm	0	0			0			0	0			Clear	
Nipsic, Valencia, Spain	29.64	752.8	55	12.8	80	SW			3		10					Sm'h		Overcast	
Onward, Callao, Peru †.	29.95	760.7	70	21.1	90	ESE			1		8					Long	N;W	Cloudy	
Palos, Shanghai, China	30.26	768.6	44	6.7	100	ENE			2		10							Overcast	
Passaic, Washington, D. C.	30.49	774.4	28	— 2.2	88	NE			1		0							Clear	
Pensacola, N. 0° 26′, W. 80° 56′	29.95	760.7	77	25.0	91	SSW			1		8			0	0	Sm'h		Cloudy	
Powhatan, New York, N. Y.	30.46	773.7	14	—10.0	100	NNE			3		8?							Clear	
Quinnebaug, Villafranca, France	29.83	757.7	56	13.3	81	ESE			3		10		ESE			Sm'h		Cloudy	
Richmond, Hong-Kong, China	30.02	762.5	70	21.1	100	ENE			1		10		ENE	0	0			Cloudy	
Saratoga, Alexandria, Va	30.44	773.2	29	— 1.7	89	ESE			2		8		SW	0	0			Hazy	
Shenandoah, Montevideo, Uruguay .*	30.03	762.7	70	21.1	80	NNE			4		0					Mod.	NNE	Clear	
St. Louis, League Island, Pa	30.49	774.4	21	— 6.1	58	NNE	6	2.7			10		NNW	0	0			Cloudy	
Swatara, Nagasaki, Japan †.	30.09	764.3	49	9.4	78	NNE			1		0					Sm'h		Blue sky	
Tennessee, New Orleans, La	30.03	762.7	61	16.1	94	SE	8	3.6			8		Calm	0	0	Sm'h		Cloudy	
Ticonderoga, N. Yard, Mare Id., Cal.	30.15	765.8	55	12.8	100	SW			2		10		SW	0.16	4.1			Rainy	
Trenton, Villafranca, France.....*	29.81	757.2	57	13.9	63	SW			1		5			0	0	Sm'h		Fair	
Vandalia, Frederichstäd, W. I.	30.06	763.5	75	24.4	91	ESE			2		8		ESE					Fair	
Wabash, Boston, Massachusetts	30.47	773.9	8	—13.3	78	NNW	5	2.2						0	0			Hazy	
Wachusetts, N. 10° 01′, W. 85° 50′....*.	29.59	751.6	82	27.8	83	WNW			2		5		N			Sm'h		Fair	
Wyoming, Villafranca, France	29.82	757.4	55	12.8	68	SE			1		10		Calm			Sm'h		Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Asturte																			Capt. G. F. Parson.
Ship Baroda, ‡ N. 19° 15′, W. 40° 00′	30.13	765.3	76	24.4	69	NE			6		4							Squally	Capt. C. J. Russell.
S. S. Bateshire,																			Capt. John Arbuckle.
Barque Belleisle, N. 12° 55′, W. 73° 04′	29.98	761.5	76.5	24.7	88	E			4		8					D. clouds			Capt. A. J. Brown.
British Merchant ‡																			Capt. E. J. Molony.
Chin Yang ‡																			Capt. N. Youlden.
S. S. Cipero, N. 43° 15′, W. 31° 10′	29.68	753.9	54	12.2		WNW			6		5					7	WNW	Misty	Capt. W. N. Lailey.
City of Agra, ‡ N. 3° 05′, W. 34° 40′	29.93	760.2	77.9	25.5	84	E			2		6					D. clouds			Capt. T. Young.
Barque Commewyne, ‡ N. 52° 33′, W. 23° 18′	30.02	762.5	48.1	8.9	81	E			5		10							Showery	Capt. W. Scott.
Barque Coppename,																			Capt. Jas. Buchan.
Denbigshire,																			Capt. H. Y. Murdoch.
Barque Dochra, ‡ N. 1° 58′, W. 25° 01′	29.91	759.7	86	30.0	68	Calm			0		10							Overcast	Capt. H. Spalding.
Ship Ellen Stuart, S. 9° 47′, E. 86° 59′	29.91	759.7	81.5	27.5	96	W			3		2							Blue sky	Capt. J. E. C. Patterson.
Barque Elissa,																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle,																			Capt. J. Kidder.
Barque Gem,																			Capt. H. Park.
S. S. Gordon Castle,																			Capt. W. Waring.
Barque Harvest Home,																			Capt. H. H. Williams
Barquentine Hope ‡																			Capt. Jas. Campbell.
Ship Iron Cross, N. 31° 18′, W. 19° 06′	29.97	761.2	63	17.2		WNW			3		5							Showery	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith,																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene,																			Capt. W. P. Hughes.
Ship Lochee, ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic,																			Capt. W. Ellery.
Barque Markland, ‡ N. 35° 30′, W. 72° 28′	30.33	770.4	57.7	14.3	70	NE			4		4					3-4	N	D. clouds	Capt. H. W. Dyke.
Barque Mertola,																			Capt E. W. Turner.
Nairnshire,																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart
Barque Shun Lee, ‡ N. 13° 26′, W. 34° 10′	29.96	761.0	80.3	26.8	86	ESE			4		2							D. clouds	Capt. John M. Gray.
S. S. Selne,																			Capt. H. Manning.
S. S. Strathloven ‡ N. 26° 37′, W. 17° 34′	29.95	760.7	63.5	17.5	83	W			2		4							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton, ‡ S. 16° 26′, E. 74° 59′	29.92	760.0	81.5	27.5	85	ENE			2		3							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire, N. 32° 40′, W. 62° 35′	30.26	768.6	64	17.8	73	WNW			4		8					4	NW	D. clouds	
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Circassian, ‡ N. 55° 14′, W. 13° 13′	30.22	767.6	45	7.2	76	NNE;N			6		8		NE	3 h'rs	sleet	R'gh	N	Squally	
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia, N. 43° 21′, W. 49° 25′	29.63	752.6	35	1.7	100	SE			4		10		SE	Sn	ow	Mod.	W	Hazy	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			
S. S. Baltic																			Capt. J. W. Jennings.
S. S. Britanic, N. 51° 19′, W. 15° 28′ †	30.00	762.0	51	10.6		NE			4		1		NE			Sl't	NE	Blue sky	Capt. H. Perry.
S. S. Celtic, N. 40° 54′, W. 63° 13′ †	30.06	763.5	29	— 1.7		NW			5		10		NW	0	0	Mod.	N	Overcast	Capt. Benj. Gleadell.
S. S. Germanic, N. 49° 38′, W. 24° 35′ †	29.85	758.2	50	10.0		E			6		8		E	Show	ers	H'vy	E	Clear	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann ‡																			Capt. H. Baur.
S. S. Köln																			
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg, N. 44° 45′, W. 45° 05′	29.91	759.7	35.6	2.0		WNW			5		8		WNW	3½	hours	R'gh	WNW	Cloudy	
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm †																			Capt. Albert Fredholm.
Ship Peru, ‡ N. 29° 25′, W. 79° 29′	30.21	767.2	68.9	20.5	77	E			3		1							Blue sky	Capt. O. F. Skötdebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 50° 18′, W. 24° 49′	29.99	761.7	56	13.3	87	SE			4		2		SE			Mod.	SE	Clear	Capt. J. W. Shackford
S. S. Indiana, ‡ N. 41° 09′, W. 58° 26′ †	29.77	756.1	40	4.4	82	NW			8		8		NW	Sn	ow	R'gh	NW	Cloudy	Capt. R. W. Sargent.
S. S. Ohio, ‡ Liverpool, England *†	29.84	757.9	45	7.2	92	Var.			2		10		W	Rain;	hail			Cloudy..	Wm. Shackford, 1st Off r.
S. S. Pennsylvania, N. 51° 12′, W. 11° 34′ †	29.89	759.2	41	5.0	?	E			5		8		E	o	o	Sm'h	E	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ N. 38° 09′, W. 129° 13′ †	30.15	765.8	60	15.6	82	ESE			2		5?		SSW	o	o	Light	wsw	Clear?	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China †*	30.11	764.8	69	20.6	75	SE			2		10		E					Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 31° 43′, E. 164° 12′	30.38	771.6	61	16.1	77	SSW			4		10		SW	o	o	Sl't	S	Fine	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, off Point Reyes, Columbia R. †	30.05	763.3	61	10.6	96	WSW			3		10					Mod.	SW	Foggy	Capt. Fred. Bolles
S. S. Oregon, N. 40° 35′, W. 124° 32′ †	29.97	761.2	54.0	12.2		WSW			3		10		SSW			Mod.	SW	Cloudy	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal. †	30.05	763.3	56	13.3	94	SW			2		10		SW					Rainy	Capt. J. N. Ingalls.
S. S. Idaho, Seattle, Wash. Ter. †	29.62	752.3	40	4.4	82	ESE			2		8							Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, San Pedro, California †	30.10	764.5	54	12.2	100	NNW			2		0					Mod.	W	Clear	Thos. Wallace.
S. S. State of California, Portland, Oregon †	29.69	754.1	45	7.2	100	SE			3		8		SE	o	o			Cloudy	Capt. G. Debney.
S. S. Victoria																			J. C. Hunter, 1st Officer.
PACIFIC MAIL S.S. CO. *J B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, S. 32° 40′, W. 162° 24′ †	29.83	757.7	65	18.3	94	SSW			6		10		SW	Squ	alls	Mod.	S	Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 33° 12′, W. 118° 33′ †	30.14	765.5	57	13.9	81	WNW			7		8		SE	o	o	H'vy	NW	Cloudy	Capt. D. S. Austin.
S. S. City of Peking, Yokohama, Japan †	30.15	765.8	44	6.7	68	NNE			2		10		NE	o	o	Sm'h		Overcast	Capt. G. G. Berry.
S. S. City of Sidney, N. 10° 04′, W. 162° 35′ †	29.97	761.2	79	26.1	74	ENE			5	8c		NE		o	o	High	NE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer.
S. S. Colima, ‡ Panama, Panama †	29.94	760.5	73	22.8	85	NW			1		2		NW	o	o			Fair	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada																			
S. S. Zealandia, Sydney, N. S. W.	30.16	766.1	70	21.1	70	SW			5		0							Fine	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland †																			Capt. Sam'l Jackson.
S. S. Nederland																			Capt. S. Stokes.
S. S. Rhynland, ‡ Staten Island, N. Y. †	30.55	776.0	26	— 3.3		W			2		8		S	0.1	3.			Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland, ‡ N. 51° 21′, E. 2° 26′	29.92	760.0				NE			2		2		NE	o	o	Sm'h	E	Fair	Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Jacksonville, Florida †	30.09	764.3	60	15.6		Calm			0		0			o	o			Fine	Capt. A. Mehaffey.
Sch'r Addie Fuller, Jones Point, Va	30.32	770.1	33	0.6	80	NE	3	1.3			2s			o	o			Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, Martinique, W. I. †	29.99	761.7	80	26.7		NE			5		5		NE	H'vy	rain			Cloudy	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 44° 05′, W. 11° 37′ †*	29.98	761.5	55	12.8		ENE			6		10		ENE			Mod.	ENE	Threatening	Capt B. F. Woodbury.
Brigantine George ‡																			Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	30.34	770.6	39	3.9	82	NE	2	0.9		5cs?	5cs?			o	o			Clear?	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 26° 00′, W. 66° 42′ †	30.17	766.3	72	22.2	100	NNE			7		10		NE	Mode	rate	R'gh	NE	Cloudy	Capt. Jos. Hand.

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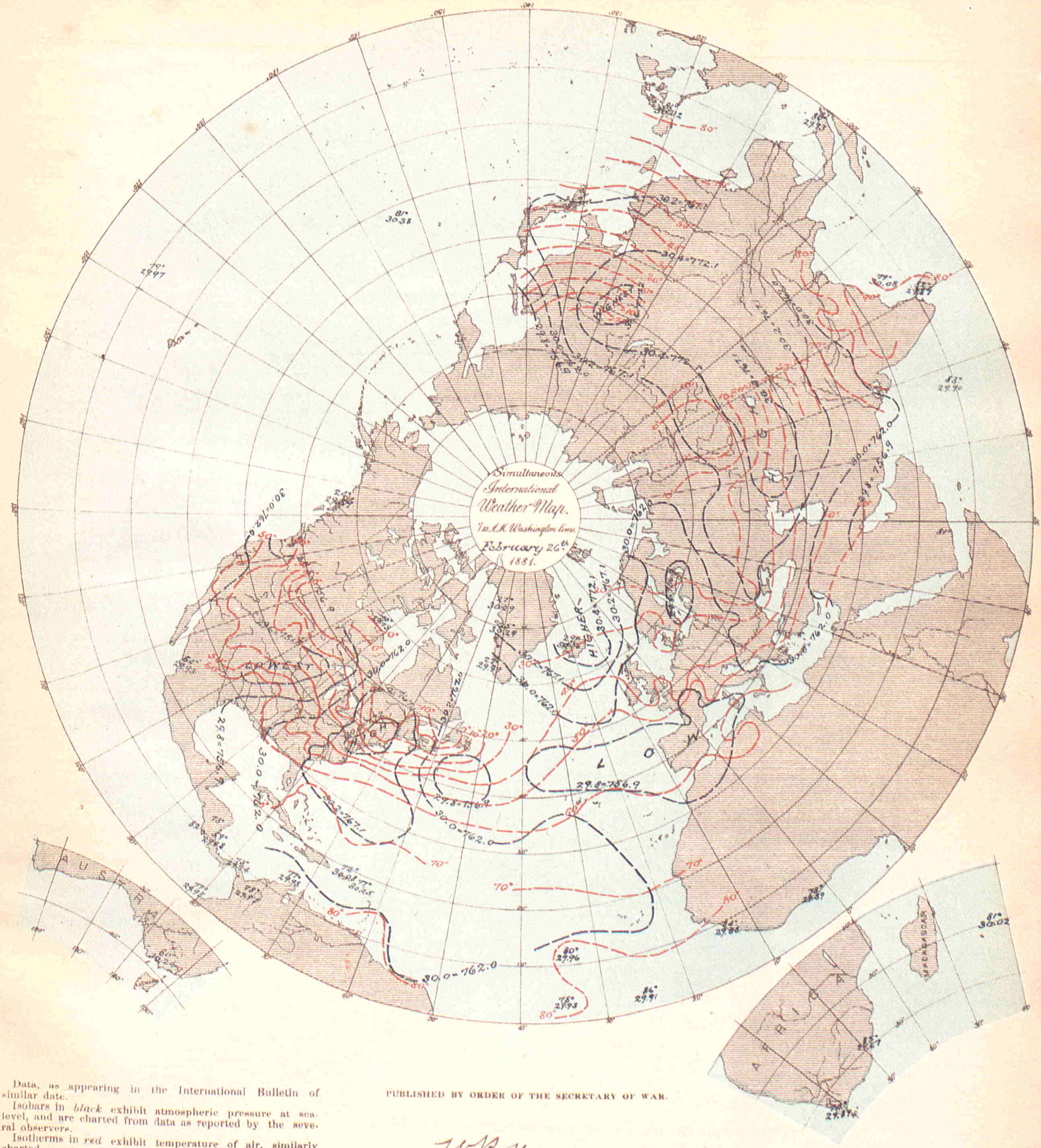
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 27, 1881,

7 A. M., Washington Mean Time.

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

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			29.95	760.6	62.6	17.0	82	SW			3		2			0.197	5.0	Fair	Dr. Ollive.
Nemours			29.62	752.3	69.3	20.7	78	SE			3		1			0	0	Very fair	Raynard.
Algiers			29.66	753.4	58.3	14.6	72	WSW			2		4			0.063	1.6	Cloudy	Nicolas.
La Calle			29.87	758.7	64.4	18.0	82	W			2		3			0	0	Pretty fair	Fonfrède.
Tunis			29.73	755.1															Jacques.
Sfax			29.79	756.6															Gau.
Saida			29.73	755.1	61.9	16.6	55	W			3		5			0	0	Cloudy	Dumas.
Tebessa			29.85	758.1	59.4	15.2	34	NW			1		7			0.102	2.6	Very cloudy	Watrin.
Geriville																			Lonchamp.
Laghouat			29.83	757.6	52.5	11.4	86	W			1		3			0	0	Pretty fair	Herbin.
Biskra																			Bandasse.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.03	762.7	30.12	765.0	64.7	18.2	85	NW	5	2.2			2			0	0	Very fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania																			Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.31	744 4	29.86	758.5	47.8	8.8	54	Calm			0		4			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.09	738.9	29.88	758.9	39.6	4.2	68	SW	1.8	0.8			10			0.008	0.2		Dr. Wiersbicki.
Eperies	28.98	736.2	29.89	759.3	36.0	2.2	57	S			2		3cs			0	0		Julius Mikolik.
Gratz‡	28.56	725.4	29.83	757.6	44.2	6.8	74	SE			2		0			0	0		Andreas Rospini.
Hermannstadt	28.50	724.0	29.99	761.8	33.4	0.8	82	ESE			2		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.45	722.6	29.85	758.1	30.6	— 0.8	94	Calm			0		10			0	0		The Staff.
Lemberg	28.85	732.8	29.87	758.7	36.3	2.4	66	SE			1		8			0	0		Dr. T. Stanecki.
Pola	29.77	756.1	29.88	759.0	53.2	11.8	63	SE			3		5			0.079	2.00		I. R. Hydrographic Office.
Szathmar	29.48	748.8	29.93	760.3	41.0	5.0	78	S			2		4			0	0		Beicht Peter, S. J.
Szegedin																			Karl Stancel.
Trieste	29.84	757.8	29.94	760.4	47.1	8.4	92	Calm			0		10			0.102	2.6	Raining	P. Busin.
Vienna	29.17	740.8	29.91	759.8	32.4	0.2	85	SE			1		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.56	750.9	29.77	756.2	35.1	1.7	77	ENE			2		10		E	0	0		Royal Observatory.
Furnes	29.75	755.7	29.78	756.3	34.0	1.1	80	NE			4		10			0.004	0.1		M. E. de Cae.
Maeseyck	29.67	753.7	29.80	756.9	36.3	2.4	80	N			4		10			0.094	2.4		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed March 2, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.01	762.2	30.11	764.8	36.3	2.4	60	ENE	22	9.8		6				0.010	0.25	Squally	W. Boswell.
Armagh, Observatory	29.74	755.4	29.98	761.5	37.1	2.8	80	NE	17	7.6									S. Call.
Bidston, Liverpool Obs'y			29.92	760.0	36.8	2.7	71	E	25	11.2		6						Misty	John Hartnup.
Bolton, Sharples	29.40	746.7	29.95	760.7	34.3	1.3	70	ESE	7	3.1		5						D. clouds	Thomas Mackereth.
Bradford, Yorkshire																0	0		J McLandsborough, F.R.S
Bridgetown, Barbadoes	29.91	759.7	29.94	760.5	82	27.8	60				2	6						Gloomy	Pvt. J. Surgenor, A. H. C.
Cardington			29.87	758.7	35.6	2.0	87	NE			1.0	10						Snowing	John McLaren.
Chatham, School M. E.	29.68	753.9	29.82	757.4	35.2	1.8	87	NE			5	10						Snowing	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.57	751.1	29.80	756.9	42.0	5.6	64	NNW			1	3						D. clouds	The Staff.
Fort Napier, Natal	27.71	703.8	29.93	760.2	61.1	16.2	96	SE			1	10						Raining	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9	84	28.9	83	SW			1	5						D. clouds	C. E. Keane.
Galway, Queen's College			29.81	757.2				NE			3	10							J. O'Donaghadue.
Gibraltar, Mediterranean	29.72	754.9	29.78	756.4	59.2	15.1	98	SW			4	8						Raining	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.85	758.2	30.05	763.3	34.7	1.5	77	NE			5							Snowing	D. G. MacLean.
Greenwich, Royal Obs'y	29.68	753.9	29.86	758.4	35.2	1.8	89	NE			1	10				Blank		Overcast	The Staff.
Guernsey	29.37	746.0	29.79	756.7	42.5	5.8	58	ESE			2	0						Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.83	757.7	29.87	758.7	33.0	0.6	89	NE	10	4.5		10						Snowing	The Met'g'l Office.
Leicester, Museum	29.64	752.8	29.90	759.4	36.2	2.3	83	NE			2	8						D. clouds	J. E. Carryer.
Malta, Mediterranean	29.62	752.3	29.70	754.4	68	20.0	65	SW			2	0						Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.99	761.7	30.04	763.0	75.0	23.9	77	E			1	4						D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.36	745.7	29.90	759.4	37.5	3.1	67	ENE			1	3						D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	29.64	752.8	29.89	759.2	35.6	2.0	77	E			3	10						Overcast	The Staff.
Plymouth	29.71	754.6	29.78	756.4	39.7	4.3	76	E			3	0						Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.18	766.6	35.1	1.7	83	NE	6	2.7		0				Blank		Blue sky	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.94	760.5	30.01	762.2	48.0	8.9	65	WSW			1	4						D. clouds	Serg't W. H. Lyne.
Sheffield	29.66	753.4	29.96	761.0	37.2	2.9	60	ENE			2	6?				0.03	0.8	Overcast ?	W. F. Cooper.
Silloth Rectory	29.97	761.2	30.00	762.0	35.6	2.0	93	E			4	10				0.063	1.60	Snowing	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.96	761.0	35.2	1.8	76	E	11	4.9		7						D. clouds	Rev. S. J. Perry.
Strathfield Turgiss	29.63	752.6	29.85	758.4	35.9	2.2	79	NE			1	9						Snowing	Rev. C. H. Griffith, F.M.S.
Truro, Royal Institution	29.72	754.9	29.80	756.9	51	10.6	72	E			4	4						D. clouds	W. Newcombe.
Valencia, Observatory	29.78	756.4	29.80	756.9	39.4	4.1	77	NNE	24	10.7		5						D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.03	762.7	30.08	764.0	11	—11.7	92	W	7	3.1		0	0			0	0	Clear	H. J. Cundall, C. E.
Chatham, N. B.*	30.05	763.3	30.11	764.8	10	—12.2	86	SW	1	0.4			10ks		SW	0	0	Cloudy	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.05	763.3	30.07	763.8	17	— 8.3	67	NW	2	0.9			10n		Calm	0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.44	747.8	30.42	772.7	—24	—31.1	100	NE	3	1.3		0	0			0	0	Clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.00	762.0	30.14	765.5	18	— 7.8	84	W.	6	2.7		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.50	749.3	29.85	758.2	33	0.6	76	S	7	3.1			10s		SE	0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.76	755.9	29.98	761.5	15	— 9.4	84	SE	5	2.2		2c	5ks	W	NW	1.00	25.4	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham, M. A
Parry Sound, Ontario*	28.98	736.1	29.69	754.1	35	1.7	96	SE	12	5.4			10n		SW	0.11	2.8	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.08	738.6	29.79	756.7	38	3.3	100	SW	4	1.8		5k	5n	SW	SW	0	0	Cloudy	H. Morgan.
Port Stanley, Ontario	29.11	739.4	29.77	756.1	38	3.3	80	SE	12	5.4			10n		SW	0.01	0.3	Cloudy	M. Payne.
Quebec, Quebec*	29.72	754.9	30.07	763.8	15	— 9.4	83	W			1		10n		W	0	0	Cloudy	Capt. Ashe, R. N
Rockliffe, Ontario*	29.31	744.5	29.80	756.9	18	— 7.8	87	E	6	2.7			10n			0.10	2.5	Hailing	K. Stewart.
Saugeen, Ontario*	28.94	735.1	29.66	753.4	41	5.0	91	S	20	8.9			10ks		S	0.41	10.4	Heavy rain	W. H. McIntyre.
St. Andrews	30.08	764.0	30.13	765.3	16	— 8.9	78	Calm	0	0		2k	2s	NW		0	0	Fair	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.94	760.5	29.99	761.7	12	—11.1	82	W	1	0.4		0	2ks			0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.42	747.3	29.82	757.4	32	0.0	88	E	3	1.3			10ks		SW	0.01	0.3	Cloudy	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.06	763.5	30.13	765.3	31	— 0.6	88	N	9	4.0			10s		W	0	0	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.93	760.2	30.21	767.3	7	—13 9	77	NW	3	1.3			10n					Stormy	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape St. Francis Lt. House	30 05	763.5			68.8	20.4	87	ESE	1.2	0.5			10s			0.020	0.51	Overcast	John Duthie.
Cape Town, C. G. H. Obs'y	30.11	764.8	30.14	765 5	87.8	31.0	39	S	21.8	9.7		0	0			0	0	Clear	The Staff, for D. Gill.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.15	765.9	30.18	766.5	45.3	7.4	96	N	2.0	0.9			10n			0.043	1.1	Raining	M. Marc Dechevrens, S. J.

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

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.22	666.0	29.94	760.5	58.6	14.8	89	SE			1					0	0	Misty	Federico Maison.

DANISH SERIES.

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

Copenhagen	30.03	762.7	30.08	763.9	20.7	—6.3	74	ESE	13	6			0						Oversergent Fischer.
Fanöe	30.04	763.1	30.06	763.6	24.8	—4.0	84	ENE			4		0						Overloorer Lauridsen.
Godthaab, Greenland	30.27	768.8	30.31	769.9	39.2	4.0	48	ENE			4		2						S. Kleinschmidt.
Stykkisholm, Iceland	30.64	778.3	30.69	779.4	5.5	—14.7	96	E			7		2						A. O. Thorlacius.
Thorshavn	30.29	769.3	30.32	770.2	29.1	—1.6	78	N	7	3			3						Overloorer Bergh.
Vestervig	30.01	762.2	30.10	764.6	20.8	—6.2		ENE			2		0						Loearer Oesterbol.

FRENCH SERIES.

Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.

Agen, Normal School	29.06	738.0	29.70	754.4	50.0	10	89	S			1	8n			0.114	2.9	Very cloudy	M. Labroue, Director.
Alençon	29.80	744.3	29.85	758 3	36.3	2.4	89	NW			3	10		NE	0	0	Covered ..	M. Nicot, Director.
Arras, Engineer School	29.50	749.4	29.77	756.2	32.4	0.2	95	NE			2	10					Covered	M. Klein, Commandant.
Avignon, Normal School	29.69	754.1	29.77	756.1	54.9	12.7	72	NE			1	5		S	0.035	0.9	Cloudy	M. Giraud, Director.
Bar-sur-Seine	29.12	739.7	29.69	754.0	45.9	7.7	89	SE			1	10					Light rain	M. Saillard, Director.
Beauvais, Normal School	29.52	749.9	29.80	756.9	37.8	3.2	75	NNE			1	10		ENE	0	0	Covered	M. Frère Eugene Marie.
Besançon, Normal School	28.87	733.3	29.76	755.9	52.9	11.6	69	W			1	cn		SSW	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.41	747.1	29.67	753.6	54.1	12.3	67	WSW			1	8		ESE	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.14	740.1	29.69	754.2	46.0	7.8	94	ENE			2	kn		ENE	0.091	2.3		M. Postel, Director.
Brest, Naval Observatory	29.57	751.1	29.81	757.2	49.3	9.6	66	Calm			0	1			0	0		M. de Kermaree, Dir.
Caen, Normal School	29.63	752.6	29.71	754.6	40.6	4.8	100	NNE			2	2		NNE	0	0	Slightly cl'dy	M. Bitrix, Director.
Châlons-sur-Marne, N.Sch'l	29.42	747.2	29.74	755.4	37.0	2.8	89	N			1	10			0	0	Covered	M. Jadot, Director.
Charleville, Normal School	29.22	742.2	29.78	756.4	41.0	5.0	74	SE			1	10			0.354	9.0	Covered	M. Grimard.
Clermont-Ferrand Obs'y	28.35	720.0	29.71	754.5	48.6	9.2	88	SSE			1	10		SSE	0.091	2.3	Covered	M. Alluard, Director.
Cluny, Normal School	29.03	737.3	29.71	754.7	57.4	14.1	57	SE			1	3		SE	0	0		M. de Villemontée, Dir.
Commercy, Normal School	28.87	733.3	29.75	755.6	44.6	7	85	E			1	n		E	0	0		Dr. Coulet, Director.
Gap, Normal School	27.28	692.8	29.85	758.3	38.3	3.5	90	S			1	2			0.12	3.	¼ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.65	727.9	29.80	756.9	49.1	9.5	86	SE			1	10		SE	0.650	16.5	Covered	M. Kina, Director.
Grenoble, Normal School	29.01	736.9	29.78	756.4	51.4	10.8	51	SE			1	ck		SW	0	0		M. Ablard, Director.
Guéret, Normal School	28.11	714.0	29.69	754.1	46.2	7.9	72	S			1	5n		N	0.126	3.2	Cloudy	M. Rivoir, Director.
Lamballe, Normal School	29.43	747.5	29.71	754.6	41.0	5	66	ENE			1			ENE	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.00	736.6	29.67	753.5	57.2	14	78	N			1	0			0	0	Clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.69	754.1	29.79	756.7	43.9	6.6	60	NE			3	0			0	0	Clear	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.67	728.2	29.68	753.8	54.9	12.7	57	SSE			1	5n		SSW	Inap.	Inap.	Cloudy	M. André, Director.
Mans, Normal School	29.47	748.6	29.79	756.6	37.0	2.8	87	NE			1	8		NE	0.146	3.7	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.45	748.0	29.72	754.9	53.8	12.1	86	ESE			2	9		SE	0.354	9.00		M. Stephan, Director.
Montlouis l'Instituteur	24.61	625.1	29.85	758.1	41.7	5.4	92	E	7.4	3.3		6		SE	0.248	6.3		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.63	752.6	29.74	755.4	52.9	11.6	87	NE			3	8		NE	0.126	3.2	Raining	M. Galzin, Director.
Nancy, Normal School	28.98	736.1	29.76	756.0	42.8	6.0	85	NE			1	10			0	0	Covered	M. Hasse.
Nantes, Observatory	29.61	752.2	29.78	756.3	38.3	3.5	90	NNE			2	10			0	0	Covered	M. Larocque, Director.
Nice	29.74	755.4	29.77	756.2	54.0	12.2	76	NE			2	10		E	NE		Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.60	751.8	29.71	754.5	52.7	11.5	79	SE	9.4	4.2		9			E	2.008	51.0		Dr. Fines.
Pic-du-Midi, Plantade	22.13	562.0			35.1	1.7						1		SW	0	0	Clear	M. Baylac, for Gen'l de Nansouty.
Privas, Normal School	28.68	728.5	29.75	755.6	52.2	11.2	65	S			1	10		S	S	0	0	Covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.82	630.3			34.2	1.2	98	SSW			2	10				0.053	1.6	Snow & fog	M. Alluard, Director.
Rochefort, Naval Obs'y	29.67	753.6	29.70	754.4	52.9	11.6	83	E			1	0				1.06	27.	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.53	750.1	29.75	755.7	44.2	6.8	91	N			1	10				0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	27.57	700.2	29.71	754.5	50.0	10.0	64	NE			1	8n				0	0		M. Richard, Director.
Rouen, Normal School	29.69	754.1	29.77	756.2	38.1	3.4	63	NE			1	5				0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.66	753.4	29.82	757.4	41.0	5	69	E			1	2		NE		0	0	Slightly cl'dy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.60	751.9	29.77	756.1	36.0	2.2	94	NNW			1	10		N		0	0	Foggy	M. Renou, Director.
Toulouse, Observatory	29.01	736.8	29.72	754.9	53.4	11.9	76	SSE			3	8				0	0	Very cloudy	M. Baillaud, Director.
Tours	29.54	750.2	29.73	755.2	42.8	6.0	85	E			1	10		E		0	0	Covered	M. de Tastes.
Versailles, Observatory	29.27	743.4	29.70	755.9	35.2	1.8	89	NE			1	10				0	0	Covered	Dr. A. Bérigny, Director
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director

GERMAN SERIES.

Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.

Bamberg	28.93	734.9	29.79	756.6	40.3	4.6	77	N			4	4k	NW		0.142	3.6			Prof. Dr. Hoh.
Berlin	29.77	756.1	29.95	760.7	36.5	2.5	54	NE			2	4			0	0			Prof. Dr. Arndt.
Breslau	29.39	746.6	29.92	760.0	30.4	—0.9	96	ENE			1	10			0.063	1.60			Royal University Obs'y.
Carlsruhe	29.34	745.3	29.78	756.3	39.0	3.9	89	E			0	10			0	0			Albert Senz.
Cassel	29.22	742.2	29.33	757.6	34.3	1.3	90	NE			2	10		NE	0.004	0.09			Dr. H. Möhl.
Frankfort on the Main	29.53	750.0	29.91	759.7	35.2	1.8	90	N			1	10			0.250	6.5	Snowing		Physical Society.
Friedrichshafen	28.30	718.8	29.74	755.5	45.7	7.6	73	S			3	6		SW	0	0			Chief Telegrapher Wilhelm.
Hamburg	29.93	760.1	30.00	761.9	28.2	—2.1	89	E			3	10			0.008	0.2			Dr. R. Kleeman.
Kiel	29.99	761.7	30.00	762.1	26.8	—2.9	88	NE			5	10			0	0			Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.49	749.1	29.93	760.3	32.0	0.0	89	ENE			2	10					Snowing		Prof. Dr. Bruhns.
Magdeburg	29.71	754.6	29.94	760.5	34.9	1.6	58	NE			3	9ks	E		0	0			Dr. Assmann.
Memel	29.91	759.8	29.96	761.0	22.3	—5.4	71	NE			3	1s							Reinbrecht & Issermann.
Munich	27.92	709.1	29.76	756.0	50.2	10.1	40	E			1	3	E		0	0			Central Station.
Neufahrwasser	30.01	762.2	30.02	762.6	28.0	—2.2	79	N			2	5			0.020	0.5	Snowing		A. Lothes.
Neustadt, Palatinate	29.18	741.2	29.70	754.4	38.5	3.6	90	NE			2	10			0.098	2.5			Dicknether.
Stuttgart	28.84	732.5	29.75	755.7	39.6	4.2	89	NE			1	6	W		0	0			Prof. Dr. Schoder.
Thorn	29.75	755.7	29.94	760.5	31.1	—0.5	81	NE			2	6			0.043	1.1			Dr. O. Cunerth.
Weissenburg, Bavaria	28.24	717.3	29.74	755.3	49.3	9.6	63	Calm			0	2	W		0	0			Prof. Kemlein.
Wustrow	29.99	761.8	30.02	762.5	30.2	—1.0	92	NE			2	10s			0	0			Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.61	752.1	30.00	762.0	57.0	13.9		W			1.0		5					½ Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.90	759.4	29.95	760.7	77.7	25.4	40	NE	38.0	17.0			8	WSW		0	0	D.clouds	
Deesa	29.47	748.5	29.94	760.5	80.9	30.5	28	E	12.5	5.6			5	W		0	0	D. clouds	
Bombay	29.87	758.8	29.91	759.7	83.5	28.6	77	W	12.0	5.4			0			0	0	Blue sky	
Poona, Yarrowda	28.03	712.0	29.85	758.2	90.8	32.7	16	E	8.0	3.6			0			0	0	Blue sky	
Belgaum	27.35	694.8	29.84	757.8	88.2	31.2	16	E	2.0	0.9			3	W		0	0	D. clouds	
Lahore	29.24	742.6	29.90	759.4	70.7	21.5	46	W	1.8	0.8			0			0	0	Blue sky	
Roorkee	29.05	737.8	29.97	761.1	70.2	21.2	66	NW	4.0	1.8			7			0	0		
Agra	29.44	747.9	30.02	762.4	76.8	24.9	27	S	6.5	2.9			6		S	0	0		
Nagpur	28.85	732.9	29.88	758.8	91.9	33.3	36	SSW	3.8	1.7			2	W		0	0	D. clouds	
Jubbulpore	28.64	727.5	30.02	762.6	76.8	24.9	52	N	4.3	1.9			8			0.14	3.6	Overcast	
Lucknow	29.59	751.6	29.97	761.3	72.2	22.3	48	NE	4.2	1.9			10	E		0	0	Overcast	
Allahabad	29.67	753.6	29.99	761.8	73.9	23.3	55	Calm	4.6	2.1			9		W	0	0	D. clouds	
Patna	29.70	754.4	29.88	759.0	81.1	27.3	69	W	1.5	0.7			8	W	W	0	0	D. clouds	
Hazaribagh	27.93	709.4	29.95	760.8	75.8	24.3	28	NNW	10.5	4.7			2			0	0	D. clouds	
Cuttack	29.83	757.6	29.91	759.7	88.5	31.4	41	SE	0.8	0.4			0			0	0	Blue sky	
Calcutta, Alipore	29.88	758.9	29.90	759.4	83.0	28.3	40	W	4.0	1.8			0			0	0	Blue sky	
Goalpara	29.47	748.5	29.88	758.8	76.3	24.6	37	W	3.4	1.5			0			0	0	Blue sky	
Chittagong	29.84	757.8	29.93	760.2	79.6	26.4	49	WNW	3.0	1.3			0			0	0	Blue sky	
Sibsagar	29.58	751.3	29.92	760.0	72.0	22.2	83	NE	1.9	0.8			2			0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.50	749.4	29.93	760.1	50.4	10.2	63	Calm	0	0			10			0	0		Prof. Giovanni Clodig
Milan	29.37	745.9	29.90	759.4	44.4	6.9	81	N	2.5	1.1			10			0	0		Prof. Schiaparelli.
Padua	29.76	755.9	29.87	758.8	50.2	10.1	78	ENE	8.7	3.9			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.00	736.5	29.92	760.0	40.8	4.9	82	NNW	1.3	0.6			10			0.445	11.3		Prof. P. F. Denza.
Genoa	29.66	753.3	29.85	758.3	44.2	6.8	79	N	10.5	4.7			10	NE		0.327	8.3		Prof. G. M. Garibaldi.
Mondovi	27.96	710.1	29.95	760.6	35.6	2.0	93	W			2		10			0	0		Prof. D. C. Bruno.
Pesaro	29.83	757.6	29.88	758.9	46.4	8.0	84	NW	8.7	3.9			9	SW		0	0		Prof. Luigi Guidi.
Florence	29.55	750.5	29.81	757.1	55.0	12.8	54	NE			2		7			0.035	0 9		Cav. F. Meucci.
Leghorn	29.71	754.5	29.79	756.7	54.3	12.4	70	ENE	8.1	3.6			10	SE		0	0		Prof. P. Monte.
Rome	29.60	751.7	29.77	756.2	53.0	12.0	52	ENE	3.8	1.7			10			0	0		Prof. P. S. Ferrari.
Lecce	29.64	752.8	29.90	759.4	52.5	11.4	89	SSE	14.3	6.4			10	SE		0.016	0.4		Prof. C. de Giorgi.
Cosenza	28.93	734.8	29.84	757.9	51.8	11.0	73	SE	0.7	0.3			10	ESE		0.772	19.6		Prof. D. Conti.
Cagliari	29.52	749.8	29.71	754.7	59.4	15.2	68	S			2		9	W		0.028	0.7		Prof. A. Pacinotti.
Palermo	29.43	747.5	29.68	753.9	60.8	16.0	58	WSW	13.0	5.8			10	WSW		0.661	16.8		Prof. G. Cincciatore.
Syracuse	29.63	752.5	29.67	753.6	61.7	16.5	89	SE	8.7	3.9			9	SSE		2.831	71.9		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.20	741.7	29.72	755.0	34.3	12.4	79	NNW	0.7	0.3			10	SE		0.008	0.2		Prof. F. Brioschi.
Stelvio	21.97	557.9			23.7	— 4.6	83	WSW			2		10n			0	0	Misty	P. F. Denza.
Valdobbia	21.91	556.6			25.5	— 3.6	77	SE			2		10			0.483	11.0	Covered	
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I M. Obs'y	30.16	766.0	30.17	766.3	45.8	7.7	73	NNE	5.8	2.6			10n			0.220	5.59	Raining	K. Sasaki.
Kioto	30.07	763.8	30.25	768.3	38.0	3.3	77						3s			0	0	Fair	M. Tojima.
Nagasaki, I. M. Obs'y	29.83	757.7	30.03	762.7	49.3	9.6	89	NE	4.5	2.0			10n			0.630	16.00	Raining	S. Takehayashi.
Tokei Obs'y, Yeddo	30.19	766.8	30.26	768.6	38.9	3.8	88	ESE	2.5	1.1			10s			0	0	Cloudy	The Staff.
Wakayama	30.15	766.8	30.20	767.1	45.7	7.6	62	NE	5.7	2.5			10s			0	0	Cloudy	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.83	757.7	30.02	762.5	80.2	26.8	68	SW	10.5	4.7		1	8		SSE	0	0	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Leon	24.41	620.0	30.14	765.6	52.0	11.1	73	N			1	4c	0	W		0	0	Clear	Prof. M. Leal.
Mazatlan	29.69	754.1	29.95	760.8	65.8	18.8	76	NNE	0	0		7c	0			0	0	Cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.05	585.6	30.21	767.4	47.5	8.6	52	Calm	0	0		0	0			0	0	Fine	The Staff.
Pabellon, Aguascalientes	23.90	607.0	29.98	761.5	49 6	9.8	59	Calm				6c	1s	W	W	0	0	Cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.34	592.9	30.16	766.1	48.9	9.4	50	Calm	0	0		0	1		SW	0	0	Fine	Prof. P. Spina.
San Luis Potosi	24.25	616.0	30.32	770.1	54.3	12.4	46	E	0.9	0.4		2	1	W	E	0	0		G. Barroeta, M. D.
Tlacotalpam	29.84	757.8	29.85	758.2	72.5	22.5	93	N	0.9	0.4		4	5	SW	N	0	0	Very cloudy	Prof. M. Cházaro.
Zacatecas	22.53	572.2	30.23	767.9	48.2	9.0	53	Calm	0	0		0	3cs			0	0	Clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.82	757.5	29.82	757.5	34.2	1.2		ENE			4					0	0		
Groningen	29.91	759.6	29.96	761.0	30.4	— 0.9		ENE			3					0	0		
Helder	29.91	759.8	29.91	759.8	33.3	0.7		ENE			4					0.028	0.7		
Hellevoetsluis	29.84	757.8	29.84	757 8	35.2	1.8	88	ENE			4					0	0		
Utrecht	29.81	757.2	29.80	758.4	37.2	2.9	55	E			4		2			0	0	Lightly cloudy	H. van der Brieb.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.01	762.2	30.07	763.8	30.6	— 0.8	77	Calm	0	0			7			0	0		
Christiania	29.84	757.9	30.00	761.9	27.9	— 2.3	49	Calm	0	0			7			0	0		
Gjæsvær	29.87	758.7	29.89	759.3	19.0	— 7.2		NE			6.7		10						
Lodingen	29.93	760.3	29.98	761.5	14.2	— 9.9	77	Calm			0		0			0	0		
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores																			Dr. J. A. Sampaio.
Campo Major	28.70	728.9	29.70	754.3	55.0	12.8	57	WSW	7.4	3.3			9			0.157	4.0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.84	757.8	29.92	760.0	64.2	17.9	72	SSE	3.1	1.4			2			0.134	3.4		Capt. D. A. de Cunha.
Lisbon, Observatory	29.35	745.6	29.72	754.8	55.2	12.9	76	SW	14.3	6.4			8	W		0.118	3.0		The Staff.
Ponta Delgada, Azores	29.91	759.6	29.98	761.4	61.9	16.6	56	NW	11.2	5.0			4	NNE		0	0		
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.38	746.3	30.58	776.8	7.2	—13.8	92	Calm	0	0			0						Capt. Lasarew.
Archangel	29.66	753.4	29.68	753.9	13.6	—10.2	90	SSE	9	4			10						Capt. Sselliwerstow.
Astrakhan	30.09	764.3	30.01	762.2	27.7	— 2.4	92	NE	9	4			10n			Bla	nk	Heavy cld's	Capt. Wisganow.
Barnaul	29.98	761.4	30.85	775.9	— 0.4	—18.0	77	SW	0	0			2						Meeorological Obs'y.
Dorpat	29.61	752.2	29.88	758.9	11.1	—11.6	82	W	9	4			10n						Obervatory.
Ekaterinburg	29.44	747.7	30.48	774.3	18.0	— 7.8	60	SSW	2	1		c	8cs					Light clouds	Meteorological Obs'y.
Kasan	30.06	763.4	30.35	770.9	11.3	—11.5	68	SSE	4	2			1						Observatory.
Kertch	30.07	763.7	30.09	764.2	29.8	— 1.2	76	N	4	2			3						Lagorio.
Kieff	29.32	744.8	30.00	762.0	22.1	— 5.5	80	S	9	4			10ks;u						Cand. Fatjanow.
Lugan	29.87	758.7	30.09	764.2	28.4	— 2.0	72	ESE	4	2			5						Meteorological Obs'y.
Moscow	29.49	749.0	30.08	764.1	16.9	— 8.4	64	Calm	0	0			0						Meteorological Obs'y.
Nertchinsk	27.94	709.7	30.71	779.9	—20.2	—29.0	82	Calm	0	0			0						Meteorological Obs'y.
Nikolaiev	30.07	763.7	30.14	765.5	24.6	— 4.1	82	E	9	4			3cs;k						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.60	751.8	29.69	754.0	0.8	—17.6	89	W	13	6			9n						Lieut. Iwanow.
Nukuss	29.63	752.5	29.86	758.5	51.1	10.6	25	E	13.4	6.0			0						Dr. Dobrochotow.
Pekin, China	30.08	764.0	30.22	767.6	21.7	— 5.7	96	Calm	0	0			10n					Snowing	Physical Observatory.
St. Petersburg	29.73	755.1	29.74	755.5	11.3	—11.5	82	W	9	4			6k;ks						Central Physical Obs'y.
Tashkend, Laboratory	28.45	722.6	30.04	762.9	50.9	10.5	35	NE	9	4			2						Teich, A. M.
Tiflis	28.39	721.2	29.84	757.9	43.7	6.5	48	NW	18	8			7ks						Physical Observatory.
Warsaw	29.47	748.6	29.91	759.8	32.4	0.2	80	NNE	7	3			10n					Snowing	Astronomical Obs'y.
Wilna	29.55	750.5	29.99	761.7	25.9	— 3.4	84	N	4	2			10					Light snow	Berg, Assistant.
Yeniseisk	30.26	768.5	30.58	776.8	— 4.4	—20.2	69	Calm	0	0			0						M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.04	763.0	35.0	1.7	98	E			1		10n			0.33	8.4	Snowy	Andrew Gibb.
Monach Lt. House, Hebrides			30.13	765.3	39	3.9	91	ENE			4	0	0			0	0	Clear	J. Youngclause.
North Unst, Shetland Isl'ds			30.15	765.8				N			2		9			Bla	nk		Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.60	751.8	29.70	754.4	57.2	14	76	ENE	3.4	1.5			1k			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	29.60	751.8	29.65	753.2	66.0	18.9	50	SE	1.3	0.6		3	3	W		0.024	0.6	Cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.69	678.0			46.4	8.0	81	NE	3.4	1.5		0	9			0	0	Almost cov'd	Domingo Mantiny Perez
Madrid, Royal Obs'y	27.46	697.5	29.71	754.6	46.8	8.2	91	S	11.0	4.9			10			0.087	2.2	Raining	The Staff.
Murcia, Met. Obs'y	29.58	751.3	29.73	755.2	60.8	16.0	75	WNW	1.3	0.6		3	5	NE		Inap.	Inap	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.69	728.7	29.58	751.3	55.2	12.9	74	SW	8.7	3.9		4	5			0	0	Almost cov'd	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.88	758.9	29.94	760.6	71.1	21.7	82	SE	5.4	2.4		3c	0	W		0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.92	760.1	29.98	761.4	81.9	27.7	64	ESE	5.5	2.5						0	0	Fair	Federico Faura, S. J
San Fernando, Naval Obs'y	29.75	755.6	29.85	758.1	58.1	14.5	71	SSW	7.7	3.4		0	9		SW	0.526	13.4	Light rain	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.97	761.2	30.06	763.5	74.5	23.6	87	SE	0	0		2c	2k	SE	SE	0	0	Clear	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.88	758.8	30.02	762.5	81.0	27.2	74	SW	1.9	0.9			2s		S	0	0	Fair	José L. Fastovra.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.80	756.9	29.84	757.9	3.2	—16.0	90	N			4		10			0	0		
Umea	29.85	758.2	29.90	759.5	10.4	—12.0	93	N			4		8			0	0		
Hernosand	29.96	760.9	30.01	762.2	13.1	—10.5	56	N			2		1			0	0		
Stockholm	29.84	757.8	30.01	762.3	15.4	— 9.2	75	W			2		6			0.039	1.0		
Wisby	29.93	760.3	29.99	761.8	15.1	— 9.4	81	N			2		0			0	0		
SUB-SERIES.																			
Upsala	29.89	759.1	29.97	761.3	14.0	—10.0	79	WSW	7.6	3.4			1			0	0		Nils Ekholm
SWISS SERIES.																			
Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.31	719.1	29.76	755.8	47.8	8.8	58	N			1		9			0	0	Covered	The Observatory.
Zurich	28.10	713.6	29.74	755.5	50.0	10.0	51	W			2		1			0	0	Clear	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —9.5 mm.; Ther. +3°.6 cent.; Hum. —9 per cent.																			
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.02	762.4	42.6	5.9	54	NE	4	2.0			5		SW	0	0		The Observatory.
Valona			29.87	758.8	60.6	15.9		SW			1		2			0	0	Slightly cl'dy	A. Bertraud.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.96	761.0	63.7	17.6	62	SW			1		6ks		SW	0.23	5.8		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper.	Lower.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES.																			
By authority of the Secretary of War.																			
Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	30.04	763.0	30.12	765.0	21	— 6.1	71	NE	1	0.4			10s		N	0	0	Cloudy	
Alpena, Michigan	28.93	734.8	29.58	751.3	35	1.7	90	SE	3	1.3			1on		Calm	0.20	5.1	Light rain	
Atlanta, Georgia	28.57	725.7	29.68	753.9	55	12.8	87	SE	20	8.9			1on		Calm	0.21	5.3	Light rain	
Atlantic City, New Jersey	30.13	765.3	30.15	765.8	37	2.8	90	Calm	0	0			Fg		Calm	0	0	Dense fog	
Attou Id., Alaska ‡	29.58	751.3			21	— 6.1	85	S	3	1.3		0	5s		S	0.04	1.0	Fair	
Augusta, Georgia	29.72	754.9	29.91	759.7	59	15.0	82	SE	3	1.3			10s		SW	0	0	Cloudy	
Baltimore, Maryland	30.10	764.5	30.15	765.8	39	3.9	73	NE	4	1.8			10s		Calm	0	0	Cloudy	
Barnegat, New Jersey	30.11	764.8	30.14	765.5	34	1.1	90	N	8	3.6			10s		Calm	0	0	Threatening	
Benton, Montana	27.00	685.8			16	— 8.9	66	Calm	0	0			10s		Calm	0	0	Cloudy	
Bismarck, Dakota	28.36	720.3	30.22	767.6	— 6	—21.1	100	Calm	0	0		0	0			0.01	0.3	Clear	
Boise City, Idaho	27.13	689.1	30.09	764.3	40	4.4	91	SE	4	1.8			1on		Calm	0.13	3.3	Light rain	
Boston, Massachusetts	29.97	761.2	30.13	765.3	32	0.0	89	SW	3	1.3			10s		SW	0	0	Cloudy	
Brackettville, Texas	28.68	728.5	29 74	755.4	51	10.6	46	N	8	2.7		0	0			0	0	Clear	
Brownsville, Texas	29.74	755.4	29.79	756.7	68	20.0	95	S	4	1.8		0	Fg		Calm	Inap.	Inap.	Clear	
Buffalo, New York	29.08	738.6	29.78	756.4	44	6.7	68	SE	9	4.0			10s		W	0	0	Cloudy	
Burlington, Vermont	29.71	754.6	30.01	762.2	29	— 1.7	89	S	14	6.3		5ck	5s	W	S	0	0	Cloudy	
Cairo, Illinois	29.14	740.1	29.52	749.8	52	11.1	93	SW	8	3.6			10s		Calm	1.32	33.5	Threatening	
Campo, California	27.47	697.7	30.04	763.0	34	1.1	90	W	3	1.3		1c	0	W		0	0	Clear	
Camp Thomas, Arizona	27.27	692.6			41	5.0	57	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.10	764.5	30.12	765.0	40	4.4	82	Calm	0	0			10ks		Calm	0	0	Cloudy	
Cape May, New Jersey																			
Castroville, Texas	29.06	738.1	29.77	756.1	45	7.2	68	NW	3	1.3		0	0			0	0	Clear	
Cedar Keys, Florida	29.89	759.2	29.91	759.7	65	18.3	84	SE	18	8.0			10ks		SE	0	0	Cloudy	
Champaign, Illinois	28.64	727.4	29.40	746.7	49	9.4	93	S	14	6.3			1on		S	0.50	12.7	Light rain	
Charleston, S. Carolina	29.93	760.2	29.99	761.7	60	15.6	88	SE	2	0.9			10s		SE	Inap.	Inap.	Threatening	
Charlotte, N. Carolina	29.12	739.6	29.95	760.7	43	6.1	83	NE	6	2.7			10s		S	0	0	Cloudy	
Chattanooga, Tennessee	28.92	734.6	29.70	754.4	53	11.7	93	S	9	4.0			1on		S	0.50	12.7	Light rain	
Cheyenne, Wyoming	23.90	607.0	29.84	757.9	17	— 8.3	83	W	6	2.7		0	2s		Calm	0.04	1.0	Clear	
Chicago, Illinois	28.77	730.7	29.44	747.8	46	7.8	92	SE	3	1.3			1on		Calm	0.61	15.5	Light rain	
Chincoteague, Virginia	30.13	765.3	30.15	765.8	36	2.2	100	SW	4	1.8			Fg		Calm	0.01	0.3	Dense fog	
Cincinnati, Ohio	29.04	737.6	29.68	753.9	56	13.3	69	SE	7	3.1			1on		Calm	0.01	0.3	Light rain	
Cleveland, Ohio	29.02	737.1	29.74	755.4	46	7.8	69	SE	13	5.8		0	5s		S	0	0	Fair	
Coleman City, Texas	28.12	714.2	29.81	757.2	43	6.1	59	N	15	6.7		0	5s		Calm	0	0	Fair	
Columbus, Ohio	28.89	733.8	29.71	754.6	51	10.6	65	SE	8	3.6			1on		SE	0.01	0.3	Light rain	
Concho, Texas	28.02	711.7	29.74	755.4	40	4.4	73	Calm	0	0		0	0			0	0	Clear	
Corsicana, Texas	29.43	747.5	29.91	759.7	44	6.7	68	NW	12	5.4		0	8s		Calm	0.02	0.5	Cloudy	
Davenport, Iowa	28.91	734.3	29.56	750.8	32	0.0	89	NW	12	5.4			1on		Calm	1.05	26.7	Light snow	
Dayton, Washington T'y	28.06	712.7	29.71	754.6	47	8.3	92	S	8	3.6			1on		Calm	1.40	35.6	Heavy rain	
Deadwood, Dakota	25.26	641.6			8	—13.3	78	S	2	0 9		0	0			0.02	0.5	Clear	
Decatur, Texas	28 65	727.7	29.87	758.7	32	0.0	79	N	16	7.2			10s		Calm	0	0	Cloudy	
Delaware Breakwater, Del.	30.12	765.0	30.14	765.5	35	1.7	100	N	2	0.9			Fg		Calm	0	0	Dense fog	
Denison, Texas	29.12	739.6	29.93	760.2	37	2.8	81	NW	8	3.6		10cs	0	Calm		0	0	Cloudy	
Denver, Colorado	24.72	627.9	29.94	760.5	31	— 0.6	89	NE	3	1.3			1on		Calm	Inap.	Inap.	Light snow	
Des Moines, Iowa	29.03	738.1	30.01	762.2	12	—11.1	61	N	16	7.2		0	0			0.07	1.8	Clear	
Detroit, Michigan	28.94	735.1	29.62	752.3	49	9.4	64	S	16	7.2			10s		Calm	0.03	0.8	Threatening	
Dodge City, Kansas	27.42	696.5	29.84	757.9	23	— 5.0	60	N	19	8.5		0	0			0	0	Clear	
Dubuque, Iowa	28.90	734.0	29.61	752.1	30	— 1.1	78	NW	11	4.9			10s		Calm	0.85	21.6	Cloudy	
Duluth, Minnesota	29.20	741.7	29.92	760.0	17	— 8.3	83	NW	22	9.8			10s		NW	1.02	25.9	Cloudy	
Eagle Pass, Texas	29.10	739.1	29.84	757.9	47	8.3	62	NW	6	2.7		0	0			0	0	Clear	
Eagle Rock, Idaho	25.20	640.1	29.84	757.9	30	— 1.1	89	N	18	8.0			10s		Calm	0.53	13.5	Cloudy	
Eastport, Maine	30.05	763.3	30.12	765.0	20	— 6.7	70	NW	1	0.4		2c	5s	NW	NW	0	0	Fair	
Edinburg, Texas																			
El Paso, Texas	26.21	665.7			45	7.2	31	W	4	1.8		0	0			0	0	Clear	
Erie, Pennsylvania	29.04	737.6	29.75	755.6	46	7.8	69	S	22	9.8			10ks		S	0.01	0.3	Cloudy	
Escanaba, Michigan	28.98	736.1	29.65	753.1	28	— 2.2	100	N			4		1on		Calm	0.38	9.7	Light snow	
Florence, Arizona	28.54	724.9	30.14	765.5	46	7.8	54	E	1	0.4		1c	1s	Calm	Calm	0	0	Clear	
Fort Apache, New Mexico	25.07	636.8	30.52	775.2	30	— 1.1	57	E	3	1.3		0	0			0	0	Clear	
Fort Assinniboine, Montana	27.03	686.6			5	—15.0	50	NE	3	1.3		0	0			0.05	1.3	Clear	
Fort Bennett, Dakota	28.58	725.9			— 5	—20.6	63	NW	2	0.9		0	0			0	0	Clear	
Fort Buford, Dakota	28.04	712.2	30.14	765.5	—10	—23.3	77	E	10	4.5		0	0			0	0	Clear	
Fort Custer, Montana	26.69	677.9			10	—12.2	79	SW	4	1.8			10s		Calm	0	0	Cloudy	
Fort Davis, Texas	25.13	638.3	30.09	764.3	50	10.0	32	NW	8	3.6		0	2s		Calm	0	0	Fair	
Fort Elliott, Texas	27.22	691.4	29.58	751.3	31	— 0.6	58	N	16	7.2		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.34	745.2	29.90	759.4	29	— 1.7	78	N	20	8.9			10s		N	0.50	12.7	Cloudy	
Fort Grant, Arizona	25.22	640.6	30.02	762.5	50	10.0	32	E	10	4.5		0	0			0	0	Clear	
Fort Griffin, Texas	28.00	726.4	29.89	759.2	42	5.6	66	NW	17	7.6			10s		Calm	0	0	Cloudy	
Fort Keogh, Montana	27.39	695.7			1	—17.2	72	SW	1	0.4		0	2s		SW	0	0	Fair	
Fort McKavett, Texas	27.00	702.6	29.61	752.1	40	4.4	56	NW	3	1.3		0	0			0	0	Clear	
Fort Macon, North Carolina	30.08	764.0	30.09	764.3	53	11.7	93	SE	6	2.7		5c	Hz	Calm	Calm	0	0	Fair	
Fort St. Michaels	29.04	752.8	29.68	753.9	— 8	—22.2	100	N	1	0.4		0	0						
Fort Missoula, Montana	29.51	673.3			34	1.1	90	NE	1	0.4			1on		Calm	0.03	0.8	Light snow	
Fort Shaw, Montana	26.10	662.9			37	2.8	63	SW	18	8.0		10cs	0	Calm		0	0	Cloudy	
Fort Sill, Indian Territory	28.74	730.0	29.90	759.4	32	0.0	79	N	20	8.9		0	5s		Calm	0	0	Fair	
Fort Stevenson, Dakota	28.32	719.3			—20	—28.9	100	Calm	0	0		0	0			0	0	Clear	
Fort Verde, Arizona					37	2.8	53	W			1	5cs	0	SW		0	0	Fair	
Fredericksburg, Texas	28.13	714.5	29.68	753.9	51	10.6	59	N	8	3.6		0	0			0	0	Clear	
Galveston, Texas	29.71	754.6	29.75	755.6	62	16.7	94	NW	3	1.3		0	Fg		Calm	1.39	35.3	Clear	
Grand Haven, Michigan	28.85	732.8	29.48	748.8	46	7.8	100	SE	7	3.1			1on		Calm	1.28	32.5	Light rain	
Hatteras, North Carolina	30.12	765.0	30.14	765.5	51	10.6	93	SE	16	7.2			10s		Calm	0.13	3.3	Cloudy	
Helena, Montana	25.58	649.7			31	— 0.6	69	N	2	0.9		0	8s		Calm	0	0	Cloudy	
Henrietta, Texas	28.08	736.1	29.95	760.7	36	2.2	80	NW	22	9.8			10s		NW	0	0	Cloudy	
Indianapolis, Indiana	28.73	729.7	29.48	748.8	53	11.7	79	SE	10	4.5			1on		Calm	0.01	0.3	Light rain	
Indianola, Texas	29.73	755.1	29.75	755.6	62	16.7	94	NW	8	3.6		0	2s		Calm	1.46	37.1	Fair	
Jacksboro, Texas	28.78	731.0	29.94	760.5	39	3.9	55	N	18	8.0		0	5s		N	0	0	Fair	
Jacksonville, Florida	29.89	759.2	29.94	760.5	65	18.3	84	SE	16	7.2			10s		SE	0	0	Cloudy	
Keokuk, Iowa	28.97	735.8	29.64	752.8	25	— 3.9	87	NW	20	8.9			1on		Calm	0.35	8.9	Light snow	
Key West, Florida	29.95	760.7	29.98	761.5	74	23.3	81	SE	14	6.3		5k	0	SE		0	0	Fair	
Kittyhawk, North Carolina	30.12	765.0	30.15	765.8	47	8.3	92	S	9	4.0		5c;c8	0	S		0	0	Fair	
Knoxville, Tennessee	28.73	729.7	29.72	754.9	50	10.0	79	NE	4	1.8			10s		SW	Inap.	Inap.	Cloudy	
La Crosse, Wisconsin	28.95	735.3	29.70	754.4	27	— 2.8	76	N	16	7.2			10s		N	0.07	1.8	Cloudy	
La Mesilla, New Mexico	26.07	662.2	30.22	767.6	46	7.8	33	Calm	0	0		0	5s		Calm	0	0	Fair	
Laredo, Texas	29.34	745.2	29.68	753.9	53	11.7	80	Calm	0	0		0	0			0	0	Clear	
Leavenworth, Kansas	29.05	738.1	29.95	760.0	13	—10.6	81	NW	24	10.7		0	2s		N	0	0	Fair	
Lewiston, Idaho	28.98	736.1	29.63	752.6	41	5.0	100	NE	7	3.1			1cn		Calm	0.49	12.4	Heavy rain	
Little Rock, Arkansas	29.35	745.5	29.66	753.4	48	8.9	85	NW	10	4.5			10s		NW	0.50	12.7	Cloudy	
Los Angeles, California	29.72	754.9	30.09	764.3	50	10.0	79	E	4	1.8		0	1s		Calm	0	0	Clear	
Louisville, Kentucky	29.04	737.6	29.58	751.3	55	12.8	87	SE	20	8.9			1on		S	0.13	3.3	Light rain	
Lynchburg, Virginia	29.39	746.5	30.09	764.3	40	4.4	73	Calm	0	0			10s		Calm	0	0	Cloudy	
Madison, Wisconsin	28.53	724.6	29.51	749.5	33	0.6	89	N	17	7.6			1on		Calm	1.38	35.1	Light rain	
Marquette, Michigan	29.02	737 1	29.75	755.6	26	— 3.3	88	NW	16	7.2			1on		Calm	0.05	1.3	Light snow	
Mason, Texas	28.24	717 3	29.99	761.7	53	11.7	73	W	4	1.8		0	2s		NW	0	0	Fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.27	743.4	29.60	751.8	51	10.6	100	Calm	0	0	.....	2cs	8ks	Calm	SE	0.78	19.8	Cloudy	
Milwaukee, Wisconsin	28.76	730.5	29.47	748.5	38	3.3	91	N	15	6.7	.....	.....	1on	.....	Calm	1.56	39.6	Light rain	
Mobile, Alabama	29.62	752.3	29.69	754.1	63	17.2	89	NW	16	7.2	.....	.....	10ks	.....	SW	2.62	66.5	Cloudy	
Montgomery, Alabama	29.43	747.5	29.65	753.1	58	14.4	93	NE	8	3.6	.....	.....	10ks	.....	SW	1.43	36.3	Threatening	
Moorhead, Minnesota	29.18	741.2	30.29	769.4	—17	—27.2	68	N	14	6.3	.....	0	0	.....	.....	0	0	Clear	
Morgantown, W. Virginia	28.88	733.5	29.85	758.2	52	11.1	60	S	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Mt. Washington, N. H.	23.65	600.7	30.01	762.2	27	— 2.8	77	NW	56	25.0	.....	5c	5s	NW	NW	0	0	Fair	
Nashville, Tennessee	29.04	737.6	29.56	750.8	55	12.8	87	SE	10	4.5	.....	.....	1on	.....	SE	0.28	7.1	Light rain	
New Haven, Connecticut	30.01	762.2	30.14	765.5	29	— 1.7	89	Calm	0	0	.....	Hz	Hz	.....	.....	0	0	Dense haze	
New London, Connecticut	30.11	764.8	30.16	766.1	30	— 1.1	68	NW	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
New Orleans, Louisiana	29.69	754.1	29.75	755.6	61	16.1	94	SW	2	0.9	.....	0	1s	.....	SW	2.25	57.1	Clear	
Newport, Rhode Island	30.10	764.5	30.15	765.8	34	1.1	79	Calm	0	0	.....	.....	10s;fg	.....	Calm	0	0	Cloudy	
New River, N. Carolina	.....	.....	.....	.....	60	15 6	88	SW	.....	.....	4	5ck	5s	Calm	Calm	.....	.....	Cloudy	
New Shoreham, Rhode I'd	30.09	764 3	30.12	765.0	37	2.8	81	Calm	0	0	.....	.....	10s	.....	SW	0	0	Cloudy	
New York, New York	29.98	761.5	30.17	766.3	31	— 0.6	89	NE	4	1.8	.....	.....	10s;fg	.....	Calm	0	0	Cloudy	
Norfolk, Virginia	30.07	763.8	30.13	765.3	40	4.4	82	NE	2	0.9	.....	.....	10ks	.....	S	Inap.	Inap.	Cloudy	
North Platte, Nebraska	27.13	689.1	29.90	759.4	13	—10.6	71	N	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Olympia, Washington T'y	29.63	752.6	29.66	753.4	46.0	7.8	96	S	5	2.2	.....	.....	1on	.....	Calm	1.15	29.2	Light rain	
Omaha, Nebraska	28.85	732.8	30.06	763.5	4	—15.6	87	N	26	11.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Oswego, New York	29.56	750.8	29.89	759.2	36	2.2	75	S	12	5.4	.....	2k	Hz	SW	.....	0	0	Fair	
Pensacola, Florida	29.70	754.4	29.73	755.1	63	17.2	89	W	13	5.8	.....	5cs	5ks	Calm	W	1.01	25.7	Cloudy	
Philadelphia, Pa	30.08	764.0	30.13	765.3	32	0.0	89	NE	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
Phœnix, Arizona	28.96	735.6	30.82	782.8	45	7.2	68	NE	1	0.4	.....	5ck	0	S	.....	0	0	Fair	
Pike's Peak, Colorado	17.47	443.7	29.68	753.9	— 5	—20.6	63	SW	48	21.5	.....	0	5s	.....	W	0.06	1.5	Fair	
Pilot Point, Texas	29.13	739.9	30.01	762.2	37	2.8	71	NW	11	4.9	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Pioche, Nevada	24.08	611.6	29.85	758.2	34	1.1	70	W	1	0.4	.....	0	0	.....	.....	0.06	1.5	Clear	
Pittsburg, Pennsylvania	29.05	737.9	29.80	758.4	43	6.1	75	NE	4	1.8	.....	.....	10ks	.....	S	0	0	Cloudy	
Port Huron, Michigan	28.98	736.1	29.63	752.6	44	6.7	84	S	15	6.7	.....	.....	10s	.....	SW	0.27	6.9	Cloudy	
Portland, Maine	30.05	763.3	30.10	764.5	22	— 5.6	58	W	4	1.8	.....	0	2s	.....	Calm	0	0	Clear	
Portland, Oregon	29.69	754.1	29.76	755.9	55	12.8	93	S	13	5.8	.....	.....	1on	.....	.....	1.21	30.7	Heavy rain	
Portsmouth, N. Carolina	.....	.....	.....	.....	58	14.4	82	SE	13	5.8	.....	10k	0	Calm	.....	0	0	Cloudy	
Prescott, Arizona	24.80	629.9	30.16	766.1	33	0.6	61	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	29.92	760.0	29.94	760.5	67	19.4	79	SE	20	8.9	.....	8c	0	W	.....	Inap.	Inap.	Fair	
Red Bluff, California	29.82	757.4	30.17	766.3	55.0	12.8	93	S	10	4.5	.....	.....	10s	.....	Calm	0.19	4.8	Cloudy	
Rio Grande City, Texas	29.62	752.3	29.83	757.7	56	13.3	87	Calm	0	0	.....	0	2s	.....	Calm	0	0	Clear	
Rochester, New York	29.20	741.7	29.82	757.4	41	5.0	82	SW	5	2.2	.....	5k	Hz	SW	.....	0	0	Fair	
Roseburg, Oregon	29.44	747.8	30.00	762.0	55	12.8	87	Calm	0	0	.....	.....	10s	.....	Calm	0.51	13.0	Cloudy	
Sacramento, California	30.13	765.3	30.20	767.1	53	11.7	93	SE	5	2.2	.....	0	5s	.....	Calm	0.26	6.6	Fair	
St. Louis, Missouri	29.00	736.6	29.87	758.7	22	— 5.6	86	NW	14	6.3	.....	.....	10s	.....	Calm	0.34	8.6	Light rain	
St. Paul, Minnesota	29.00	736.6	29.87	758.7	22	— 5.6	86	NW	14	6.3	.....	.....	10s	.....	NW	Inap.	Inap.	Cloudy	
Salt Lake City, Utah	25.66	651.8	29.99	761.7	39	3.9	73	SE	4	1.8	.....	.....	1on	.....	Calm	0.06	1.5	Light rain	
San Antonio, Texas	29.14	740.1	29.84	757.9	52	11.1	54	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
San Diego, California	30.04	763.0	30.11	764.8	51	10.6	86	Calm	0	0	.....	0	8s	.....	Calm	0	0	Fair	
Sandusky, Ohio	29.01	736.8	29.66	753.4	55	12.8	72	S	18	8.0	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Sandy Hook, New Jersey	30.12	765.0	30.16	766.1	31	— 0.6	79	N	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
San Francisco, California	30.15	765.8	30.22	767.6	55	12.8	96	SW	3	1.3	.....	.....	Fg	.....	SW	0.59	15.0	Dense fog	
Santa Fé, New Mexico	23.18	588.8	29.72	754.9	28	— 2.2	77	N	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	29.86	758.4	29.96	761.0	60	15.	88	SE	4	1.8	.....	.....	10s,	.....	SW	0	0	Threatening	
Shreveport, Louisiana	29.51	749.5	29.75	755.6	48	8.9	78	NW	14	6.3	.....	0	5s	.....	Calm	0	0	Fair	
Silver City, New Mexico	24.26	616.2	30.51	774.9	41	5.0	49	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Smithville, North Carolina	30.02	762 5	30.06	763.5	58	14.4	94	SE	16	7.2	.....	.....	10s	.....	SE	0.04	1.0	Cloudy	
Socorro, New Mexico	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Springfield, Illinois	28.84	732.5	29.50	749.3	36	2.2	90	NW	13	5.8	.....	.....	1on	.....	NW	0.28	7.1	Light rain	
Springfield, Massachusetts	29.97	761.2	30.10	764.5	30	— 1.1	78	S	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Stockton, Texas	26.92	683.8	29.92	760.0	39	3.9	55	NW	6	2.7	.....	0	5s	.....	Calm	0	0	Fair	
St. Vincent, Minnesota	29.44	747.8	30.39	771.9	—23	—30.6	100	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Thatcher's Island, Mass	30.10	764.5	30.15	765.8	32	0.0	79	SW	13	5.8	.....	.....	10s	.....	SW	0	0	Cloudy	
Toledo, Ohio	28.97	735.8	29.04	752.8	49	9.4	71	S	12	5.4	.....	.....	10s	.....	Calm	0	0	Threatening	
Tucson, Arizona	27.59	700.8	30.14	765.5	46	7.8	40	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.42	747.3	29.91	759.7	43	6.1	100	E	5	2.2	.....	.....	1on	.....	W	0.25	6.3	Light rain	
Uvalde, Texas	28.91	734.3	29.74	755.4	48	8.9	63	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Vicksburg, Mississippi	29.42	747.3	29.67	753.6	58	14.4	94	SW	10	4.5	.....	.....	10ks	.....	SW	0.34	8.6	Cloudy	
Visalia, California	29.83	757.7	30.20	767.1	55	12.8	87	SE	3	1.3	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Washington, D. C.	30.01	762.2	30.13	765.3	35	1.7	90	E	3	1.3	.....	.....	10s;hz	.....	Calm	0	0	Cloudy	
Wickenburg, Arizona	.....	.....	.....	.....	42	5.6	42	W	.....	.....	1	0	1s	.....	Calm	0	0	Clear	
Wilmington, N. Carolina	30.00	762.0	30.05	763.3	61	16.1	82	S	8	3.6	.....	.....	10s	.....	S	0	0	Cloudy	
Winnemucca, Nevada	25.65	651.5	30.01	762.2	46	7.8	62	SW	18	8.0	.....	0	2s	.....	SW	0.42	10.7	Clear	
Wood's Holl, Mass	30.10	764.5	30.14	765.5	36	2'2	90	S	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
Yankton, Dakota	28.69	728.7	30.15	765.8	— 5	—20.6	63	N	24	10.7	.....	0	0	.....	.....	0	0	Clear	
Yuma, Arizona	29.87	758.7	30.02	762.5	53	11.7	67	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.07	560.6	.....	.....	52.5	11.4	91	Calm	0	0	.....	.....	1on	.....	.....	0.20	5.1	Cloudy	Thomas Herman.
Buff Bay Town, Jam ica.‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.91	759.7	29.96	761.0	72	22.2	75	SE	3.6	1.6	.....	0	0	.....	.....	0	0	Clear	Charles Hasselbrink.
Jakobshavn, Greenland	30.43	772.8	30.48	774.3	31.1	— 0.5	.....	W	.....	.....	6	.....	1	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I.	30.01	762.2	30.02	762.5	72.9	22.7	77	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	Robert Johnstone
Navassa, W. I.	29.92	760.0	30.00	762.0	78	25.6	72	E	9.5	4.2	.....	5k	5s	SE	E	0.09	2.3	Fair	F. M. Everett.
Paramaribo, S. A.	29.99	761.7	29.99	761.7	77	25.0	91	SSE	.....	.....	2	.....	8ks	E	.....	0	0	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.44	747.8	30.00	762.0	80	26.7	76	Calm	.....	.....	0	.....	10s	.....	N	0	0	Cloudy	Francesco J. Cisneros
Rivas, Nicaragua	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.02	762.5	30.04	763.0	73 4	23	81	SE	.....	.....	2	0	0	.....	.....	0	0	Cloudy	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	74	23.3	.....	Calm	0	0	.....	2cs	3ks	.....	.....	.....	.....	.....	G. O. Gellich.
Upernavik, Greenland	30.37	771.3	30.43	772.9	16.9	— 8.4	.....	W	.....	.....	2	.....	2	.....	.....	0	0	.....	K. Elberg.
York Factory, B. A.	30.01	762.2	30.06	763.5	—25.0	—31.7	.....	SW	8	3.6	.....	4ck	2s	W	SW	0.01	0.3	Cloudy	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F. R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.74	755.4	65	18.3	74	WSW			1		2							D. clouds	Capt. Lordal teKerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 30° 32′, E. 47° 51′	30.00	762.0	58	14.4	53	NW			5-6		3	N				1	NNW	D. clouds	Comm. G. Hand.
H. M. S Bittern, Constantinople, Turkey			47	8.3		Calm			0		5	NE						D. clouds	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	30.03	762.7	72	22.2	85	SW			5		10	ENE				4	SW	Overcast	Capt. F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Island Sea, Japan	30.24	768.1	46	7.8	77	NE			1		0							Blue sky	Capt. J. W. East.
H. M. S. Condor, Smyrna, Turkey, Asia	29.99	761.7	52	11.1	66	NW			2	2c								D. clouds	Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer, Syracuse, Sicily	29.73	755.1	56	13.3		Calm			0		2	W						D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa, Shanghai, China	30.06	763.5	50	10.0	93	NNE			1		10							Raining	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido																			Capt C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.20	767.1	62	16.7	88	NNE			1		1							Blue sky	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 34′, E. 81° 14′	29.85	758.2	82	27.8		NNE			1		4	NNE				1	NE	D. clouds	Comm. John Hext.
H. M. S. Eclipse, N. 17° 10′, E. 85° 40′ †	30.05	763.3	78	25.6		NNW			2		1							Blue sky	Capt. E. St. J. Garforth.
H. M. S. Egeria																			Capt. W. H. Maxwell.
H. M. S. Emerald																			Comm. C. Johnstone.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, N. 18° 01′, E. 72° 48′	29.86	758.4	80	26.7	96	SW			2-3		0							Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 17° 23′, W. 64° 03′	30.07	763.8	79	26.1		ENE			2		3	Calm				2	E	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo																			Capt. R. N. Castance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyu.
H. M. S. Gannet, Panama, Panama	29.95	760.7	72	22.2	90	NW			0-1		3							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 54′, W. 58° 37′	29.63	752.6				WSW			2									Drizzling	Capt. L. F. Jones.
H. M. S. Griffon																			Capt. J. Inglis.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 1° 17′, E. 103° 51′	29.89	759.2	80	26.7	87	NE			1-2		3	NE				2	E	D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Africa	29.86	758.4	80	26.7	91	SW			1		6			Blank				D. clouds	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 25° 29′, E. 119° 29′	30.11	764.8	55.5	13.1	94	E			1		10							Drizzling	Capt. R. H. Napier.
H. M. S. Malabar																			Capt. J. F. G. Grant.
H. M. S. Minataur, Vigo, Spain	29.58	751.3	57	13.9	84	Calm			0		10	SW						Overcast	Capt. H. Rawson.
H. M. S. Modeste, N. 1° 17′, E. 103° 51′	29.87	758.7	82	27.8	83	S			2		3					2	E	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, N. 35° 30′, E. 34° 30′	29.93	760.2	57	13.9	75	WNW			2		6	W				Sm'h		D. clouds	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Pt. Royal, Jamaica, W.I.	29.95	760.7	74	23.3	86	Calm			0		2							D. clouds	Capt. E. Drummond.
H. M. S. Orontes, N. 33° 20′, W. 38° 00′	30.03	762.7	63	17.2	?	SW			3-4		9	WNW				2	NNW	D. clouds	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, Elmina, Gold Coast, Africa.	29.86	758.4	81	27.2	96	SSW			1		3					2	S	D. clouds	Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman, N. 42° 32,′ W. 15° 31′			53	11.7		ESE			3		3	SE				5	E	D. clouds	Capt. P. H. W. Mayow.
H. M. S. Rocket																			Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.90	759.4	80	26.7	100	Calm			0		10							Raining	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	29.70	754.4	60	15.6	88	W			3		7	W						Showery	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 40′, E. 49° 20′	29.44	747.8	81	27.2	96	SE			2-3	ick						4	ESE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	30.00	762.0	71.5	21.9	88	Calm			0		3	E				2	E	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. L. H. Ward.
H. M. S. Tenedos, N 13° 05′, W. 59° 36′	30.01	762.2	77.5	25.3	73	ENE			2		3					Sm'h		D. clouds	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo Bay, Chili, S.A	29.57	761.2	62	16.7	91	Calm			0		9	SE						Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 8° 40′, E. 71° 20′	29.89	759.2	80	26.7		ENE			1		1					Sm'h		D. clouds	Capt. J. E. Stokes.
H. M. S. Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Aba, Shehr, Arabia	29.99	761.7	62.5	16.9	62	NW			4-5		3	NW						Squally	Capt. F. Negham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
RioLima, Porto Praya, Cape Verd I'ds	30.01	762 2	75.2	24.0	72	NE			4		4					2	ENE	D. clouds	S. C. da Silva Costa, Comd't.
Sado. St. Paul de Loando, Africa.	29.85	758.1	84.2	29.0	78	NW			3		2					1		Blue sky	G. A. de Brito Capello, Comd't.
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force.	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	29.86	758.4	61	16.1	94	SW	12	5.4		8		SW		1.16	29.5			Fair	
N. Yard, Portsmouth, N. H.	30.13	765.3	21	— 6.1	86	W	2	0.9		8c?		Calm		0	0			Clear?	
Naval Hospital, Yokohama, Japan	30.06	763.5	44.5	6.9	64	E			2		8		SW	0	0			Clearing	
Adams, Panama, Panama	29.89	759.2	75	23.9	86	WNW			2		2		NW			Sm'h		Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.14	765 5	50	10.0	?	Calm			0		10		SW	0	0			Cloudy	
Alert, N. 23° 21′, E. 117° 30′	29.93	760.2	64	17.8	89	NNE			4		10		NNE	0	0	Mod.	NNE	Misty	
Alliance, New Orleans, La	29.75	755.6	63	17.2	94	W			2		2		W	Hea	vy	Sm'h		Clear	
Ashuelot, Tientsin, China	30.22	767.6	25	— 3.9	100	E			1		10		Calm					Light snow.	
Colorado, New York, N. Y	30.14	765.5	30	— 1.1		Calm	0	0			10		Calm	0	0			Overcast	
Constitution, N. Yard, League I'd., Pa	30.08	764.0	35	1.7	80	Calm	0	0			10							Hazy	
Franklin, Norfolk, Va	30.09	764.3	42	5.6	74	NE	1	0.4			10		SSW	0	0			Fair	
Galena. Smyrna, Turkey	30.02	762.5	51	10.6	65	WNW			1		0							Clear	
Independence, N. Yard, Mare I'd, Cal	30.16	766.1	57	13.9	?	SW	2.4	1.1			10		Calm	0	0			Overcast	
Jamestown, Sitka, Alaska	29.36	745.7	23	— 5.0		Calm			0		2			0	0	Sm'h		Fair	
Kearsarge, New Orleans, La	29.67	753.6	61	16.1	94	SW			1		2		Calm	Dri	zzles	Sm'h		Misty	
Marion, S. 53° 04′, W. 59° 40′	29.91	759.7	50	10.0	93	SW			3		10			Lig	ht	Sm'h		Foggy	
Michigan, Erie, Pennsylvania	29.78	756.4	45	7.2		S	6	2.7			5?		SW					Cloudy?	
Minnesota, New York, N. Y	30.16	766.1	31	— 0.6		NNE			1		10							Misty	
Monocacy, Shanghai, China	30.15	765.8	49	9.4	93	N			1		10		Calm					Rainy	
New Hampshire, Port Royal, S. C	29.93	760.2	61	16.1	88	SSE	7	3.1			10			0.35	8.9			Overcast	
Nipsic, Valencia, Spain	29.71	754.6	60	15.6	71	ESE			1		2					Sm'h		D. clouds	
Onward, Callao, Peru †	29.92	760.0	70	21.1	95	Calm			0		8					Long	N;W	Cloudy	
Palos, Shanghai, China	30.17	766.3	45	7.2	100	NE			1		10							Rainy	
Passaic, Washington, D. C	30.20	767.1	38	3.3	90	NE			2		10		Calm					Foggy	
Pensacola, S. 2° 15′, W. 81° 18′	29.96	761.0	77	25.0	86	SSW			1		8			c	o	Sm'h		Cloudy	
Powhatan, New York, N. Y	30.16	766.1	31	— 0.6	100	NE			2		10							Overcast	
Richmond, Hong-Kong, China	30.03	762.7	67	19.4	100	ENE			2		10		Calm					Drizzling	
Saratoga, Alexandria, Va	30.11	764.8	38	3.3	81	Calm			0		10		Calm	0	0			Misty	
Shenandoah, Montevideo, Uruguay	29.89	759.2	72	22.2	80	NE			3		10					Sm'h		Cloudy	
St. Louis, League Island, Pa	30.22	767.6	33	0.6	89	NNE	4	1.8			10			0	0			Misty	
Swatara, Nagasaki, Japan †	29.96	761.0	53	11.7	80	NNE			1		10					Sm'h		Raining	
Tennessee, New Orleans, La	29.72	754.9	61	16.1	100	WSW	3	1.3			2			2.10	53.3	Sm'h		Fair	
Ticonderoga, N. Yard, Mare Id., Cal.	30.21	767.3	56	13.3	94	SW			2		2		SW	0	0			Fair	
Trenton, Villafranca, France	29.74	755.4	55	12.8	68	N			1		10			8 h'r	s h'vy	Sm'h		Cloudy	
Vandalia. Frederichstad, W. I	30.02	762.5	81	27.2	78	ENE			1		1		NE					Clear	
Wabash, Boston, Massachusetts	30.18	766.6	32	0.0	79	SSW	5	2.2			10			0	0			Hazy	
Wachusetts, N. 11° 49′, W. 87° 28′	29.59	751.6	81	27.2	83	NW			1		5		N			Sm'h		Fair	
Wyoming, Villafranca, France	29.76	755.9	54	12.2	93	N			1		10		Calm			Sm'h		Raining	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda ‡																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 11° 50′, W. 75° 22′	29.94	760.5	76.5	24.7	91	NE			5		6							D. clouds	Capt. A. J. Brown.
Britis-h Merchant. ‡																			Capt. E. J. Molony.
Chin Yang ‡																			Capt. H. Youlden.
S. S. Cipero, N. 45° 35′, W. 27° 55′	29.63	752.6	52	11.1		SSE			5		5					6	SSE; W	Misty	Capt W. N. Lailey.
City of Agra, ‡ N. 4° 12′, W. 35° 42′	29.93	760.2	79.5	26.4	85	NNE			4		9							Raining	Capt. T. Young.
Barque Commewyne, ‡ N. 53° 15′, W. 22° 32′	30.11	764.8	47.9	8.8	77	ENE			5		4							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡ N. 2° 34′, W. 25° 01′	29.92	760.0	80	26.7	82	SSE			2		10							Showery	Capt. H. Spalding.
Ship Ellen Stuart, S. 11° 15′, E. 86° 46′	29.84	757.9	83.5	28.6	75	WNW			3		2							Blue sky	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope, S. 20° 38′, W. 37° 00′ ‡	30.01	762.2	84.0	28.9	75	NNE			2	3c;cs		WNW				3	S;NE	D. clouds	Capt. Jas. Campbell.
Ship Iron Cross, N. 28 56′, W. 18° 56′	30.04	763.0	64.5	18.1		NW			3		5							Misty	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R.N.F.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ Off Cape Henry, Va	30.14	765.5	44.5	6.9	92	SSE			5		6							Misty	Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee, ‡ N. 15° 47′, W. 34° 50′	29.95	760.7	81.5	27.5	87	E			3		3					Sl't	SE	D. clouds	Capt. John M. Gray
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 22° 28′, W. 17° 38′	30.03	762.7	67.5	19.7	79	N			1		2							Blue sky	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton, S. 1° 50′, E. 78° 34′	29.89	759.2	83	28.3	83	NE			2		7							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire, N. 33° 15′, W. 66° 25′	30.37	771.4	58	14.4	59	N			2		1					3	NNW	Blue sky	
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Circassian, N. 54° 31′, W. 22° 23′	30.48	774.2	47	8.3	85	ENE			5		5		E;NE	3 h'rs	rain	Mod.	NE; ENE	Squally	
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia, N. 42° 36′, W. 53° 08′ †	29.69	754.1	30	— 1.1	100	WNW			8		10			Snow		Very h'vy	NW	Snowing	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britanic, N. 50° 47′, W. 24° 58′ †	30.03	762.7	54	12.2		ENE			4		2		NE			Mod.	NE	D. clouds	Capt. H. Perry.
S. S. Celtic, N. 41° 24′, W. 55° 58′ †	29.91	759 7	35	1.7		WNW			6		8		NW	0	0	Mod.	N	Fair	Capt. Benj. Gleadell.
S. S. Germanic, N. 50° 23′, W. 16° 40′ †	30.00	762.0	48	8.9		ENE			5		5?		ENE	0	0	Light	ENE	Clear	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Köln ‡																			
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg, N. 44° 06′, W. 47° 54′	29.51	749.5	25.7	— 3.5		WNW			7		10		WNW	8 h'rs	snow	R'gh	WNW	Hailing	
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm, ‡																			Capt. Albert Fredholm.
Ship Peru, ‡ N. 30° 50′, W 77° 26′	30.02	762.4	71 2	21.8	91	SE			6		7							Squally	Capt. O. F. Skötdelrand.

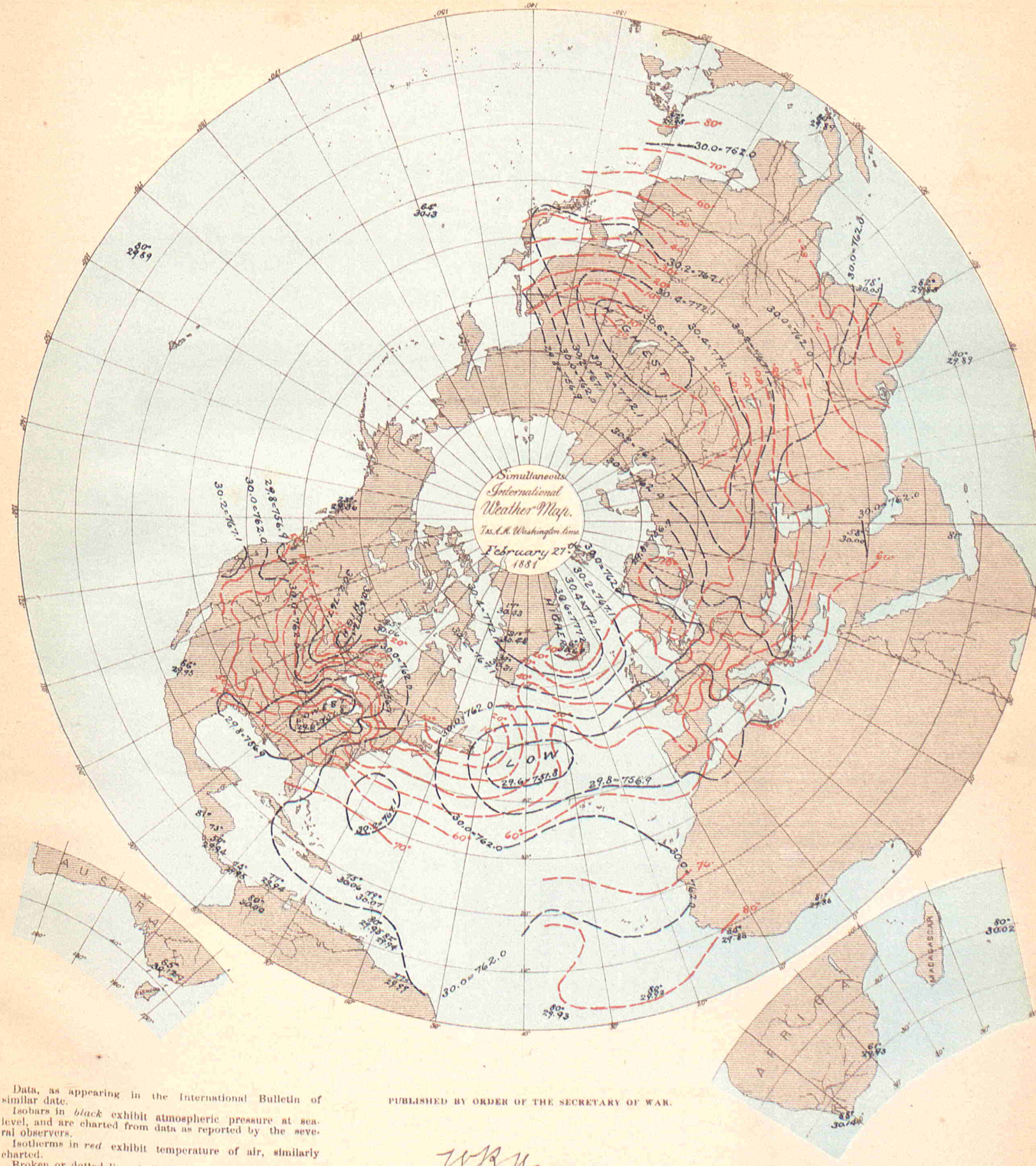
UNITED STATES MERCHANT-MARINE SERIES.

Furnished by the co-operation of the owners and agents of the respective lines and vessels.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. ‡ N. 48° 45′, W. 32° 11′	29.56	750.8	55	12.8	93	ESE			5		5?		SE			Long Cross	SW	Clear?	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 41° 44′, W. 51° 58′ †	29.81	757.2	36	2.2	80	NNW			8		8		NW	Sn	ow	R'gh	NW	Cloudy	Capt. R. W. Sargent.
S. S. Ohio, Liverpool, England †*	30.01	762.2	40	4.4	91	E			2		5		E	o	o			Fair	Wm. Shakford, 1st Off.
S. S. Pennsylvania, Hollyhead, England †	29.85	758.2	39	3.9	82	SE			4		5?		SE	o	o	Sm'h	SE	Cloudy?	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 38° 06′, W. 123° 19′ †	30.25	768.3	59	15.0	82	SE			2		10			Driz	zles	Light	wsw	Foggy	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China *†	30.08	764.0	68	20.0	84	SW			2		10		E					Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 31° 51′, E. 159° 33′	30.13	765.3	64	17.8	94	SSW			4		8		SW	o	o	Con.	NW; SW	Fine	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			
S. S. Oregon, N. 45° 55′, W. 124° 20′ †	29.80	756.9	52.5	11.4		WSW			4		10		SW			R'gh	SW	Rainy	Capt. Fred. Bolles.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			Capt. E. Polemann.
S. S. Ancon, San Francisco, Cal. †	30.18	766.6	55	12.8	93	Calm			0		10		Calm					Rain & fog	Capt. J. N. Ingalls.
S. S. Idaho, ‡ Seattle, Wash. Ter. †	29.60	751.8	44	6.7	92	SE			2		10		SW					Raining	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, Santa Barbara, Cal. †	30.02	762.5	58	14.4	94	E			1		5					Mod.	W	Fair	Thos. Wallace.
S. S. State of California, Portland, Oregon †	29.76	755.9	55	12.8	93	SE			6		10		SE	Ra	in			Raining	Capt. G. Debney.
S. S. Victoria																			J. C. Hunter, 1st Officer.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, S. 34° 07′, W. 167° —′ †	29.79	756.7	69	20.6	85	SW			5		10		SW	Squ	alls	Mod.	SW	Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 35° 47′, W. 121° 27′ †	30.31	769.9	55	12.8	100	NW			6		10		SW	o	o	H'vy	NW		Capt. D. S. Austin.
S. S. City of Peking, Yokohama, Japan †	30.19	766.8	45	7.2	76	E			4		10		NE	o	o			Overcast	Capt. G. G. Berry.
S. S. City of Sidney, N. 5° 16′, W. 164° 09′ †	29.89	759.2	80	26.7	74	ENE			4	5c			NE	o	o	Mod	ENE	Hazy	Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer.
S. S. Colima, Panama, Panama †	29.95	760.7	74	23.3	86	NNW			1		2		NW	o	o			Fair	Capt. R. R. Searle.
S. S. Dakota																			Capt. D. E. Griffiths.
S. S. Granada																			
S. S. Zealandia, Sydney, N. S. Wales	30.23	767.8	72	22.2	85	Calm			0		0							Fine	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland ‡																			Capt. Sam'l Jackson.
S. S. Nederland ‡																			Capt. S. Stokes.
S. S. Rhyniand, ‡ Jersey City, N. J	30.06	763.5	33	0.6		N			1		10			o	o			Hazy	Capt. W. Geo. Randle.
S. S. Vaderland																			Capt. J. C. Jamison.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, ‡ Jacksonville, Florida †	29.86	758.4	65	18.3		SSE			5		10		W	o	o			Threatening	Capt. A. Mehaffey.
Sch'r Addie Fuller, Tappahannock	30.12	765.0	46	7.8	84	Calm	o	o			Fog			o	o			Foggy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, Martinique, W. I. †	29.95	760.7	80	26.7		NE			5		2		ENE	Sho	wers			Clear	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 46° 23′, W. 11° 47′ †*	29.96	761.0	54	12.2		E			4		8		E			Sm'h		Threatening	Capt. B. F. Woodbury.
Brigantine George ‡																Cross			Capt. W. H. Champlin.
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va. †	30.20	767.1	47	8.3	70	Calm	o	o			10n			o	o			Foggy	
Ship Jumna																			Capt. James S. Gawin.
Bark Sunbeam, ‡ N. 28° 50′, W. 69° 54′ †	30.22	767.6	71	21.7	100	E			7		5		ESE	Mod	erate	R'gh	NE	Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.

CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 28, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.09	764.3	63.3	17.4	84	NW			2		5			0.492	12.5	Cloudy	Dr. Olive.
Nemours			29.72	755.0	63.0	17.2	88	SSW			4		1			0.051	1.3	Very fair	Raynard.
Algiers			29.78	756.3	66.2	19.0	43	WSW			3		10			0	0	Covered	Nicolas.
La Calle			29.77	756.2	68.0	20.0	55	WNW			1		2			0	0	Fair	Fonfrède.
Tunis			29.78	756.5															Jacques.
Sfax			29.87	758.8															Gau.
Saida			29.85	758.1	55.8	13.2	53	NW			3		0			0	0	Clear	Dumas.
Tebessa			29.91	759.7	59.4	15.2	24	W			3		3			0	0	Pretty fair	Watrin.
Geriville																			Lonchamp.
Laghouat			29.92	760.0	62.2	16.8	61	SSW			2		0			Inap.	Inap.	Clear	Herbin.
Biskra																			Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.94	760.5	30.03	762.7	74.1	23.4	50	SE	3	1.3			3			0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania																			Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.27	743.4	29.82	757.5	49.1	9.5	73	W			1		0			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.08	738.6	29.86	758.5	40.3	4.6	71	E	10.5	4.7			5			0	0		Dr. Wiersbicki.
Eperies	28.99	736.3	29.89	759.1	42.4	5.8	62	S			1		8cs;s			0	0		Julius Mikolik.
Gratz‡	28.54	724.8	29.81	757.2	40.3	4.6	81	WSW			2		0			0	0		Andreas Rospini.
Hermannstadt	28.48	723.5	29.96	761.0	37.6	3.1	89	W			3		5			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.37	720.6	29.76	755.9	32.7	0.4	92	Calm			0		10			0	0		The Staff.
Lemberg	28.92	734.5	29.94	760.4	37.0	2.8	66	SE			1		3			0	0		Dr. T. Stanecki.
Pola	29.71	754.6	29.82	757.5	53.1	11.7	73	SE			1		8			0	0		I. R. HydrographicOffice.
Szathmar	29.50	749.2	29.95	760.7	44.6	7.0	83	E			2		9			0	0		Belcht Peter, S. J.
Szegedin	29.61	752.0	29.90	759.4	41.0	5.0	71	S			2		4			0	0		Karl Stancel.
Trieste	29.75	755.7	29.85	758.3	49.5	9.7	92	Calm			0		10			0.169	4.3	Raining	P. Busin.
Vienna	29.08	738.6	29.82	757.5	34.5	1.4	85	SE			1		9			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.43	747.6	29.64	752.9	36.0	2.2	81	WNW			2		10		NW	0.059	1.5	Snowing	Royal Observatory.
Furnes	29.63	752.6	29.65	753.2	37.8	3.2	78	NNW			2		10			0.154	3.9	Raining	M. E. de Cae.
Maeseyck	29.50	749.4	29.63	752.6	37.6	3.1	98	NNE			2		10			0	0		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed March 3, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.79	756.7	29.89	759.2	32.0	0.0	77	NW	19	8.5			4			0.005	0.13	Blue sky	W. Boswell.
Armagh, Observatory	29.71	754.6	29.96	761.0	34.2	1.2		N	3	1.3						Blank		D. clouds	S. Call.
Bidston, Liverpool Obs'y			29.87	758.7	34.1	1.2	70	NNE	14	6.3			2					Blue sky	John Hartnup.
Bolton, Sharples	29.25	742.9	29.79	756.7	35.6	2.0	69	SE	12	5.4			0					Blue sky	Thomas Mackereth.
Bradford, Yorkshire	29.42	747.3	29.82	757.4	33.1	0.6	90	NE			2		10			0	0	Overcast	J McLandsborough, F.R.S
Bridgetown, Barbadoes	29.92	760.0	29.95	760.7	82	27 8	63				3		2					D. clouds	Pvt. J. Surgenor, A. H. C.
Cardington			29.80	756.9	35.0	1.7	80	N			2.0		8					Snowing	John McLaren.
Chatham, School M. E	29.61	752.1	29.74	755.4	34.5	1.4	72	NE			6		8					Dull	Lance Cpl. R. Tear, R.C.
Falmouth, Observatory	29.59	751.6	29.82	757.4	36.7	2.6	55	ENE			1		6					Overcast	The Staff.
Fort Napier, Natal	27.74	704.6	29.95	760.7	70.4	21.3	85	NE			1		6					Overcast	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.89	759.2	83	28.3	87	W			1		4					D. clouds	C. E. Keane.
Galway, Queen's College			29.90	759.4				N			2		4					D. clouds	J. O'Donaghadue.
Gibraltar, Mediterranean	29.90	759.4	29.95	760.7	60.2	15.7	94	W			2		7					D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.70	754.4	29.91	759.7	63.0	17.2	68	N			2							Blue sky	D. G. MacLean.
Greenwich, Royal Obs'y	29.57	751.1	29.75	755.6	32.8	0.4	86	NNW			1		10					Snowing	The Staff.
Guernsey	29.52	749.8	29.74	755.4	38.5	3.6	68	NE			2		4					D. clouds	D. S. E. Hoskins, F. R. S.
Kew, Observatory	29.73	755.1	29.77	756.1	32.6	0.4	78	N	17	7.6			9					D. clouds	The Met'g'l Office.
Leicester, Museum	29.64	752.8	29.90	759.4	34.0	1.1	78	NE			4		5					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.79	756.7	29.87	758.7	68	20.0	56	SW			2		1					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.94	760.5	29.99	761.7	75.5	24.2	87	S			3		8			Blank		Overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.29	744.0	29.83	757.7	32.8	0.4	84	NNE			2		5					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	29.56	750.8	29.82	757.4	33.3	0.7	94	NNE			3		10					Overcast	The Staff.
Plymouth	29.72	754.9	29.80	756.9	37.5	3.1	62	NE			2		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			29.91	759.7	30.9	— 0.6	97	N	11	4.9			4					Showery	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.95	761.0	30.03	762.7	45.8	7.7	56	NNE			2		1					Blue sky	Serg't W. H. Lyne.
Sheffield	29.56	750.8	29.85	758.2	35.7	2.1	77	NE			1		6?			0	0	Overcast?	W. F. Cooper.
Silloth Rectory	29.86	758.4	29.89	759.2	36.9	2.7	74	NE			3		0			0.047	1.20	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.87	758.7	32.4	0.2	72	ENE	10	4.5			10					Overcast	Rev. S. J. Perry.
Strathfield Turgiss	29.56	750.8	29.79	756.7	32.2	0.1	80	N			3		8					D. clouds	Rev C.H. Griffith, F.M.S.
Truro, Royal Institution	29.72	754.9	29.81	757.2	43	6.1	59	NE			4		5					D. clouds	W. Newcombe.
Valencia, Observatory	29.91	759.7	29.93	760.2	36.8	2.7	67	NE	20	8.9			2			Blank		Blue sky	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.08	764.0	30.13	765.3	11	—11.7	100	Calm	0	0		0	58			0	0	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.05	763.3	30.12	765.0	25	— 3.9	94	Calm	0	0			10ks			0.02	0.5	Cloudy	G. A. Blair.
Chicontime, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	29.97	761.2	29.99	761.7	24	— 4.4	74	NE	2	0.9			10n		Calm	0.20	5.1	Threatening	J. McWilliams.
Fort Garry, Manitoba*	29.40	746.7	30.37	771.4	—16	—26.7	100	SE	4	1.8		0	0			0	0	Clear	James Stewart.
Fredericton, N. B																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.98	761.5	30.12	765.0	26	— 3.3	88	E	5	2.2		0	8ks			0	0	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.07	738.4	29.41	747.0	40	4.4	96	SW	5	2.2			10s		Calm	0.32	8.1	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S																			C. H Rigby.
Montreal, Quebec*	29.32	744.7	29.52	749.8	32	0.0	96	Calm	0	0			10n			0.62	15.7	Light rain	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Norwood, Ontario																			Rev. T. F. Fotheringham M. A
Parry Sound, Ontario*	28.71	729.2	29.41	747.0	35	1.7	100	SE	11	4.9			10n		SE	1.04	26.4	Cloudy	Rev R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	28.78	731.0	29.49	749.0	32	0.0	100	SW	15	6.7			10n			0.18	4.6	Threatening	H. Morgan.
Port Stanley, Ontario	28.83	732.3	29.49	749.0	32	0.0	89	SW	20	8.9			10n		SW	0.23	5.8	Cloudy	M. Payne.
Quebec, Quebec*	29.49	749.0	29.83	757 7	28	— 2.2	100	NE			5		10n		NE	0.02	0.5	Light rain	Capt. Ashe, R. N
Rockliffe, Ontario*	28.96	735.6	29.43	747.5	35	1.7	92	SE	2	0.9			10s		SE	0.74	18.8	Light rain	K. Stewart.
Saugeen, Ontario*	28.69	728.7	29.41	747.0	33	0.6	81	S	18	8.0			10ks			0.43	10.9	Cloudy	W. H. McIntyre.
St. Andrews	29.91	759.7	29.96	761.0	33	0.6	93	SE	6	2.7			10n			0	0	Cloudy	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.08	764.0	30.12	765.0	2	—16.7	92	Calm	0	0		0	0			0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.09	738.9	29.48	748.8	35	1.7	92	SW	10	4.5			10ks		SW	0.33	8.4	Cloudy	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.92	760.0	29.98	761.5	33	0.6	98	SE	9	4.0		Fg	Fg			0	0	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. John's, Newfoundland	29.54	750.3	29.80	756.9	33	0.6	89	NW	0	0		10k	10s			0.60	15.2	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Beaufort West, Cape Colony																			
Cape St. Francis Lt. House	29.82	757.4			68.5	20.3	88	E	18.4	8.2		0	0			0	0	Hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.87	758.7	29.90	759.4	84.3	29.1	40	SW	4.3	1.9		0	0			0	0	Clear	The Staff, for D. Gill.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.23	767.9	30.26	768.5	43.9	6.6	86	N	0.7	0.3			10			0	0	Covered	M. Marc Dechevrens, S. J.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Federico Maison, Director of the Central Office of Statistics and Meteorology.

San José	25.25	666.7	29.97	751.2	61.7	16.5	92	SE			1	4cs	0			0	0	Cloudy	Federico Maison.

DANISH SERIES.

Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.

Copenhagen	29.82	757.4	29.87	758.6	28.8	—1.8	72	ESE	25	11			10						Oversergent Fischer.
Fanöe	29.72	754.9	29.90	759.4	26.2	—3.2	94	ENE			6		10					Snowing	Overloerer Lauridsen.
Godthaab, Greenland	30.40	772.2	30.45	773.3	23.9	—4.5	75	Calm			0		2						S. Kleinschmidt.
Stykkisholm, Iceland	30.50	774.6	30.54	775.7	9.7	—12.4	92	NE			7		0						A. O. Thorlacius.
Thorshavn	30.03	762.8	30.07	763.7	25.5	—3.6	78	N	16	7			4					Snowing	Overloerer Bergh.
Vestervig	29.76	756.0	29.86	758.4	18.9	—7.3		ENE			2		1						Loearer Oesterbol.

FRENCH SERIES.

Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.

Agen, Normal School	28.95	735.4	29.60	751.9	52.9	11.6	78	W			1		kn		E	0	0		M. Labroue, Director.
Alençon	29.15	740.4	29.70	754.4	37.0	2.8	86	N			1		10		N	0.16	4.	Snowing	M. Nicot, Director.
Avignon, Normal School	29.47	748.6	29.74	755.4	31.8	—0.1	96												M. Klein, Commandant.
Bar-sur-Seine	29.60	751.7	29.67	753.7	52.2	11.2	77	E			3		8		S	0.177	4.5	Very cloudy	M. Giraud, Directof.
Beauvais, Normal School	28.99	736.4	29.54	750.3	54.7	12.6	65	S			1		8kn		SW	0.055	1.4	Very cloudy	M. Saillard, Director.
Besançon, Normal School	29.41	747.1	29.69	754 1	36.1	2.3	89	NNE			1		10					Snowing	M. Frère Eugene Marie.
Bordeaux, Observatory	28.75	730.3	29.62	752.3	56.7	13.7	65	SSW			2		kn		SSW	0	0		M. Gobin, Director.
Bourges, Normal School	29.33	744.9	29.59	751.5	50.0	10.0	83	N			1		10		W	0.024	0.6	Covered	M. Rayet, Director.
Brest, Naval Observatory	29.01	736.8	29.56	750.8	48.2	9	92	NNW			2		10n		NNW	0.020	0.5	Raining	M. Postel, Director.
Caen, Normal School	29.54	750.4	29.78	756.5	42.8	6.0	70	NE			1		8		NE	0	0		M. de Rermaree, Dir.
Châlons-sur-Marne, N.Sch'l	29.56	750.8	29.54	752.8	41.7	5.4	100	NNE			2		8		NNE	0	0	Very cloudy	M. Biétrix, Director.
Charleville, Normal School	29.30	744.3	29.63	752.6	34.2	1.2	96	SW			2		10			0	0	Covered	M. Jadot, Director.
Clermont-Ferrand Obs'y	29.08	738.5	29.63	752.6	36.0	2.2	85	NW			1		10			0.28	7.0	Snowing	M. Grimard
Cluny, Normal School	28.19	716.0	29.52	749.8	55.0	12.8	64	S			1		10		S	0.126	3.2	Covered	M. Allnard, Director.
Commercy, Normal School	28.79	731.3	29.65	753.0	45.5	7.5	71	SE			1		3		SE	0	0		M. de Villemontée, Dir.
Gap, Normal School	28.72	729.4	29.59	751.5	47.7	8.7	89	N			1		n		N	0.067	1.7		Dr. Coulet, Director.
Gréasque, du. Rhone	27.19	690.6	29.73	755.2	46.0	7.8	59	NE			1		2		N	0.51	13.	¼ covered	M. Jeangirard, Director.
Grenoble, Normal School	28.62	727.0	29.75	756.0	47.3	8.5	83	SE			2		10		SE	0.016	0.4	Rainy	M. Kina, Director.
Guéret, Normal School	28.76	730.5	29.52	749.7	53.6	12	78	WNW			1		ck			0	0		M. Ablard, Director.
Lamballe, Normal School	27.95	710.0	29.52	749.8	50.4	10.2	86	SW			1		n		NE	0	0		M. Rivoir, Director.
Lescar, Normal School	29.46	748.3	29.74	755.4	40.1	4.5	70	NE			1				NE	0	0		M. Ollitrault, Director.
Lorient, Naval Observatory	29.01	736.8	29.68	753.9	51.8	11	69	W			3		5		W	0	0	Cloudy	M Chauvin, Director.
Lyon Obs'y, Park Station	29.63	752.7	29.74	755.3	47.8	8.8	76	NE			3		2	E	NE	0	0	¼ covered	Lt. T Carré, Director.
Mans, Normal School	28.57	725.6	29.58	751.3	52.9	11.6	56	S			4		5n		S	0	0	Cloudy	M. André, Director.
Marseille, Observatory	29.38	746.3	29.70	754.4	34.5	1.4	94	NNE			4		8		NE	0.20	5.	Very cloudy	M Piboen, Director.
Montlouis Pinstituteur	29.43	747.6	29.70	754.4	50.4	10.2	86	ESE			2		10		SE	0.398	10.10	Raining	M. Stephan, Director.
Montpellier, Normal School	24 64	625.9	29.88	758.9	40.5	4.7	100	ESE	9.4	4.2			10		ENE	0	0	Foggy	M. Cave, for Dr. Fines.
Nancy, Normal School	29.50	749.2	29.61	752.0	53.4	11.9	97	S			4		8		SE	0.839	21.3	Raining	M. Galzin, Director.
Nantes, Observatory	28.84	732.6	29.60	751.8	54.0	12.2	72	SE			1	5ck			S	0.157	4.0	Cloudy	M. Hasse.
Nice	29.55	750.5	29.71	754.6	36.5	2.5	86	NNE			2		10			0.102	2.6	Covered	M. Larocque, Director.
Perpignan, Observatory	29.74	755.4	29.78	756.3	54.3	12.4	72	E			3		10	E	E	0.299	7.6	Light rain	Capt. Boissière, Director.
Pic-du-Midi, Plantade	29.48	748.8	29.59	751.5	57.6	14.2	61	SW	3.8	1.7			4		NW	0	0		Dr. Fines.
Privas, Normal School	22.10	561.4			24.6	—4.1							10		SW	0.791	20.1	Snowy	M. Baylac, for Gen'l de Nansouty.
Puy de Dôme O s'y, Summit	28.62	727.0	29.69	754.2	48.6	9.2	69	S			4		10	S	S			Raining	M. Tailleu.
Rochefort, Naval Obs'y	24.70	627.4			36.5	2.5	91	S			3		10			0.059	1.5	Foggy	M. Allnard, Director.
Roche-sur-Yon, N. School	29.56	750.8	29.59	751.6	48.6	9.2	84	NE			1		10			1.30	33.	Covered	Lt. E. Decante, Director.
Rodez, Normal School	29.43	747.6	29.60	753 3	38.1	3.4	87	N			2		10			0	0	Covered	M. Mouillot, Director.
Rouen, Normal School	27.47	697.6	29.62	752.3	41.7	5.4	94	SE			1		10		SE			Raining	M. Richard, Director.
Saint Lô, Normal School	29.61	752.0	29.69	754.0	36.0	2.2	93	NE			1		10		NE	0.177	4.5	Snowing	M. Platrier, Director.
Saint Maur, Observatory	29.58	751.2	29.73	755.2	37.8	3.2	72	ENE			1		10		NNE	0	0	Covered	M. Delaplanche, Dir.
Toulouse, Observatory	29.48	748.9	29.65	753.1	32.2	0.1	97	NNE			2		10			0.008	0.2		M. Renou, Director.
Tours	28.92	734.5	29.63	752.6	51.1	10.6	86	SSW			1		10			0.103	2.7	Covered	M. Ballland, Director.
Versailles, Observatory	29.44	747.8	29.64	752.8	35.2	1.8	93	ENE			1		10		E	0.012	0.3	Rain & snow	M. de Tastes.
Sun-Series.																			
Paris, Montsouris Obs'y	29.20	741.6	29.69	754.1	31.6	—0.2	100	N			1		10			0.127	3.23	Covered	Dr. A. Bérigny, Director
																			M. Marié Davy, Director

GERMAN SERIES.

Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.

Bamberg	28.79	731.3	29.64	752.9	44.6	7.0	70	SSE			5		2cs			0	0		Prof. Dr. Hoh.
Berlin	29.40	746.8	29.58	751.3	36.1	2.3	70	SE			1		10			0.154	3.9		Prof. Dr. Arndt.
Breslau	29.28	743.6	29.80	757.0	34.9	1.6	85	SE			4		10			0.020	0.50		Royal University Obs'y.
Carlsruhe	29.18	741.2	29.61	752.0	47.5	8.6	76	SE			1		3	SW		0	0		Albert Senz.
Cassel	29.00	736.7	29.61	752.0	38.5	3.6	85	SE			2		10	SE		0.176	4.44		Dr. H. Möhl.
Frankfort on the Main	29.35	745.5	29.72	755.0	40.6	4.8	87	NE			1		10			0.228	5.8	Foggy	Physical Society.
Friedrichshafen	28.20	710.3	29.64	752.8	46.0	7.8	79	SW			2		0			0.185	4.7		Chief Telegrapher Wilhelm.
Hamburg	29.60	751.7	29.67	753.5	30.2	—1.0	89	SE			2		10			0.110	2.8		Dr. R. Kleeman.
Kiel	29.68	753.8	29.69	754.2	29.1	—1.6	82	E			4		10			0.018	0.45	Snowing	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.24	742.8	29.67	753.7	37.0	2.8	91	SSE			2		10			0.035	0.9	Raining	Prof. Dr. Bruhns.
Magdeburg	29.37	745.9	29.60	751.8	36.1	2.3	82	E			1		10ks	W		0.079	2.0		Dr. Assmann.
Memel	30.13	765.4	30.18	766.6	16.9	—8.4	79	SE			2								Reinorent & Issermann.
Munich	27.82	705.7	29.66	753.4	49.8	9.9	54	NE			2		2			0	0		Central Station.
Neufahrwasser	30.02	762.5	30.04	762.9	23.7	—4.6	67	ESE			3		4			0.094	2.4		A Lothes.
Neustadt, Palatinate	29.06	738.0	29.58	751.2	42.8	6.0	94	E			2		10			0	0	Heavy fog	Dicknether.
Stuttgart	28.66	727.9	29.55	750.5	50.9	10.5	72	E			1		3	W		0.177	4.5		Prof. Dr. Schoder.
Thorn	29.66	753.4	29.85	758.1	27.0	—2.8	66	NE			5		10			0	0		Dr. O. Qunerth.
Weissenburg, Bavaria	28.13	714.5	29.63	752.5	49.5	9.7	66	Calm			0		5	W		0	0		Prof. Kemlein.
Wustrow	29.77	756.2	29.80	756.9	25.9	—3.4	100	SE			3		10			0.197	5.0		Profs. Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

GREEK SERIES.

Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.

Athens	29.65	753.2	30.05	763.2	56.3	13.5		NE			1.0		10					Covered	Schmidt & Wourlisch.

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	29.87	758.8	29.92	760.1	80.0	26.7	51	S	20.0	8.9			9	SSW		0	0	D. clouds	
Deesa	29.42	747.2	29.89	759.1	85.9	29.9	34	NE					10	SSW	SSW	0	0	Overcast	
Bombay	29.83	757.8	29.87	758.7	82.6	28.1	75	NW	14.0	6.3			1	WSW		0	0	D. clouds	
Poona, Yarrowda	27.98	710.6	29.79	756.6	91.5	33.1	15	WSW	19.0	8.5			0			0	0	Blue sky	
Belgaum	27.30	693.5	29.78	756.3	89.2	31.8	9	E	3.0	1.3			0			0	0	Blue sky	
Lahore	29.20	741.6	29.97	761.2	63.6	17.6	73	W	2.1	0.9			10			0	0	Overcast	
Roorkee	29.04	737.6	29.96	761.1	68.2	20.1	56	NW	3.4	1.5			9			0	0		
Agra	29.40	746.8	29.98	761.4	74.3	23.5	40	NW	5.6	2.5			6		W	0	0		
Nagpur	28.81	731.7	29.83	757.6	93.2	34.0	23	SE	4.0	1.8			4	NW		0	0	D. clouds	
Jubbulpore	28.53	724.6	29.88	758.9	86.2	30.1	33	NE	4.6	2.1			4			0	0	D. clouds	
Lucknow	29.51	749.5	29.89	759.1	80.2	26.8	27	NW	5.0	2.2			7	ENE		0	0	Blue sky	
Allahabad	29.57	751.0	29.88	758.9	81.7	27.6	36	NW	3.9	1.7			8	W		0	0	D. clouds	
Patna	29.64	753.0	29.83	757.6	77.1	25.1	47	W	1.9	0.8			4	W	W	0	0	D. clouds	
Hazaribagh	27.84	707.1	29.85	758.1	78.8	26.0	31	W	12.7	5.7			0			0	0	Blue sky	
Cuttack	29.76	756.0	29.85	758.1	87.3	30.7	43	SE	0.8	0.4			0			0	0	Blue sky	
Calcutta, Alipore	29.80	756.9	29.82	757.5	84.5	29.2	41	Calm	0	0			0			0	0	Blue sky	
Goalpara	29.41	747.0	29.82	757.3	76.2	24.6	51	Calm	1.4	0.6			0			0	0	Blue sky	
Chittagong	29.77	756.1	29.86	758.4	80.8	27.1	67	WSW	2.8	1.2			0			0	0	Blue sky	
Sibsagar	29.54	750.4	29.89	759.2	68.3	20.2	79	NE	1.4	0.6			10	W	W	0	0	D. clouds	

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.44	747.8	29.86	758.5	51.3	10.7	74	Calm	0	0			10			0	0		Prof. Giovanni Clodig.
Milan	29.30	744.3	29.84	757.8	45.0	7.2	93	NNE	2.5	1.1			10			0	0		Prof. Schiaparelli.
Padua	29.72	755.0	29.84	757.9	48.9	9.4	92	ENE	5.6	2.5			10	ENE		0.091	2.3		Prof. Dott. Lorenzoni.
Moncalieri	28.92	734.6	29.85	758.1	45.0	7.2	78	NNW	1.3	0.6			9			0	0		Prof. P. F. Denza.
Genoa	29.62	752.3	29.82	757.3	47.5	8.6	73	N	4.9	2.2			10	SE		0.244	6.2		Prof. G. M. Garibaldi.
Mondovi	27.89	708.5	29.88	759.0	43.3	6.3	78	W			2		7			0	0		Prof. D. C. Bruno.
Pesaro	29.78	756.5	29.84	757.8	47.1	8.4	92	NW	7.4	3.3			10	S		0	0		Prof. Luigi Guidi.
Florence	29.52	749.7	29.78	756.3	57.2	14.0	54	NE			2		8	WSW		0	0		Cav. F. Meucci.
Leghorn	29.71	754.5	29.79	756.7	57.9	14.4	62	SSW	7.4	3.3			10			0	0		Prof. P. Monte.
Rome	29.62	752.3	29.79	756.7	59.0	15.0	55	Calm	0	0			7			0	0		Prof. P. S. Ferrari.
Lecce	29.55	750.6	29.81	757.2	60.1	15.6	65	SW	23.7	10.6			4	SW		0.047	1.2		Prof. C. de Giorgi.
Cosenza	28.95	735.4	29.86	758.5	55.4	13.0	73	NW	1.3	0.6			9	NNW		0.480	12.2		Prof. D. Conti.
Cagliari	29.59	751.6	29.78	756.5	59.0	15.0	71	SE			2		10			0.197	5.0		Prof. A. Pacinotti.
Palermo	29.63	752.6	29.88	759.0	57.2	14.0	79	Calm	0	0			10			0	0		Prof. G. Ciacciatore.
Syracuse	29.73	755.2	29.78	756.3	57.9	14.4	79	SSE	3.8	1.7			3	WSW		0	0		Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R	29.32	744.7	29.84	757.9	57.9	14.4	70	WSW	6.3	2.8			7	WNW		0.217	5.5		Prof. F. Brioschi.
Stelvio	21.97	558.1			26.2	— 3.2	87	W			6		10n			0	0	Misty	P. F. Denza.
Valdobbia	21.88	555.8			28.4	— 2.0	88	E			2		10			0	0	Covered	

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I M. Obs'y†	29.98	761.5	30.00	762.0	40.5	4.7	96	S	0.9	0.4			7s;ck			0.038	0.97	Cloudy	K. Sasaki.
Kioto	29.69	754.1	29.87	758.7	46.0	7.8	82						4s;ks			0.220	5.59	Fair	M. Tojima.
Nagasaki, I. M. Obs'y	29.86	758.4	30.07	763.8	44.2	6.8	83	Calm	0	0			0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.78	756.4	29.85	758.2	37.1	2.8	98	NNE	6.3	2.8			10n			0.830	21.08	Raining	The Staff.
Wakayama	29.85	758.2	29.90	759.4	46.0	7.8	93	NNW	6.8	3.0			10n			0.396	10.06	Raining	Y. Kawamura.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.78	756.4	29.97	761.1	81.6	27.6	56	ESE	15.0	6.7		0	2			0.09	2.3	Fine	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Leon	24.48	621.8	30.23	767.7	55.4	13.9	79	W			1	4c	2k	S		0	0	Clear	Prof. M. Leal.
Mazatlan	29.72	754.8	29.98	761.5	66.0	18.9	89	E	0.9	0.4		0	0			0	0	Light haze	F. Quijano, C. E.
Mexico, Central Obs'y	23.17	588.5	30.30	769.6	46.4	8.0	50	Calm	0	0		0	4k			0	0	Fair	The Staff.
Pabellon, Aguascalientes	23.98	609.1	30.08	764.1	47.1	8.4	56	Calm				1cs	0			0	0	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.42	594.7	30.49	774.3	34.7	1.5		Calm	0	0		0	8		SW	0	0	Cloudy	Prof. P. Spina.
San Luis Potosi	24.28	616.7	30.36	771.2	53.1	11.7	42	E	0.9	0.4		7	0	W		0	0	Cloudy	G. Barroeta, M. D.
Tlacotalpam	30.18	766.6	30.19	766.9	71.8	22.1	90	N	1.7	0.8		5	5	NNE	N	0	0	Threatening	Prof. M. Cházaro.
Zacatecas																			J. A. Bonilla, M. E.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	29.66	753.4	29.66	753.4	36.3	2.4		NNW			3					0	0		
Groningen	29.56	750.9	29.62	752.3	32.7	0.4		ENE			2					0	0		
Helder	29.63	752.5	29.63	752.5	31.3	— 0.4		NE			2					0.016	0.4		
Hellevoetsluis	29.64	752.9	29.64	752.9	34.0	1.1	93	NW			2					0	0		
Utrecht	29.60	751.7	29.64	752.9	34.3	1.3	85	NE			1		1c			0	0	Dull	H. van der Brink.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind Up'er	CLOUDS. Amount and kind Lo'er	CLOUDS. Direction, Upper.	CLOUDS. Direction, Lower.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.74	755.5	29.81	757.1	29.5	— 1.4	68	Calm	0	0			3			0.295	7.5		
Christiania	29.75	755.7	29.91	759.7	19.0	— 7.2	72	E	9	4			6			0	0		
Gjæsvær	29.87	758.8	29.90	759.4	19.0	— 7.2		NE			6		10						
Lodingen	29.90	759.5	29.95	760.7	15.6	— 9.1	75	SE			2		3			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores																			Dr. J. A. Sampaio.
Campo Major	28.81	731.7	29.81	757.2	54.0	12.2	70	WNW	5.6	2.5			8			0.142	3.6		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.07	763.8	30.16	766.0	63.7	17.6	51	SSE	1.3	0.6			0			0	0		Capt. D. A. da Cunha.
Lisbon, Observatory	29.52	749.8	29.88	758.9	57.7	14.3	89	NNW	11.9	5.3			8			0.197	5.0		The Staff.
Ponta Delgada, Azores	29.82	757.4	29.89	759.2	58.6	14.8	84	S	15.4	6.9			10			0.087	2.2	Light rain	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.35	745.6	30.57	776.4	1.0	—17.2	74	NNE	13	6			0						Capt. Lasarew.
Archangel	29.76	755.9	29.78	756.4	11.8	—11.2	89	ESE	4	2			10						Capt. Sseliwerstow.
Astrakhan	29.84	758.0	29.76	755.9	26.4	— 3.1	87	NNE	7	3			10n			Blank		Heavy cl'ds	Capt. Wisganow.
Barnaul ‡	30.28	769.2	30.87	784.0	— 8.5	—22.5	68	Calm	0	0			0						Mecorological Obs'y.
Dorpat	29.89	759.3	30.16	766.1	12.7	—10.7	76	SSW	7	3			6k						Obervatory.
Ekaterinburg	29.42	747.3	30.47	774.0	15.3	— 9.3	69	SE	18	8			10					Solar corona	Meteorological Obs'y.
Kasan	29.91	759.8	30.21	767.3	15.3	— 9.3	64	SSE	2	1			9						Observatory.
Kertch	30.14	765.6	30.16	766.1	25.7	— 3.5	76	N	7	3			10						Lagorio.
Kieff	29.43	747.5	30.10	764.4	30.2	— 1.0	76	N	2	1			10ks						Cand. Fatjanow.
Lugan	29.90	759.5	30.11	764.9	28.8	— 1.8	72	NNE	13	6			8						Meteorological Obs'y.
Moscow	29.58	751.3	30.18	766.5	15.8	— 9.0	66	NE	4	2			0						Meteorological Obs'y.
Nertchinsk	27.83	706.9	30.36	771.1	2.8	—16.2	41	N	4	2			2					Light clouds	Meteorological Obs'y.
Nikolaiev	30.15	765.7	30.22	767.5	30.2	— 1.0	72	ESE	4	2			6cs;ks						1st. Lieut. Kurdakov.
Nikolaievsk, on the Amoor	29.87	758.8	29.96	761.0	3.2	—16.0	76	W	4	2			6s						Lieut. Iwanow.
Nukuss	29.47	748.5	29.71	754.7	34.5	1.4	89	WSW	12.1	5.4			10n						Dr. Dobrochotow.
Pekin, China	29.97	761.3	30.11	764.9	37.4	3.0	47	NW	4	2			0						Physical Observatory.
St. Petersburg	30.03	762.7	30.04	763.1	9.9	—12.3	81	WNW	11	5			9ks;n						Central Physical Obs'y.
Tashkend, Laboratory	28.30	718.8	29.87	758.6	52.7	11.5	64						10						Teich, A. M.
Tiflis	28.42	721.9	29.87	758.7	41.0	5.0	52	NW	45	20			10ks						Physical Observatory.
Warsaw	29.55	750.6	30.00	761.9	25.5	— 3.6	76	E	16	7			10n					Snowing	Astronomical Obs'y
Wilna	29.79	756.6	30.24	768.2	16.2	— 8.8	58	Calm	0	0			1					Light clouds	Berg, Assistant.
Yeniseisk	30.58	776.8	30.91	785.2	—10.3	—23.5	75	Calm	0	0			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.92	760.0	32.8	0.4	68	W				1	5ck		N			Hazy	Andrew Gibb.
Monach Lt. House, Hebrides			29.97	761.2	36	2.2	90	ENE				3	3	0	ENE	0	0	D. clouds	J. Youngclause.
North Unst, Shetland Isl'ds			29.86	758.4				N				2		5		Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.60	751.8	29.71	754.5	56.8	13.8	79	SW	4.5	2.0			3k			0.075	1.91		Antonio Rave, Director.
Bilbao, Met. Obs'y	29.67	753.7	29.73	755.2	51.8	11.0	88	W	1.1	0.5			10			0.425	10.8	Rainy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.73	679.0			44.6	7.0	78	W	7.8	3.5			10			0.413	10.5	Covered	Domingo Mantiny Perez.
Madrid, Royal Obs'y	27.50	698.5	29.73	755.1	52.2	11.2	68	W	8.3	3.7		0	7			0.055	1.4	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.60	751.9	29.71	754.7	63.7	17.6	60	NW	2.7	1.2		2	4	E		0.016	0.4	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.91	734.2	29.80	757.0	51.3	10.7	61	NNW	9.8	4.4			9			0.016	0.4	Almost cov'd	R. Gil Villanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	29.91	759.7	29.98	761.4	72.8	22.7	91	SSE	1.3	0.6		20	18	WSW		0	0	Fair	Benito Vines, S. J.
Manilla, Phillippine Islands	29.91	759.8	29.96	761.1	81.5	27.5	66	ESE	5.5	2.5						0	0	Fair	Federico Faura, S. J
San Fernando, Naval Obs'y	29.74	755.5	29.84	758.0	55.8	13.2	72	WNW	7.5	3.4		0	7		W	0.245	6.2		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.99	761.7	30.08	764.0	75.2	24.0	86	SE	5.3	2.35		2k	4k	SE	SE	0.020	0.50	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.90	759.4	30.04	763.1	78.0	25.6	80	NW	5.2	2.3			3k		N	0	0	Clear	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.69	754.2	29.73	755.2	11.8	—11.2	85	N				2		0		0	0		
Umea	29.87	758.6	29.92	759.9	19.0	— 7.2	90	Calm				0		2		0	0		
Hernosand	29.94	760.5	29.99	761.8	7.3	—13.7	79	Calm				0		1		0	0		
Stockholm	29.82	757.5	30.00	762.0	20.5	— 6.4	74	SW				2		9		0.031	0.8		
Wisby	29.91	759.7	29.97	761.2	26.2	— 3.2	65	WSW				2		3		0	0		
SUB-SERIES.																			
Upsala	29.88	758.9	29.97	761.1	13.3	—10.4	93	NE	0	0				4	W	0.016	0.40		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Observatory of Switzerland, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.20	716.3	29.63	752.7	51.1	10.6	47	N				2		2		0	0	Clear	The Observatory.
Zurich	27.99	710.9	29.63	752.5	54.0	12.2	54	NW				2		1		0.126	3.2	Clear	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —9.2 mm.; Ther. +5°.2 cent.; Hum. —20 per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.11	764.7	43.9	6.6	53	N	13	6.0			0			0	0		The Observatory.
Valona			29.83	757.6	60.4	15.8		SW				1	10			0	0	Covered	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.97	761.3	60.3	15.7	61	W				1	2k		NW	0.05	1.3		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.
By authority of the SECRETARY OF WAR.
Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.44	747.8	29.52	749.8	47	8.3	92	W	3	1.3			10n;fg		Calm	0.35	8.9	Light rain	
Alpena, Michigan	28.84	732.5	29.51	749.5	15	— 9.4	100	N	22	9.8			10n		Calm	1.75	44.4	Light snow.	
Atlanta, Georgia	28.62	726.9	29.78	756.4	39	3.9	63	NW	14	6.3		0	0			1.01	25.7	Clear.	
Atlantic City, New Jersey	29.55	750.6	29.56	750.8	42	5.6	100	S	12	5.4			Fg		Calm	0.89	22.6	Dense fog	
Atton Id., Alaska	‡																		
Augusta, Georgia	29.53	750.0	29.73	755.1	56	13.3	87	SW	6	2.7			10s		SW	0.43	10.9	Cloudy	
Baltimore, Maryland	29.49	749.0	29.54	750.3	51	10.6	100	Calm	0	0			Fg		Calm	0.55	14.0	Dense fog	
Barnegat, New Jersey	29.51	749.5	29.54	750.3	40	4.4	100	S	11	4.9			Fg		Calm	1.02	25.9	Dense fog	
Benton, Montana	26.84	681.7			29	— 1.7	78	W	5	2.2			10s		Calm	Inap.	Inap.	Cloudy	
Bismarck, Dakota	28.24	717.3	30.10	764.5	— 2	—18.9	100	Calm	0	0		0	0			0	0	Clear	
Boise City, Idaho	27.15	689.6	30.11	764.8	45	7.2	84	SE	4	1.8			10s		Calm	0.15	3.8	Cloudy	
Boston, Massachusetts	29.49	749.0	29.64	752.8	44	6.7	100	SE	16	7.2			10n;fg		Calm	0.41	10.4	Heavy rain	
Brackettville, Texas	28.93	734.8	30.02	762.5	43	6.1	59	N	2	0.9		0	0			0	0	Clear	
Brownsville, Texas	30.07	763.8	30.12	765.0	53	11.7	93	N	3	1.3		0	0			0	0	Clear	
Buffalo, New York	28.78	731.0	29.47	748.5	34	1.1	90	SW	5	2.2			10s		SW	0.21	5.3	Cloudy	
Burlington, Vermont	29.23	742.4	29.51	749.5	44	6.7	92	S	9	4.0			10n		S	0.29	7.4	Light rain	
Cairo, Illinois	29.58	751.3	29.99	761.7	32	0.0	69	NW	16	7.2			10s		NW	0.12	3.0	Cloudy	
Campo, California	27.51	698.7	30.08	764.0	34	1.1	90	S	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.38	695.4			41	5.0	57	Calm			0	5cs	0	Calm		0	0	Fair	
Cape Henry, Virginia	29.57	751.1	29.58	751.3	60	15.6	88	S	11	4.9		8c	0	SW		0.45	11.4	Fair	
Cape May, New Jersey																			
Castroville, Texas	29.32	744.7	30.06	763.5	39	3.9	73	NW	3	1.3		0	0			0	0	Clear	
Cedar Keys, Florida	29.85	758.2	29.87	758.7	64	17.8	89	W	14	6.3		5c	0	W		2.24	56.9	Fair	
Champaign, Illinois	28.92	734.6	29.75	755.6	20	— 6.7	85	NW	22	9.8			10n		NW	0.46	11.7	Light snow.	
Charleston, S. Carolina	29.68	753.9	29.73	755.1	57	13.9	87	S	5	2.2		2c	0	S		0.35	8.9	Clear	
Charlotte, N. Carolina	28.76	739.5	29.55	750.6	52	11.1	93	SW	7	3.1			10n		SW	0.46	11.7	Light rain	
Chattanooga, Tennessee	29.02	737.1	29.85	758.2	37	2.8	63	NW	7	3.1			10s		NW	0.62	15.7	Cloudy	
Cheyenne, Wyoming	23.96	608.6	29.90	759.4	42	5.6	42	NW	20	8.9		0	5s		Calm	0	0	Fair	
Chicago, Illinois	28.95	735.3	29.67	753.6	19	— 7.2	85	NW	10	4.5			10n		Calm	0.95	24.1	Light snow.	
Chincoteague, Virginia	29.57	751.1	29.59	751.6	39	3.9	100	SW	10	4.5			Fg		Calm	1.22	31.0	Dense fog	
Cincinnati, Ohio	29.05	737.9	29.72	754.9	32	0.0	69	SW	12	5.4			10n		W	0.33	8.4	Light snow.	
Cleveland, Ohio	28.79	731.3	29.52	749.8	32	0.0	69	SW	20	8.9			10ks		SW	0.04	1.0	Cloudy	
Coleman City, Texas	28.23	717.0	29.96	761.0	36	2.2	90	Calm	0	0		0	0			0	0	Clear	
Columbus, Ohio	28.75	730.2	29.60	751.8	28	— 2.2	77	SW	23	10.3			10s		W	0.46	11.7	Cloudy	
Concho, Texas	28.10	713.7	29.81	757.2	45	7.2	53	SW	12	5.4		0	0			0	0	Clear	
Corsicana, Texas	29.68	753.9	30.16	766.1	45	7.2	61	Calm	0	0		0	0			0	0	Clear	
Davenport, Iowa	29.20	741.7	29.89	759.2	12	—11.1	80	NW	10	4.5		1cs	0	Calm		0.20	5.1	Clear	
Dayton, Washington T'y	28.68	713.2	29.72	754.9	50	10.0	86	S	4	1.8			10n		Calm	0.45	11.4	Light rain	
Deadwood, Dakota	25.20	640.1			32	0.0	79	S	1	0.4		5cs	0	Calm		0	0	Fair	
Decatur, Texas	28.91	734.3	30.13	765.3	36	2.2	61	NE	10	4.5		0	0			0	0	Clear	
Delaware Breakwater, Del.	29.52	749.8	29.54	750.3	46	7.8	100	S	9	4.0			Fg		Calm	0.31	7.9	Dense fog	
Denison, Texas	29.32	744.7	30.14	765.5	33	0.6	70	Calm	0	0		0	0			0	0	Clear	
Denver, Colorado	24.75	628.6	29.97	761.2	49	9.4	37	W	5	2.2		2ck	8s	Calm	Calm	Inap.	Inap.	Cloudy	
Des Moines, Iowa	29.17	740.9	30.16	766.1	0	—17.8	70	N	12	5.4		0	0			Inap.	Inap.	Clear	
Detroit, Michigan	28.70	729.0	29.39	746.5	37	2.8	81	S	21	9.4			10s		S	0.76	19.3	Threatening.	
Dodge City, Kansas	27.39	695.7	29.77	756.1	29	— 1.7	78	SE	6	2.7		0	0			0	0	Clear	
Dubuque, Iowa	29.16	740.7	29.92	760.0	12	—11.1	61	NW	12	5.4		0	5ks		Calm	0.03	0.8	Fair	
Duluth, Minnesota	29.44	747.8	30.20	767.1	1	—17.2	85	NW	12	5.4		0	0			0	0	Clear	
Eagle Pass, Texas	29.34	745.2	30.10	764.5	43	6.1	67	Calm	0	0		0	0			0	0	Clear	
Eagle Rock, Idaho	25.27	641.8	29.92	760.0	35	1.7	70	SW	14	6.3			10s		SW	0	0	Cloudy	
Eastport, Maine	29.92	760.0	29.99	761.7	33	0.6	100	E	9	4.0			Fg		Calm	0	0	Dense fog	
Edinburg, Texas																			
El Paso, Texas	26.30	668.0			46	7.8	26	W	4	1.8		0	0			0	0	Clear	
Erie, Pennsylvania	28.77	730.7	29.48	748.8	37	2.8	71	SW	14	6.3			10ks		S	0.02	0.5	Cloudy	
Escanaba, Michigan	29.12	739.6	29.81	757.2	15	— 9.4	82	NW			6	2c	2s	NW	NW	0.08	2.0	Fair	
Florence, Arizona	28.57	725.7	30.17	766.3	49	9.4	37	W	2	0.9		2c	2s	Calm	Calm	0	0	Fair	
Fort Apache, New Mexico	25.14	638.5	30.59	777.0	32	0.0	79	NE	3	1.3		0	2s		Calm	0	0	Fair	
Fort Assininiboine, Montana	26.77	679.9			22	— 5.6	72	NE	2	0.9			10s		Calm	0	0	Cloudy	
Fort Bennett, Dakota	28.49	723.6			— 4	—20.0	65	SE	5	2.2		0	0			0	0	Clear	
Fort Buford, Dakota	27.85	707.4	29.86	758.4	3	—16.1	87	E	12	5.4		0	0			0	0	Clear	
Fort Custer, Montana	26.60	675.6			35	1.7	90	SW	8	3.6			10s		Calm	0	0	Cloudy	
Fort Davis, Texas	25.26	641.6	30.22	767.6	48	8.9	63	S	7	3.1		0	0			0	0	Clear	
Fort Elliott, Texas																			
Fort Gibson, Indian T'y	29.60	751.8	30.18	766.6	25	— 3.9	87	NW	4	1.8		0	0			0	0	Clear	
Fort Grant, Arizona	25.27	641.8	30.07	763.8	46	7.8	41	NE	4	1.8		2cs	0	Calm		0	0	Clear	
Fort Griffin, Texas	28.68	728.5	29.99	761.7	37	2.8	71	Calm	0	0		0	0			0	0	Clear	
Fort Keogh, Montana	27.27	692.6			20	— 6.7	72	N	8	3.6			10s		Calm	0	0	Cloudy	
Fort McKavett, Texas	27.78	705.6	29.73	755.1	43	6.1	43	SW	11	4.9		0	0			0	0	Clear	
Fort Macon, North Carolina	29.07	753.6	29.68	753.9	53	11.7	100	SW	13	5.8			Fg		Calm	0.76	19.3	Dense fog	
Fort St. Michaels	29.56	750.8	29.60	751.8	—18	—27.8	100	N	2	0.9		0	0						
Fort Missoula, Montana	26.48	672.6			37	2.8	100	S	3	1.3			10n		Calm	0.26	6.6	Light rain	
Fort Shaw, Montana	26.03	661.2			45	7.2	61	SW	26	11.6		0	0			0	0	Clear	
Fort Sill, Indian Territory	28.84	732.5	30.00	762.0	31	— 0.6	79	NE	1	0.4		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.14	714.7			— 4	—20.0	82	Calm	0	0		0	0			0	0	Clear	
Fort Verde, Arizona					40	4.4	48	W			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.34	719.8	29.94	760.5	45	7.2	61	W	2	0.9		0	0			0	0	Clear	
Galveston, Texas	30.07	763.8	30.12	765.0	51	10.6	59	NE	4	1.8		Hz	0	Calm		0	0	Clear	
Grand Haven, Michigan	28.81	731.8	29.47	748.5	21	— 6.1	86	NW	8	3.6			10s		Calm	1.49	37.8	Cloudy	
Hatteras, North Carolina	29.64	752.8	29.66	753.4	49	9.4	100	S	16	7.2			Fg		Calm	0.75	19.0	Dense fog	
Helena, Montana	25.57	649.5			49	9.4	41	W	4	1.8		0	0			Inap.	Inap.	Clear	
Henrietta, Texas	29.09	738.9	30.08	764.0	33	0.6	70	NE	4	1.8		0	2s		Calm	0	0	Clear	
Indianapolis, Indiana	28.85	732.8	29.65	753.1	24	— 4.4	87	W	9	4.0			10n		Calm	0.75	19.0	Light snow.	
Indianola, Texas	30.07	763.8	30.10	764.5	54	12.2	67	NE	11	4.9		0	0			0	0	Clear	
Jacksboro, Texas	28.93	734.8	30.12	765.0	35	1.7	70	E	1	0.4		0	0			0	0	Clear	
Jacksonville, Florida	29.70	755.9	29.81	757.2	63	17.2	83	SW	7	3.1			10s		SW	0.86	21.8	Cloudy	
Keoknk, Iowa	29.27	743.4	29.97	761.2	13	—10.6	71	NW	13	5.8		0	1s		Calm	0.10	2.5	Clear	
Key West, Florida	29.94	760.5	29.97	761.2	75	23.9	86	SW	12	5.4		5cs	0	Calm		0	0	Fair	
Kittyhawk, North Carolina	29.63	752.6	29.66	753.4	58	14.4	94	SW	12	5.4		10c	0	W		1.22	31.0	Cloudy	
Knoxville, Tennessee	28.77	730.7	29.79	756.7	36	2.2	61	W	16	7.2			10s		W	0.53	13.5	Cloudy	
La Crosse, Wisconsin	29.23	742.4	30.04	763.0	5	—15.0	75	N	6	2.7		0	0			0	0	Clear	
La Mesilla, New Mexico	20.18	615.0	30.33	770.4	43	6.1	36	Calm	0	0		0	1s		Calm	0	0	Clear	
Laredo, Texas	29.68	753.9	30.03	762.7	50	10.0	79	S	1	0.4		0	0			0	0	Clear	
Leavenworth, Kansas	29.24	742.7	30.17	766.3	8	—13.3	78	NW	6	2.7		0	0			Inap.	Inap.	Clear	
Lewiston, Idaho	28.97	735.8	29.61	752.1	43	6.1	100	E	2	0.9			10n		Calm	1.25	31.7	Light rain	
Little Rock, Arkansas	29.77	756.1	30.11	764.8	32	0.0	59	NW	8	3.6		2k	0	W		0	0	Clear	
Los Angeles, California	29.71	754.6	30.08	764.0	51	10.6	86	NE	4	1.8		0	0			0	0	Clear	
Louisville, Kentucky	29.19	741.4	29.77	756.1	29	— 1.7	78	SW	13	5.8			10n		W	0.22	5.6	Light snow.	
Lynchburg, Virginia	28.86	733.0	29.53	750.0	47	8.3	85	W	2	0.9		0	8s		SW	0.60	15.2	Clearing	
Madison, Wisconsin	28.72	729.5	29.78	756.4	9	—12.8	78	NW	25	11.2			10s		NW	1.05	26.7	Cloudy	
Marquette, Michigan	29.22	742.2	30.00	762.0	2	—10.7	72	NW	28	12.5			10s		NW	0.09	2.3	Cloudy	
Mason, Texas	28.38	720.8	30.19	766.8	42	5.6	74	NW	2	0.9		0	0			0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Memphis, Tennessee	29.67	753.6	30.02	762.5	30	— 1.1	89	SW	6	2.7		0	0			0.09	2.3	Clear	
Milwaukee, Wisconsin	28.92	734.6	29.08	753.9	16	— 8.9	83	NW	25	11.2			10n		NW	0.63	16.0	Light snow.	
Mobile, Alabama	29.95	760.7	30.02	762.5	45	7.2	61	W	8	3.6		0	0			0	0	Clear	
Montgomery, Alabama	29.71	754.6	29.95	760.7	40	4.4	73	NW	8	3.6		0	0			0	0	Clear	
Moorhead, Minnesota	29.19	741.4	30.33	770.4	—25	—31.7	53	NE	8	3.6		0	0			0	0	Clear.	
Morgantown, W. Virginia	28.60	726.4	29.57	751.1	45	7.2	61	SW	14	6.3			10s		W	0.20	5.1	Cloudy	
Mt. Washington, N. H.	23.37	593.6	29.73	755.1	30	— 1.1	100	S	80	35.8			10n;fg		C;S	0.35	8.9	Sleeting	
Nashville, Tennessee	29.35	745.5	29.91	759.7	33	0.6	89	W	10	4.5			10n		W	0.07	1.8	Light snow.	
New Haven, Connecticut	29.42	747.3	29.54	750.3	48	8.9	100	Calm	0	0			10n;fg		Calm	1.09	27.7	Light rain	
New London, Connecticut	29.53	750.0	29.56	751.3	42	5.6	100	S	16	7.2			10n		S	1.13	28.7	Heavy rain.	
New Orleans, Louisiana	30.00	762.0	30.00	762.5	51	10.6	46	NW	10	4.5		0	Hz			0	0	Clear.	
Newport, Rhode Island	29.55	750.6	29.00	751.8	45	7.2	100	SE	23	10.3			10n;fg			1.10	27.9	Light rain	
New River, N. Carolina	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
New Shoreham, Rhode I'd.	29.59	751.6	29.02	752.3	48	8.9	100	SE	32	14.3			10n		SE	0.07	1.8	Heavy rain.	
New York, New York	29.37	746.0	29.54	750.3	46	7.8	100	SE	8	3.6			Fg		Calm	0.64	16.3	Dense fog	
Norfolk, Virginia	29.52	749.8	29.58	751.3	58	14.4	100	S	7	3.1		5cs	0	SW		0.60	15.2	Fair	
North Platte, Nebraska	27.05	687.1	29.71	754.6	29	— 1.7	89	S	4	1.8			10s		Calm	0	0	Cloudy	
Olympia, Washington T'y	29.68	753.9	29.72	754.9	50.0	10.0	90	S	4	1.8			10n		Calm	1.75	44.5	Light rain	
Omaha, Nebraska	28.97	735.8	30.21	767.3	— 2	—18.9	67	N	10	4.5		0	0			Inap.	Inap.	Clear	
Oswego, New York	29.09	738.9	29.41	747.0	41	5.0	82	S	6	2.7			10s		W	0.58	14.7	Cloudy	
Pensacola, Florida	30.00	762.0	30.03	762.7	48	8.9	70	NW	5	2.2		0	0			0	0	Clear	
Philadelphia, Pa	29.47	748.5	29.52	749.8	53	11.7	100	W	5	2.2			Fg		Calm	0.70	17.8	Dense fog	
Phœnix, Arizona	28.95	735.3	30.80	782.3	48	8.9	70	E	2	0.9		0	8ks		Calm	0	0	Cloudy	
Pike's Peak, Colorado	17.66	448.6	29.87	758.7	12	—11.1	61	NW	22	9.8		0	5s		NW	0	0	Fair	
Pilot Point, Texas	29.34	745.2	30.23	767.8	33	0.6	79	NE	6	2.7			10s		Calm	0	0	Cloudy	
Ploche, Nevada	24.14	613.1	29.91	759.7	37	2.8	53	Calm	0	0		0	0			0	0	Clear	
Pittsburg, Pennsylvania	28.70	730.5	29.50	750.8	38	3.3	72	W	8	3.6			10s		SW	0.11	2.8	Cloudy	
Port Huron, Michigan	28.73	729.7	29.39	746.5	29	— 1.7	78	S	12	5.4		0	5ks		SW	0.59	15.0	Fair	
Portland, Maine	29.76	755.9	29.82	757.4	36	2.2	90	NE	13	5.8			10n;fg		Calm	0.04	1.0	Light rain	
Portland, Oregon	29.76	755.9	29.83	757.7	50	10.0	96	S	12	5.4			10n		SW	1.80	45.7	Light rain	
Portsmouth, N. Carolina	...	...	...	...	53	11.7	100	SW	20	8.9			Fg		SW	0.89	22.6	Dense fog	
Prescott, Arizona	24.89	632.2	30.25	768.3	37	2.8	53	W	2	0.9		5c	0	Calm		0	0	Fair	
Punta Rassa, Florida	29.90	759.4	29.92	760.0	68	20.0	90	W	14	6.3			10s		SW	0 22	5.6	Threatening	
Red Bluff, California	29.73	755 1	30.08	764.0	56.0	13.3	90	S	9	4.0		Hz	4s	Calm	SW	0.02	0.5	Fair	
Rio Grande City, Texas	29.90	761.0	30.19	766.8	48	8.9	78	SW	3	1.3		0	0			0	0	Clear	
Rochester, New York	28.83	732.3	29.44	747.8	37	2.8	90	W	9	4.0			10n		W	0.30	7.6	Heavy rain.	
Roseburg, Oregon	29.34	745.2	29.90	759.4	55	12.8	77	E	4	1.8			10s		Calm	0.07	1.8	Cloudy	
Sacramento, California	30.04	763.0	30.11	764.8	52	11.1	93	SE	5	2.2		0	0			0	0	Clear	
St. Louis, Missouri	29.35	745.5	29.90	761.0	17	— 8.3	83	NW	20	8.9		0	8s		NW	0.05	1.3	Fair	
St. Paul, Minnesota	29.21	741.9	30.12	765.0	6	—14.4	76	NW	6	2.7		0	0			0	0	Clear	
Salt Lake City, Utah	25.72	653.3	30.05	763.3	41	5.0	57	SE	3	1.3		0	0			Inap.	Inap.	Clear	
San Antonio, Texas	29.42	747.3	30.15	765.8	43	6.1	75	Calm	0	0		0	0			0	0	Clear	
San Diego, California	29.99	761.7	30.00	763.5	52	11.1	87	NW	7	3.1		0	0			0	0	Clear	
Sandusky, Ohio	28.80	731.5	29.47	748.5	32	0.0	79	SW	25	11.2			10s		SW	0.23	5.8	Cloudy	
Sandy Hook, New Jersey	29.50	749.3	29.53	750.0	48	8.9	100	S	5	2.2			10s;fg		Calm	1.10	27.9	Cloudy	
San Francisco, California	30.05	763 3	30.11	764.8	52	11.1	96	N	2	0.9			Fg		Calm	0	0	Dense fog	
Santa Fé, New Mexico	23.31	592.1	29.85	758.2	37	2 8	93	N	4	1.8		0	0			0	0	Clear	
Savannah, Georgia	29.66	753.4	29.75	755.6	59	15.0	88	SW	7	3.1		5cs	Fg	SW	Calm	0.30	7.6	Fair	
Shreveport, Louisiana	29.92	760.0	30.18	766.6	38	3.3	54	N	5	2.2		0	5s		Calm	0	0	Fair	
Silver City, New Mexico	24.31	617 5	30.59	777.0	39	3.9	55	Calm	0	0		0	0			0	0	Clear	
Smithville, North Carolina	29.09	754.1	29.72	754.9	50	13.3	94	SW	16	7.2			10s		Calm	0.65	16.5	Cloudy	
Socorro, New Mexico	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Springfield, Illinois	29.18	741.2	29.90	759.4	17	— 8.3	67	W	13	5.8		0	1s		NW	0.21	5 3	Clear	
Springfield, Massachusetts	29.43	747 5	29.50	750.8	45	7.2	100	NE	6	2.7			10n		Calm	1.35	34.3	Light rain	
Stockton, Texas	29.99	685.5	29.99	761.7	46	7.8	47	NW	4	1.8		0	1s		Calm	0	0	Clear	
St. Vincent, Minnesota	29.37	746.0	30.32	770.1	—23	—30 6	100	NW	1	0.4		0	0			0	0	Clear	
Thatcher's Island, Mass.	29.05	753.1	29.70	754.4	42	5.6	100	SE	9	4.0			10n		SE	0.89	22.6	Light rain	
Toledo, Ohio	28.75	730.2	29.44	747.8	30	— 1.1	89	SW	28	12.5			10n		Calm	0.35	8.9	Light snow.	
Tucson, Arizona	27.02	701.5	30.17	766.3	48	8.9	43	S	4	1.8		0	0			0	0	Clear	
Umatilla, Oregon	29.48	748.8	29.97	761.2	53	11.7	64	W	16	7.2			10s		W	0.02	0.5	Cloudy	
Uvalde, Texas	29.16	740.7	30.03	762.7	40	4.4	63	SE	1	0.4		0	0			0	0	Clear	
Vicksburg, Mississippi	29.84	757.9	30.12	765 0	38	3.3	72	NW	12	5.4		0	0			0	0	Clear	
Visalia, California	29.73	755.1	30.10	764.5	47	8.3	92	Calm	0	0		0	0			0	0	Clear	
Washington, D. C.	29.42	747.3	29.54	750.3	52	11.1	93	W	1	0.4			10s;fg		W;C	0.30	7.6	Cloudy	
Wickenburg, Arizona	...	...	...	...	45	7.2	53	W	...	...	1	1c	0	Calm		0	0	Clear	
Wilmington, N. Carolina	29.64	752.8	29.09	754.1	57	13 9	94	SW	10	4.5			10s		Calm	0.84	21.3	Cloudy	
Winnemucca, Nevada	25.66	651.8	30.02	762.5	35	1.7	80	SE	2	0.9		0	0			0	0	Clear	
Wood's Holl, Mass.	29.58	751.3	29.02	752.3	50	10 0	93	SE	51	22.8			10n		SE	0.39	9.9	Light rain	
Yankton, Dakota	28.84	732.5	30.33	770.4	— 9	—22.8	50	Calm	0	0		0	0			0	0	Clear.	
Yuma, Arizona	29.88	758.9	30.03	762.7	53	11.7	73	Calm	0	0		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.10	561 3	...	...	51 .5	10 8	84	Calm	0	0		...	10n			1.26	32.0	Cloudy	Thomas Heran.
Buff Bay Town, Jam ica.‡	29.81	757.2	30.13	765.3	70	21.1	95	E	...	...	...	1c	0	...	...	...	...	...	
Havana, Cuba, W. I.	29.94	760.5	29.99	761.7	78	25.6	82	Calm	0	0		4cs	0	SW		0	0	Fair	Charles Hasselbrink.
Jakobshavn, Greenland	30.35	770 9	30.41	772.4	27.5	— 2.5	...	W	...	...	4	...	0	...	...	0	0	...	K. V. Möller.
Kingston, Jamaica, W. I.	30.02	762.5	30.03	762.7	71	21.8	77	Calm	0	0		5c	0	...	...	0	0	Fair	Robert Johnstone.
Navassa, W. I.	29.95	760.7	30.03	762.7	77	25.0	78	NE	7	3.1		8k	5s		NE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	29.93	760.2	29.93	760.2	77	25.0	85	E	...	...	2	...	8ks	E	...	1.920	48.77	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Colmbia	29.47	748.5	30.02	762.5	79	26.1	80	Calm	...	...	0	...	10s	...	N	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua	...	...	...	...	73.4	23	...	SE	...	...	1	7ck	0	SE	...	0	0	...	Earl Flint.
Santiago de Cuba, W. I.	30.02	762.5	30.04	763.0	74	23.3	81	Calm	0	0	...	1cs	0	...	...	0	0	Fair	Robert Mason.
St. Thomas, W. I.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	G. O. Gollich.
Upernavik, Greenland	30.43	773.0	30.50	774.6	29.1	— 1.6	...	W	...	...	6	...	8	...	...	0	0	...	K. Elberg.
York Factory, B. A.	30.29	769.4	30.35	770.9	—36.0	—37.8	...	S	14	6.3	...	2c	2s	S	S	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Near Malta, Mediterranean						ENE			1		0					1	NW	Blue sky	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 30° 32′, E 47° 51′	29.95	760.7	61	16.1	66	SE			1		5	SE				2	NNW	D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			45	7.2		Calm			0		5	NE						D. clouds	Comm. E. B. Pusey.
H. M. S. Blanche																			Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	30.02	762.5	79	26.1	72	E			1		6	NE				2	S	D' clouds	Comm. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cookatrice																			Capt. H. T. Gorfell.
H. M. S. Comus, N. 34° 41′, E. 135° 12′	29.92	760.0	45	7.2	68	N			1	3c		N						D. clouds	Capt. J. W. East.
H. M. S. Condor, Smyrna, Turkey, Asia	30.02	762.5	47	8.3	85	NW			1		5k							D. clouds	Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, Syracuse, Sicily	29.85	758.2	61	16.1		E			1		1	NE						Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa, Shanghai, China	30.15	765.8	50	10.0	93	NW			1		10							Overcast	Capt. W. H. Cuming.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.12	765.0	66	18.9	74	SE			1–2									D. clouds	Capt. J. Moresby.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dryad, N. 8° 34′, E. 81° 14′	29.81	757.2	82	27.8		NNE			1		3	NE				1	NE	D. clouds	Comm. John Hext.
H. M. S. Eclipse, N. 20° 25′, E. 87° 39′ †	30.08	764.0	80	26.7		ENE			1		2					0		D. clouds	Comm. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Goa, India	29.81	757.2	83	28.3	83	NW			3–4		3					3	NW	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 17° 55′, W. 64° 21′	30.02	762.5	78	25.6		ESE			2		4	E				2	ENE	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Capt. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Panama, Panama	29.95	760.7	72	22.2	90	NW			1		5							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.79	756.7				ESE			1									Drizzling	Capt. L. F. Jones.
H. M. S. Griffon																			Capt. J. Inglis.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 1° 17′, E. 103° 51′	29.85	758.2	78	25.6	91	Calm			0		5	NE				1–2	E	Misty	Capt. H. F. Cleveland.
H. M. S. Kingfisher																			Comm. R. H. Thornton
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Comm. S. Grove.
H. M. S. London, Zanzibar, Zanzibar, Africa	29.89	759.2	81	27.2	91	WSW			2–3		5	SW				1–2	SW	Showery	Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 25° 29′ E. 119° 29′	30.21	767.3	53.5	11.9	87	NE			3		10							Misty	Capt. R. H. Napier.
H. M. S. Malabar																			Capt. J. F. G. Grant.
H. M. S. Minatour, Vigo, Spain	29.84	757.9	59	15.0	73	NW			2		2	W						D. clouds	Capt. H. Rawson.
H. M. S. Modeste																			Capt. J. G. Mead.
H. M. S. Monarch. Famagusta, Cyprus, I'd	29.96	761.0	60	15.6	55	NE			1		2	N				Sm'h		D. clouds	Capt. G. Tyron, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Pt. Royal, Jamaica, W.I.	29.96	761.0	73	22.8	83	N			1		1							D. clouds	Capt. J. A. Fisher.
H. M. S. Orontes, N. 32° 40′, W. 43° 40′	29.90	759.4	63.0	17.2	91	W			5		5	NW				4	WNW	D. clouds	Capt. R. G. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, Elmina, Gold Coast, Africa.	29.89	759.2	82	27.8	91	SSW			1		1					2	S	Blue sky	Capt. Hon. A. C. Littleton
H. M. S. Ready																			Capt. H. H. Edwards.
H. M. S. Rifleman, N. 40° 37′, W. 16° 09′			55	12.8		WSW			3		3	W				3	W	D. clouds	Comm. P. H. W. Mayow.
H. M. S. Rocket																			
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	29.86	758.4	84	28.9	87	S			1		10							Raining	Capt. C. E. Foot.
H. M. S. Salamis, Lisbon, Portugal	29.85	758 2	61	16.1	66	NW			2		8	Calm						D. clouds	Capt. A. Fitz George.
H. M. S. Sea Gull, N. 14° 42′, E. 49° 35′	29.46	748.3	84	28.9	91	ESE			1–2	10k				Blank		4	ESE	D. clouds	Comm. M. Byles.
H. M. S. Seraphis																			Capt. G. P. Lewis.
H. M. S. Shannon, S. 12° 03′, W. 77° 09′	30.00	762.0	70	21.1	92	Calm			0		8					1	SSW	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 13° 05′, W. 59° 36	30.01	762.2	77	25.0	79	NE			2		5					Sm'h		D. clouds	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S Triumph, Coquimbo Bay, Chili, S.A.	30.00	762.0	64	17.8	83	NNW			2		10							Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 7° 30′, E. 75° 00′	29.83	757.7	79	26.1		E			1		0					1	E	Blue sky	Capt. J. E. Stokes.
H. M. S Urgent																			Comm. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverine																			Comm. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Aba, Shehr, Arabia	29.96	761.0	63.5	17.5	68	N			0–1		8	SW						D. clouds	Capt. R. D. Cummin.
H M. S. Zephyr																			Lt. Comm G. W. Pollard
GERMAN NAVAL SERIES.																			
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PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Porto Praya, Cape Verd Id's	30.02	762.6	76.1	24.5	72	NE			5		5					2	ENE	D. clouds	S. C da Silva Costa, Comd't.
Sado, St. Paul de Loando, Africa	29.89	759.3	84.6	29.2	78	NNW			3		2		NW			1		Blue sky	G. A de Brito Capello, Comd't
Tamega																			
SWEDISH NAVAL SERIES.																			
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H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.			Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.14	765.5	52	11.1	47	NW	6	2.7			0			0	0			Clear.	
N. Yard, Portsmouth, N. H.	29.81	757.2	36	2.2	100	NE	20	8.9			10		NE					Rainy	
Naval Hospital, Yokohama, Japan	29.71	754.6	39	3.9	95	NNE			3		10		NE	0.61	15.5			Raining	
Adams, Panama, Panama	29.97	761.2	74	23.3	90	NW			1		8		NW			Sm'h		Fair	
Alaska, N. Yard, Mare I'd, Cal.	30.09	764.3	54	12.2	87	Calm			0		10			0	0			Foggy	
Alert, Amoy, China *.	29.99	761.7	59	15.0	82	ENE			4		10		Calm	0	0	Sm'h		Misty	
Alliance, New Orleans, La	30.00	762.0	52	11.1	60	NW			2		0			0	0	Sm'h		Clear	
Ashuelot, Tientsin, China	30.13	765.3	33	0.6	89	Calm			0		0							Clear	
Colorado, New York, N. Y	29.49	749.0	43	6.1	100	Calm	0	0			10			0.02	0.5			Dense fog	
Constitution, N. Yard, League I'd., Pa	29.49	749.0	49	9.4	100	W	2	0.9										Dense fog	
Franklin, Norfolk, Va	29.56	750.8	59	15.0	88	SW	6	2.7			5		S	0.59	15.0			Fair	
Galena, Smyrna, Turkey	30.01	762.2	52	11.1	79	W			3		0					Sm'h		Clear	
Independence, N. Yard, Mare I'd, Cal	30.12	765.0	54	12.2	93	SW	15.6	7.0			8		SW	0	0			Cloudy	
Jamestown, Sitka, Alaska *.	29.06	738.1	32	0.0		WNW			1		10			0.20	5.1	Sm'h		Snowing	
Kearsarge, New Orleans, La	29.99	761.7	53	11.7	61	WNW			2		2		Calm					Fair	
Marion, S. 51° 50′, W. 58° 00′ *†	30.02	762.5	47	8.3	92	ENE			3		10					Mod.	NE	Cloudy	
Michigan, Erie, Pennsylvania	29.43	747.5	37	2.8		SW	4	1.8			10		SW					Cloudy	
Minnesota, New York, N. Y	29.53	750.0	50	10.0	93	Calm			0		10							Foggy	
Monocacy, Shanghai, China	30.24	768.1	47	8.3	85	NNW			2		10		Calm					Cloudy	
New Hampshire, Port Royal, S. C	29.72	754.9	57	13.9	94	S	12	5.4			8		WSW	0.28	7.1			Fair	
Nipsic, Valencia, Spain	29.72	754.9	61	16.1	61	WNW			3		2		W			Sm'h		D. clouds	
Onward, Callao, Peru †.	29.93	760.2	71	21.7	95	Calm			0		5					Long	N;W	Fair	
Palos, Shanghai, China	30.25	768.3	45	7.2	84	NNW			1		10							Overcast	
Passaic, Washington, D. C	29.61	752.1	50	10.0	93	S			1		10		Calm					Foggy	
Pensacola, S. 4° 35′, W. 21° 21′	29.96	761.0	76	24.4	86	SE			3		5			0	0	Sm'h	S	Fair	
Powhatan, New York, N. Y	29.60	751.8	46	7.8	100	S			2		10							Dense fog	
Quinnebaug, Villafranca, France	29.77	756.1	55	12.8	80	Calm			0		10		Calm			Sm'h		Rainy	
Richmond, Hong-Kong, China	30.08	764.0	65	18.3	94	W			1		8		W	0.09	2.3			Misty	
Saratoga, Alexandria, Va	29.46	748.3	51	10.6	100	NNW			1		10		Calm	Heavy				Cloudy	
Shenandoah, Montevideo, Uruguay *	29.89	759.2	68	20.0	84	WSW			5		0		WSW			Mod.	SW	Fair	
St. Louis, League Island, Pa	29.69	754.1	46	7.8	?	Calm	0	0			10			0.80	20.3			Rain & fog	
Tennessee, New Orleans, La	30.11	764.8	50	10.0	58	NW	9	4.0			2			0	0	Sm'h		Clear	
Ticonderoga, N. Yard, Mare Id., Cal.	30.13	765.3	56	13.3	94	W			1		0			0	0			Foggy	
Trenton, Villafranca, France *	29.75	755.6	57	13.9	69	SE			3		10			10h'rs	h'vy	Sm'h		Cloudy	
Vandalia. Frederichstäd, W. I	30.04	763.0	77	25.0	82	NNE			1		2		NE					Fair	
Wabash, Boston, Massachusetts	29.72	754.9	43	6.1	100	SE	8	3.6			10			0.33	8.4			Rain & fog	
Wachusetts, N. 12° 54′, W. 89° 25′ *.	29.61	752.1	80	26.7	87	NNW			2		2		N			Sm'h		Fair	
Wyoming, Villafranca, France	29.76	755.9	54	12.2	74	SE			1		10		Calm			Sm'h		Overcast	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				

BRITISH MERCHANT-MARINE SERIES.

Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.

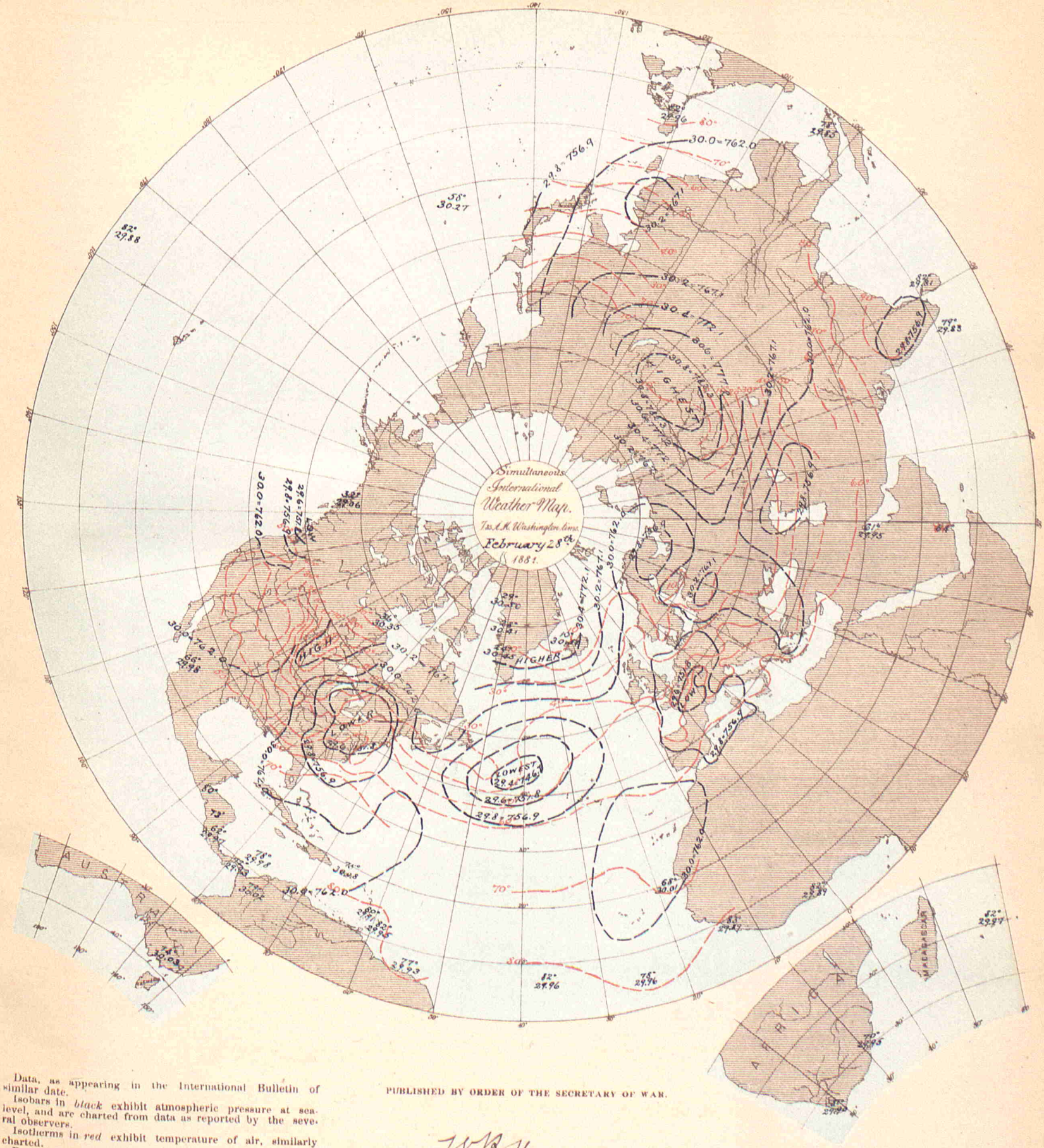
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda ‡																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N 11° 14′, W. 77° 34′	29.98	761.5	77.5	25.3	86	NE			3		6							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang ‡																			Capt. H. Youlden.
S. S. Cipero, N. 47° 35′, W. 25° 05′	29.68	753.9	49	9.4		ESE			6		10					6	W	Raining	W. N. Lailey.
City of Agra, ‡ N. 6° 15′, W. 37° 05′	29.96	761.0	81.5	27.5	77	ENE			4		8						NE	D. clouds	Capt. T. Young.
Barque Commewyne, ‡ N. 52° 14′, W. 21° 21′	29.98	761.5	47.5	8.6	74	NE			4		5							D. clouds	Capt. W. Scott.
Barque Copename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra, ‡ N. 3° 54′, W. 25° 13′	29.96	761.0	78	25.6	80	ESE			6		10							Raining	Capt. H. Spalding.
Ship Ellen Stuart, ‡ S. 13° 07′, E. 86° 30′	29.86	758.4	81.5	27.5	83	NW			3		8							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia ‡																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Home																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 21° 23′, W. 37° 40′	30.01	762.2	82.5	28.1	77	NNE			3		1c;ck		WNW					D. clouds	Capt. Jas. Campbell.
Ship Iron Cross, N. 27° 15′, W. 19° 48′	30.16	766.1	67.8	19.9		ESE			3		4							D. clouds	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland ‡																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee ‡																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 18° 13′, W. 17° 40′	30.01	762.2	67.5	19.7	84	NE			5		0							Blue sky	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡ S. 1° 57′, E. 82° 09′	29.84	757.9	82	27.8	87	Var.			1–2		10							Overcast	Capt. R. J. Blacklin.
S. S. Yorkshire, N. 34° 10′, W. 70° 35′	29.80	756.9	66	18.9	89	SSE			6		10					4	S	Overcast	
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Circassian, N. 53° 10′, W. 31° 05′	30.27	768.8	45	7.2	92	E			5		5		ESE	1 h'r	rain	Mod.	ESE; ENE	Showery	
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian ‡																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Scythia, N. 41° 46′, W. 57° 21′	29.80	756.9	38	3.3	100	N			6		8		NW	0	0	Mod.	NNW	Cloudy	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic ‡																			Capt. J. W. Jennings.
S. S. Baltic ‡																			Capt. H. Parsell.
S. S. Britannic, N. 49° 38′, W. 34° 15′	29.57	751.1	47	8.3		Var.			2		8		E			Mod.		Raining	Capt. H. Perry.
S. S. Celtic, N. 42° 25′, W. 49° 09′	29.50	749.3	27	— 2.8		NW			5		10		NW	0	0	Mod.	NW	Cloudy	Capt. Benj. Gleadell.
S. S. Germanic, ‡ Off Queenstown, Ireland	29.97	761.2	36	2.2		NNE			4		0			0	0	Sm'h		Clear	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. B. I. Irving.

GERMAN MERCHANT--MARINE SERIES.

NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Undütsch.
S. S. Hermann																			Capt. H. Maur.
S. S. Köln																			
S. S. Leipzig ‡																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg, N. 43° 04′, W. 52° 07′	29.60	751.8	31.1	— 0.5		NNW			5		8		NNW	4 h'rs	snow	R'gh	WNW	Snowing	

SWEDISH MERCHANT--MARINE SERIES.

Barque Adolph Fredholm ‡																			Capt Albert Fredholm.
Ship Peru, ‡ N. 31° 36′, W. 75° 28′	29.72	754 8	70.7	21.5	91	S			7		10							Overcast	Capt O. F. Skötertrand.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

WAR DEPARTMENT,
OFFICE OF THE CHIEF SIGNAL OFFICER OF THE ARMY OF THE UNITED STATES.

INTERNATIONAL

SIMULTANEOUS METEOROLOGICAL OBSERVATIONS

INCLUDING A MONTHLY SUMMARY WITH DAILY BULLETINS AND ACCOMPANYING CHARTS.

FOR THE MONTH OF FEBRUARY, 1881.

PRINTED FOR EXCHANGE WITH CO-OPERATING OBSERVERS.

WASHINGTON, D. C.:
MARCH, 1882.

MONTHLY SUMMARY

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

FEBRUARY, 1881.

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for February, 1881.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	O	Miles	Kil.	0–10	Inch.	Mill.
Algerian Series.	° ′	° ′																								
Mogador	N. 31 30	W. 9 44	11.29 a.m.	56	17	.....	.....	30.05	763.2	64.4	18.0	77.6	.....	1	6	5	.....	1	.....	14	1	.....	.....	4	4.11	104.5
Nemours	N. 35 06	W. 1 51	12.01 p.m.	20	6	.....	.....	29.92	759.9	64.4	18.0	84.0	3	5	7	6	4	2	.....	1	.....	.....	.....	2	1.10	27.8
Algiers	N. 36 47	E. 3 04	0.20 p.m.	99	325	.....	.....	29.95	760.6	61.7	16.5	64.9	2	2	11	6	1	2	3	.....	1	.....	.....	6	3.31	84.0
La Calle	N. 36 54	E. 8 26	0.42 p.m.	36	11	.....	.....	29.94	760.5	61.0	16.1	76.1	2	10	4	1	5	3	.....	3	.....	.....	.....	5	4.52	114.8
Tunis	N. 36 47	E. 10 11	0.49 p.m.	46	14	.....	.....	29.90	759.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sfax	N. 34 45	E. 10 36	0.50 p.m.	?	?	.....	.....	30.00	762.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saida	N. 34 51	E. 0 10	0.09 p.m.	2844	867	.....	.....	30.00	761.9	58.3	14.6	53.8	.....	2	16	1	5	3	1	.....	.....	.....	.....	5	1.26	32.0
Tebessa	N. 35 24	E. 8 06	0.40 p.m.	2890	881	.....	.....	30.00	762.1	55.2	12.9	45.7	5	7	5	1	2	4	.....	4	.....	.....	.....	6	1.25	31.7
Geriville	N. 33 45	E. 1 10	0.13 p.m.	4285	1306	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Laghouat	N. 33 48	E. 2 51	0.19 p.m.	2556	770	.....	.....	30.03	762.8	59.9	15.5	59.6	3	.....	6	4	7	4	3	1	.....	.....	.....	3	1.25	31.7
Biskra	N. 34 51	E. 5 40	0.31 p.m.	410	125	.....	.....	30.06	763.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Australian Series.																										
Melbourne	S. 37 49	E. 144 58	9.47 p.m.	91	28	29.96	761.0	30.05	763.3	63.4	17.4	70.3	3	1	.....	3	8	12	.....	.....	1	.....	.....	4	0.29	7.4
Sub-Series.																										
Hobart Town	S. 42 52	E. 147 22	9.58 p.m.	105	32	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Austro-Hungarian Series.																										
Agram	N. 45 47	E. 15 53	1.12 p.m.	512	156	29.46	748.2	30.03	762.7	35.8	2.1	83.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	1.24	31.6
Cracow	N. 50 04	E. 20 00	1.28 p.m.	722	220	29.19	741.5	30.00	762.1	32.7	0.4	87.4	.....	1	7	8	.....	1	2	9	.....	.....	.....	6	0.39	10.0
Eperies	N. 48 58	E. 21 15	1.33 p.m.	820	250	29.09	738.9	30.00	762.1	34.5	1.4	73.0	1	3	.....	.....	8	3	.....	.....	13	.....	.....	1	0.22	5.7
Gratz	N. 47 04	E. 15 28	1.10 p.m.	1171	357	28.72	729.5	30.02	762.5	35.8	2.1	74.3	.....	2	2	16	7	1	.....	.....	.....	.....	.....	5	0.34	8.5
Hermannstadt	N. 45 47	E. 24 13	1.45 p.m.	1355	412	28.54	724.8	30.04	762.9	31.5	−0.3	86.4	2	2	1	1	6	9	6	1	.....	.....	.....	6	3.31	84.0
Kronsmünster	N. 48 04	E. 14 08	1.04 p.m.	1200	384	28.57	725.7	29.97	761.2	32.0	0.0	89.3	.....	.....	2	5	.....	.....	.....	8	13	.....	.....	8	0.66	16.7
Lemberg	N. 49 50	E. 24 00	1.44 p.m.	978	298	29.00	736.5	30.02	762.6	30.9	− 0.6	73.1	.....	5	.....	3	1	15	.....	4	.....	.....	.....	7	0.49	12.4
Pola	N. 44 52	E. 13 51	1.03 p.m.	105	32	29.84	757.9	29.96	760.9	47.3	8.5	66.7	1	1	6	3	.....	7	4	5	1	.....	.....	6	4.86	123.5
Szathmar	N. 47 49	E. 22 51	1.39 p.m.	430	131	29.57	751.0	30.03	762.7	34.3	1.3	82.1	4	4	3	4	4	3	6	.....	.....	.....	.....	5	0.79	20.1
Szegedin *b*	N. 46 15	E. 20 07	1.28 p.m.	256	78	29.74	755.5	30.03	762.7	32.5	0.3	76.1	1	3	.....	.....	11	2	2	.....	7	.....	.....	6	0.06	1.5
Trieste	N. 45 39	E. 13 46	1.04 p.m.	85	26	29.88	759.0	29.98	761.6	45.1	7.3	65.3	2	.....	1	1	.....	.....	5	5	14	.....	.....	6	0.94	23.9
Vienna	N. 48 12	E. 16 22	1.14 p.m.	663	202	29.27	743.5	30.02	762.6	34.2	1.2	74.8	1	2	5	.....	1	15	1	.....	3	.....	.....	8	0.57	14.4
Belgian Series.																										
Brussels	N. 50 51	E. 4 22	0.26 p.m.	187	57	29.64	752.8	29.84	758.0	40.6	4.8	79.4	2	3	3	2	5	3	4	5	1	.....	.....	8	2.54	64.4
Furnes	N. 51 04	E. 2 40	0.19 p.m.	20	6	29.80	756.8	29.82	757.4	41.2	5.1	81.1	5	2	3	4	1	4	6	.....	.....	.....	.....	8	1.52	38.6
Maeseyck	N. 51 06	E. 5 48	0.32 p.m.	118	35	29.72	754.9	29.85	758.1	40.8	4.9	82.9	4	.....	6	5	1	.....	8	4	.....	.....	.....	8	2.34	59.3
British Series.																										
Aberdeen	N. 57 10	W. 2 06	0.00 m.	86	26	29.74	755.4	29.84	757.9	35.9	2.2	83.7	2	7	3	2	5	4	3	2	.....	.....	.....	8	4.46	113.3
Armagh	N. 54 21	W. 6 39	11.42 a.m.	206	63	29.59	751.6	29.83	757.7	40.9	4.9	82.9	3	1	4	3	3	5	5	4	.....	.....	.....	7	.....	.....
Bidston	N. 53 24	W. 3 04	11.58 a.m.	180	85	.....	.....	29.80	756.9	39.3	4.1	80.4	3	4	1	6	1	6	6	1	.....	.....	.....	7	.....	.....
Bolton	N. 53 35	W. 2 28	11.58 a.m.	481	145	29.25	742.9	29.79	756.7	37.5	3.1	85.8	3	4	2	3	2	8	2	4	.....	.....	.....	8	.....	.....
Bradford *d*	N. 53 48	W. 1 47	0.01 p.m.	362	110	29.37	746.0	29.76	755.9	38.0	3.3	87.5	.....	2	1	6	.....	6	2	7	.....	.....	.....	9	4.04	102.6
Bridgetown	N. 13 04	W. 59 37	8.10 a.m.	28	9	29.94	760.5	29.98	761.5	81.1	27.3	68.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	.....
Cardington	N. 52 08	W. 0 27	0.06 p.m.	109	33	.....	.....	29.82	757.4	40.4	4.7	84.6	5	3	2	1	4	4	3	6	.....	.....	.....	8	.....	.....
Chatham	N. 51 25	E. 0 33	0.10 p.m.	120	37	29.74	755.4	29.88	758.9	40.0	4.4	77.8	2	3	3	4	2	3	1	6	4	.....	.....	8	.....	.....
Falmouth	N. 50 09	W. 5 04	11.48 a.m.	200	61	29.61	752.1	29.84	757.9	44.4	6.9	78.9	1	5	4	2	4	1	6	5	.....	.....	.....	8	.....	.....
Fort Napier	S. 30 00	E. 31 00	2.12 p.m.	2200	671	27.59	700.8	29.80	756.9	75.0	23.9	84.3	.....	3	.....	1	.....	3	1	20	.....	.....	.....	4	.....	.....
Free Town	N. 8 30	W. 13 14	11.15 a.m.	224	68	29.62	752.3	29.85	758.2	86.0	30.0	87.4	.....	3	8	8	1	4	2	2	.....	.....	.....	7	.....	.....
Galway	N. 53 15	W. 9 03	11.32 a.m.	25	8	.....	.....	29.70	754.4	.....	.....	.....	6b	1	4	2	4	2	1	5	1	.....	.....	8	.....	.....
Gibraltar	N. 36 06	W. 5 21	11.47 a.m.	50	15	29.96	761.0	30.01	762.2	61.6	16.4	92.5	2	5	10	4	.....	1	3	.....	.....	.....	.....	8	.....	.....
Glasgow	N. 55 53	W. 4 17	11.51 a.m.	90	27	29.60	751.8	29.81	757.2	37.6	3.1	77.7	3	2	5	2	4	2	2	8	.....	.....	.....	5	.....	.....
Greenwich	N. 51 29	0 00	0.08 p.m.	159	48	29.67	753.6	29.85	758.2	39.7	4.3	84.5	5	3	1	5	5	1	1	7	.....	.....	.....	9	.....	.....
Guernsey	N. 49 27	W. 2 41	11.58 a.m.	204	62	29.61	752.1	29.84	757.9	44.6	7.0	81.0	2	4	1	4	1	4	5	7	.....	.....	.....	9	.....	.....
Kew	N. 51 28	W. 0 19	0.07 p.m.	34	10	29.78	756.4	29.82	757.4	39.8	4.3	78.0	8	4	2	1	6	3	.....	4	.....	.....	.....	9	.....	.....
Leicester	N. 52 39	W. 1 08	0.04 p.m.	245	75	29.55	750.6	29.81	757.2	40.3	4.6	81.4	2	.....	.....	9	5	2	.....	10	.....	.....	.....	8	.....	.....
Malta	N. 36 00	E. 14 30	1.06 p.m.	111	34	29.78	756.4	29.86	758.4	59.7	15.4	73.9	.....	9	1	5	.....	9	1	3	.....	.....	.....	5	.....	.....
Nassau	N. 25 04	W. 77 22	6.58 a.m.	44	13	.....	.....	30.10	764.5	71.0	21.7	76.5	2	3	.....	.....	5	4	5	9	.....	.....	.....	4	.....	.....
Oscott	N. 52 28	W. 1 55	0.00 m.	483	147	29.30	744.2	29.84	767.9	38.9	3.8	83.5	6	3	3	1	3	5	.....	6	1	.....	.....	8	.....	.....
Oxford	N. 51 46	W. 1 17	0.03 p.m.	232	70	29.61	752.1	29.87	758.7	39.7	4.3	83.9	7	4	1	2	3	6	2	1	2	.....	.....	9	.....	.....
Plymouth	N. 50 22	W. 4 10	11.51 a.m.	69	21	29.76	755.9	29.83	757.7	43.4	6.3	84.2	.....	2	4	4	.....	5	4	9	.....	.....	.....	8	.....	.....
Sandwick Manse	N. 59 05	W. 3 20	11.54 a.m.	94	29	.....	.....	29.85	758.2	36.1	2.3	90.9	3	2	2	.....	7	4	6	4	.....	.....	.....	9	.....	.....
Scutari Cemetery	N. 41 00	E. 29 03	2.04 p.m.	60	18	29.88	758.9	29.95	760.7	42.9	6.1	80.3	11	1	.....	2	.....	1	.....	13	.....	.....	.....	8	.....	.....
Sheffield	N. 53 23	W. 1 28	0.02 p.m.	260	79	29.55	750.6	29.83	757.7	39.1	3.9	85.0	1	.....	2	5	4	2	2	11	1	.....	.....	8	.....	.....
Silloth Rectory	N. 54 52	W. 3 22	11.54 a.m.	28	9	29.77	756.1	29.80	756.9	40.3	4.6	83.5	4	.....	5	.....	.....	4	9	1	5	.....	.....	8	.....	.....
Stonyhurst	N. 53 51	W. 2 28	11.58 a.m.	363	110	.....	.....	29.82	757.4	37.4	3.0	82.6	1	3	3	1	4	2	6	8	.....	.....	.....	7	.....	.....
Strathfield Turgiss	N. 51 17	W. 0 53	0.04 p.m.	197	60	29.64	752.8	29.86	758.4	40.2	4.6	82.6	2	2	3	3	7	.....	.....	8	.....	.....	.....	9	.....	.....
Truro	N. 50 16	W. 5 04	11.53 a.m.	43	13	29.77	756.1	29.83	757.7	48.2	9.0	81.2	1	3	4	5	2	2	5	6	.....	.....	.....	8	.....	.....
Valencia	N. 51 55	W. 10 18	11.27 a.m.	20	6	29.77	756.1	29.79	756.7	45.5	7.5	78.7	4	.....	2	2	2	6	5	7	.....	.....	.....	8	.....	.....

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for February, 1881.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
Canadian Series	o /	o /																								
Bathurst	N. 47 39	W. 65 43	7.45 a.m.	4	1																					
Charlottetown	N. 46 14	W. 63 10	7.55 a.m.	38	12	29.97	761.2	30.01	762.2	17.1	— 8.3	94.0	4	6	6	3	2	2	.....	.....	5	5442	8758	6	4.20	106.7
Chatham	N. 47 03	W. 65 29	7.45 a.m.	50	15	29.98	761.5	30.05	763.3	11.6	—11.3	90.4	2	4	3	5	.....	.....	.....	3	11	2858	4599	7	2.39	60.7
Chicontimi																										
Cornwall	N. 45 01	W. 74 43	7.09 a.m.	175	53																					
Dalhousie	N. 48 04	W. 66 21	7.32 a.m.	30	9																					
Father Point	N. 48 31	W. 68 28	7.34 a.m.	20	6	30.07	763.8	30.09	764.3	12.9	—10.6	76.2	3	12	1	4	2	2	.....	4	.....	8376	13480	7	1.16	29.5
Fort Garry	N. 49 51	W. 97 07	5.39 a.m.	758	231	29.34	745.2	30.25	768.3	- 4.3	—20.2	98.9	4	4	1	5	.....	8	2	4	.....	.....	.....	6	3.74	95.0
Fredericton	N. 45 57	W. 66 39	7.41 a.m.	59	18																					
Granton	N. 43 12	W. 81 21	6.43 a.m.	1015	309																					
Halifax	N. 44 39	W. 63.36	7.53 a.m.	122	37	29.92	760.0	30.06	763.5	22.7	— 5.2	90.0	2	9	8	2	2	2	1	2	.....	.....	.....	6	3.69	93.7
Hamilton	N. 43 16	W. 79 53	6.49 a.m.	332	101																					
Kingston	N. 44 14	W. 76 30	7.02 a.m.	335	102	29.81	757.2	30.17	766.3	14.4	— 9.8	87.1	3	5	2	4	5	3	2	2	2	3748	6032	6	2.80	71.1
Little Glace Bay	N. 46 11	W. 59 58	8.08 a.m.	34	10																					
Montreal	N. 45 31	W. 73 33	7.13 a.m.	187	57	29.95	760.7	30.16	766.1	13.5	—10.3	84.0	1	3	7	6	3	2	2	2	2	.....	.....	7	3.45	87.6
Moose Factory	N. 51 16	W. 80 56	6.44 a.m.	30	9																					
Parry Sound	N. 45 19	W. 80 01	6.48 a.m.	641	195	29.42	747.3	30.15	765.8	9.8	—12.3	82.0	3	.....	5	2	6	5	3	.....	4	6837	11003	6	1.58	40.1
Peterborough	N. 44 17	W. 78 20	6.54 a.m.	688	210																					
Port Dover	N. 42 47	W. 80 13	6.47 a.m.	635	194	29.47	748.5	30.19	766.8	15.2	— 9.3	96.4	3	7	1	7	3	1	1	4	4970	7998	7	1.77	45.0
Port Stanley	N. 42 40	W. 81 13	6.43 a.m.	592	180	29.48	748.8	30.19	766.8	14.5	— 9.7	88.8	3	3	8	1	.....	1	11	1	.....	.....	.....	8	4.05	102.9
Quebec	N. 46 48	W. 71 12	7.23 a.m.	293	89	29.80	756.9	30.15	765.8	9.1	—12.7	82.8	1	5	13	1	.....	.....	1	5	2	.....	.....	6	1.68	42.7
Rockliffe	N. 46 10	W. 77 48	6.57 a.m.	418	127	29.69	754.1	30.20	767.1	5.6	—14.7	84.8	.....	6	3	1	...	1	9	.....	8	.....	.....	5	1.68	42.7
Saugeen	N. 44 30	W. 80 21	6.42 a.m.	641	208	29.39	746.5	30.13	765.3	14.1	— 9.9	88.4	1	3	1	2	6	6	2	6	1	8103	13040	7	1.62	41.1
St. Andrews	N. 43 04	W. 81 06	6.34 a.m.	?	?	30.02	762.5	30.08	764.0	18.6	— 7.4	84.8	3	11	.....	3	2	2	.....	1	6	.....	.....	4	3.21	81.5
St. John, N.B.	N. 45 17	W. 66 03	7.44 a.m.	150	46																					
Stratford	N. 43 23	W. 81 00	6.44 a.m.	1182	360																					
Sydney	N. 46 08	W. 60 10	8.07 a.m.	27	8	29.94	760.5	29.99	761.7	18.5	— 7.5	91.7	3	2	6	6	1	2	1	1	6	5487	8830	7	5.26	133.6
Toronto	N. 43 39	W. 79 23	6.50 a.m.	350	150	29.78	756.4	30.20	767.1	16.8	— 8.4	90.3	6	7	2	3	1	2	3	2	2	7136	11484	6	0.85	21.6
Windsor																										
Woodstock	N. 43 08	W. 80 47	6.48 a.m.	980	299																					
Yarmouth	N. 43 50	W. 66 02	7.44 a.m.	61	19	30.01	762.2	30.08	764.0	24.5	— 4.2	79.5	7	7	.....	3	2	2	3	4	.....	.....	.....	6	4.80	121.9
Sub-Series.																										
St. Johns, N. F.	N. 47 34	W. 52 42	8.37 a.m.	230	70	29.74	755.4	30.01	762.2	24.3	— 4.3	88.9	1	6	5	7	2	4	.....	3	.....	.....	.....	5	4.34	110.2
St. Pierre	N. 46 47	W. 56 08	8.24 a.m.	?	?																					
Cape Colony Series.																										
Cape St. Francis	S. 34 10	E. 21 53	1.48 p.m.	25	7	29.92	760.0	.....	.....	68.9	20.5	86.0	.....	.....	7	6	2	7	6	.....	.....	.....	.....	4	0.25	6.3
Cape Town	S. 34 02	E. 18 29	1.22 p.m.	27	8	29.92	760.0	29.96	761.0	45.5	7.5	51.4	1	3	2	1	19	2	.....	.....	.....	.....	.....	4	0.11	2.8
Chinese Series.																										
Zi-Ka-Wei	N. 31 12	E. 121 26	8.14 p.m.	23	7	30.23	767.8	30.26	768.5	41.0	5.0	87.3	8	1	2	.....	1	3	7	6	.....	.....	.....	7	2.11	53.5
Costa Rica Series.																										
San José	N. 9 56	W. 84 00	6.15 a.m.	3757	1145	26.24	666.5	29.95	760.7	61.9	16.6	87.9	.....	.....	.....	.....	.....	13	.....	9	6	.....	.....	2	.0	.0
Danish Series.																										
Copenhagen	N. 55 41	E. 12 36	0.58 p.m.	46	13	29.87	758.7	29.92	759.9	28.2	— 2.1	85.0	5	1	.....	2	1	13	3	1	2	.....	.....	8	.....	.....
Fanöe	N. 55 27	E. 8 24	0.42 p.m.	20	6	29.85	758.2	29.87	758.6	29.1	— 1.5	90.6	5	1	2	1	3	2	8	5	1	.....	.....	8	.....	.....
Godthaab	N. 64 11	W. 51 46	8.41 a.m.	36	11	29.67	753.6	29.71	754.7	17.6	— 8.0	81.0	8	1	1	.....	1	2	.....	10	5	.....	.....	6	.....	.....
Stykkisholm	N. 65 05	W. 22 46	10.37 a.m.	36	11	29.80	757.0	29.85	758.1	14.5	— 9.7	88.8	.....	.....	1	1	4	1	18	2	1	.....	.....	5	.....	.....
Thorshavn	N. 62 02	W. 6 44	11.41 a.m.	29	9	29.90	759.4	29.93	760.3	37.2	2.9	78.6	4	.....	1	.....	6	.....	5	7	5	.....	.....	8	.....	.....
Vestervig	N. 56 47	E. 8 20	0.41 p.m.	82	25	29.83	757.6	29.92	760.0	26.6	— 3.0	.....	4	.....	1	1	2	.....	6	10	4	.....	.....	8	.....	.....
French Series.																										
Agen	N. 44 12	E. 0 38	0.11 p.m.	604	184	29.28	743.8	29.93	760.2	51.6	10.9	73.6	1	3	5	1	1	16	.....	1	.....	.....	.....	.....	1.08	27.3
Alençon	N. 48 25	E. 0 06	0.09 p.m.	476	145	29.37	746.0	29.92	760.0	42.3	5.7	90.9	3	6	.....	7	5	.....	.....	7	.....	.....	.....	7	2.16	54.9
Arras	N. 50 17	E. 2 47	0.19 p.m.	239	73	29.00	751.8	29.85	758.5	39.9	4.4	85.3	2n	4	2	4	3	3	1	8	.....	.....	.....	.....	.....	.....
Avignon	N. 43 57	E. 4 38	0.25 p.m.	65	20	29.88	758.9	29.96	760.9	52.9	11.6	58.8	14	2	.....	1	.....	5	5	1	.....	.....	.....	5	1.67	42.4
Bar-sur-Seine	N. 48 06	E. 4 22	0.25 p.m.	517	157	29.34	745.3	29.89	759.3	47.5	8.6	73.2	.....	2	2	2	9	9	3	1	.....	.....	.....	8	1.78	45.2
Beauvais	N. 49 26	E. 2 04	0.16 p.m.	246	75	29.61	752.0	29.88	758.9	42.3	5.7	79.9	4	1	2	2	2	4	5	6	2	.....	.....	9	1.35	34.4
Besançon	N. 47 14	E. 6 01	0.32 p.m.	829	250	29.06	738.0	29.97	761.3	46.4	8.0	75.1	.....	.....	4	2	14	3	3	2	.....	.....	.....	.....	3.40	87.8
Bordeaux	N. 44 50	E. 0 32	0.06 p.m.	243	74	29.64	752.9	29.89	759.3	52.0	11.1	71.4	4	4	2	1	4	13	.....	.....	.....	.....	.....	8	2.04	51.8
Bourges	N. 47 10	E. 2 24	0.17 p.m.	510	156	29.32	744.6	29.86	758.5	47.5	8.6	77.4	1	2	1	4	5	4	4	7	.....	.....	.....	.....	2.85	72.4
Brest	N. 48 23	W. 4 29	11.50 a.m.	213	65	29.65	753.0	29.89	759.3	48.7	9.3	83.6	1	3	2	5	4	1	.....	11	1	.....	.....	7	6.79	172.4
Caen	N. 49 11	W. 0 21	0.07 p.m.	69	21	29.72	754.9	29.80	756.9	46.4	8.0	96.8	5	3	2	1	4	5	3	5	.....	.....	.....	8	2.14	54.3
Châlons-sur-Marne	N. 48 57	E. 4 23	0.25 p.m.	294	90	29.57	751.1	29.91	759.6	45.3	7.4	84.7	2n	2	2	4	9	6	2	.....	.....	.....	.....	7	1.97	50.0
Charleville	N. 49 46	E. 4 42	0.27 p.m.	476	145	29.34	745.1	29.88	759.0	43.5	6.4	73.1	2	2	.....	3	10	6	5	.....	.....	.....	.....	6	3.64	92.5
Clermont-Fd	N. 45 45	E. 3 04	0.20 p.m.	1273	388	28.53	724.6	29.92	759.9	49.1	9.5	59.4	1	5	3	2	8	6	3	.....	.....	.....	.....	7	1.91	48.5
Cluny	N. 46 26	E. 4 39	0.27 p.m.	787	240	29.09	738.9	29.94	760.4	49.3	9.6	74.6	4	2	.....	3	7	9	1	2	.....	.....	.....	4	0.87	22.0
Commercy	N. 48 45	E. 5 35	0.30 p.m.	817	249	29.02	737.0	29.91	759.6	42.8	6.0	82.6	2	1	5	3	3	6	8	.....	.....	.....	.....	.....	2.49	63.2
Gap	N. 44 34	E. 6 04	0.32 p.m.	2427	740	27.39	695.8	29.98	761.5	41.9	5.5	62.5	4	2	2	1	13	3	.....	3	.....	.....	.....	5	0.98	25.0
Gréasque	N. 43 24	E. 5 37	0.31 p.m.	1056	322	28.84	732.5	29.98	761.6	50.2	10.1	59.5	1	.....	.....	.....	5	7	.....	15	.....	.....	.....	6	1.26	31.9
Grenoble	N. 45 11	E. 5 43	0.31 p.m.	715	218	29.17	741.0	29.96	760.9	46.2	7.9	67.5	3	3	3	2	1	4	.....	12	.....	.....	.....	.....	2.81	71.3
Guéret	N. 46 10	E. 1 52	0.16 p.m.	1486	453	28.31	719.0	29.90	759.4	47.8	8.8	70.0	.....	3	2	11	2	10	.....	.....	.....	.....	.....	.....	4.56	115.7
Lamballe	N. 48 28	W. 2 31	11.59 a.m.	252	77	29.00	751.8	29.88	758.9	46.2	7.9	82.6	9	.....	.....	.....	3	7	5	4	.....	.....	.....	.....	1.60	40.7
Lescar	N. 43 21	W. 0 26	0.06 p.m.	525	160	29.33	745.0	30.00	762.1	54.1	12.3	77.1	2n	2	6	2	1	.....	7	7	.....	.....	.....	5	3.70	94.1
Lorient	N. 47 44	W. 3 21	11.55 a.m.	86	26	29.80	758.8	29.90	759.4	49.5	9.7	86.2	6	2	2	3	1	5	3	6	.....	.....	.....	7	4.56	115.7
Lyons	N. 45 45	E. 4 49	0.27 p.m.	574	175	28.87	733.3	29.92	759.9	48.0	8.9	63.6	1	3	1	1	11	8	3	.....	.....	.....	.....	5	1.22	31.0
Mans	N. 48 01	E. 0 12	0.09 p.m.	285	87	29.60	751.7	29.92	759.9	44.1	6.7	86.4	3	2	3	1	7	.....	6	6	.....	.....	.....	6	2.28	57.9
Marseilles	N. 43 18	E. 5 23	0.29 p.m.	246	75	29.66	753.4	29.93	760.3	53.8	12.1	62.9	1	6	4	2	1	1	13	.....	.....	.....	.....	6	1.37	34.8
Mont-Louis *g*	N. 42 30	E. 2 07	0.16 p.m.	5203	1586	24.66	620.3	29.89	759.3	38.7	3.7	61.8	1	1	6	7	.....	2	3	1	.....	.....	.....	4	1.90	48.2
Montpelier	N. 43 36	E. 3 54	0.24 p.m.	102	31	29.84	757.9	29.95	760.7	52.5	11.4	70.3	4b	7	2	1	1	4	4	3	.....	.....	.....	5	2.31	58.7
Nancy	N. 48 41	E. 6 11	0.33 p.m.	712	217	29.12	739.7	29.90	759.4	43.0	6.1	79.4	1	3	3	8	7	6	1	.....	.....	.....	.....	7	1.17	29.7
Nantes	N. 47 13	W. 1 33	0.02 p.m.	134	41	29.75	755.6	29.91	759.7	48.9	9.4	82.9	4	1	4	4	1	2	5	7	.....	.....	.....	7	2.03	51.6
Nice	N. 43 41	E. 7 16	0.37 p.m.	29	9	29.88	758.9	29.91	759.7	55.6	13.1	61.3	1	1	4	3	.....	3	13	3	.....	.....	.....	7	0.82	20.7
Perpignan	N. 42 42	E. 2 53	0.19 p.m.	98	30	29.83	757.6	29.94	760.4	53.6	12.0	62.7	6	5	.....	1	2	9	3	1	1	.....	.....	6	6.24	158.6
Pic du Midi (Pltde)	N. 42 15	E. 0 08	0.08 p.m.	7763	2366	22.35	597.8	.....	.....	30.2	— 1.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	9.60	243.7
Privas	N. 44 44	E. 4 35	0.26 p.m.	997	304	28.90	734.0	29.97	761.1	48.9	9.4	66.3	8c	3	1	.....	6	3	.....	2	.....	.....	.....	5	0.35	9.0
Puy de Dome	N. 45 46	E. 2 58	0.20 p.m.	4813	1467	24.95	633.7	.....	.....	31.5	— 0.3	93.0	2	1	5	3	3	6	8	.....	.....	.....	.....	8	5.82	147.7
Rochefort	N. 45 56	W. 0 58	0.04 p.m.	29	9	29.89	759.1	29.91	759.8	52.5	11.4	77.0	*a*	2	5	3	2	8	5	2	.....	.....	.....	6	5.39	136.8
Roche-sur-Yon	N. 46 40	W. 1 26	0.14 p.m.	198	60	29.69	754.2	29.91	759.8	49.1	9.5	81.3	4	3	2	3	2	6	6	2	.....	.....	.....	6	0.96	24.5
Rodez	N. 44 21	E. 2 35	0.18 p.m.	2050	625	27.78	705.6	29.96	761.1	44.4	6.9	73.5	.....	3	7	.....	2	1	14	1	.....	.....	.....	5	2 32	59.0
Rouen	N. 49 26	E. 1 14	0.13 p.m.	80	24	29.77	756.2	29.85	758.3	44.2	6.8	71.6	4	1	1	1	4	9	1	7	.....	.....	.....	6	1.99	50.6
Saint Lô	N. 49 06	W. 1 05	0.04 p.m.	134	41	29.72	754.8	29.87	758.8	45.0	7.2	80.9	1	3	8	1	2	6	3	4	.....	.....	.....	6	2.10	53.4
Saint Maur	N. 48 48	E. 2 21	0.18 p.m.	162	49	29.71	754.7	29.88	758.9	43.0	6.1	81.2	7	6	3	4	3	3	1	1	.....	.....	.....	9	1.62	41.1
Toulouse	N. 43 37	E. 1 27	0.14 p.m.	636	194	29.23	742.5	29.96	760.9	50.4	10.2	76.7	.....	3	7	1	1	15	1	.....	.....	.....	.....	7	3.28	83.2
Tours	N. 47 24	E. 0 41	0.11 p.m.	171	52	29.70	754.4	29.91	759.6	48.4	9.1	74.0	2	3	3	1	3	7	6	3	.....	.....	.....	7	2.02	51.2
Versailles	N. 48 48	E. 2 07	0.16 p.m.	445	136	29.38	746.2	29.87	758.7	42.4	5.8	81.4	5	5	2	4	4	4	.....	4	.....	.....	.....	.....	1.54	39.2
Sub-Series.																										
Paris, Montsouris	N. 48 50	E. 2 20	0.18 p.m.	213	66																					

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for February, 1881.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
German Series.	o /	o /																								
Bamberg	N. 49 54	E. 10 53	1.51 p.m.	774	236	29.04	737.5	29.90	759.4	*37.8	3.2	73.9	3	2	4	1	3	8	4	1	2	.....	.....	5	1.59	40.4
Berlin	N. 52 30	E. 13 23	1.02 p.m.	157	48	29.73	755.1	29.91	759.6	35.1	1.7	71.5	1	8	.....	5	2	8	2	2	.....	.....	.....	7	1.19	30.2
Breslau	N. 51 07	E. 17 02	1.17 p.m.	482	147	29.44	747.8	29.97	761.2	33.6	0.9	74.7	.....	1	5	3	3	10	3	1	2	.....	.....	7	0.56	14.2
Carlsruhe	N. 49 01	E. 8 25	0.42 p.m.	404	123	29.48	748.8	29.91	759.7	37.8	3.2	77.5	1	1	.....	8	2	3	9	4	.....	.....	.....	7	2.46	62.4
Cassel	N. 51 19	E. 9 28	0.46 p.m.	561	171	29.24	742.8	29.85	758.3	38.3	3.5	78.2	3	1	3	3	5	7	4	2	.....	.....	.....	6	1.76	44.6
Frankfort on M.	N. 50 08	E. 8 41	0.43 p.m.	338	103	29.59	751.6	29.97	761.2	39.6	4.2	74.2	3	6	6	10	3	.....	.....	.....	.....	.....	.....	7	2.50	63.5
Friedrichshafen	N. 47 39	E. 9 29	0.45 p.m.	1355	413	28.48	723.5	29.90	761.0	38.5	3.6	79.5	3	5	14	3	1	.....	2	.....	.....	.....	.....	6	1.26	32.0
Hamburg	N. 53 33	E. 9 58	0.48 p.m.	66	20	29.82	757.5	29.89	759.3	32.7	0.4	80.8	5	1	6	1	9	5	1	.....	.....	.....	.....	6	1.60	40.7
Kiel	N. 54 20	E. 10 04	0.49 p.m.	26	8	29.87	758.6	29.88	759.0	30.6	—0.8	86.8	1	2	3	.....	3	.....	10	3	6	.....	.....	7	0.99	25.2
Leipsic	N. 51 20	E. 12 24	0.58 p.m.	390	119	29.49	749.0	29.92	760.0	35.4	1.9	77.5	3	2	5	5	3	4	6	.....	.....	.....	.....	7	1.00	25.3
Magdeburg	N. 52 09	E. 11 37	0.54 p.m.	210	64	29.67	753.6	29.90	759.5	34.0	1.1	81.2	1	2	4	.....	2	6	7	3	3	.....	.....	7	0.94	23.8
Memel	N. 55 43	E. 21 07	1.32 p.m.	39	12	29.97	761.3	30.02	762.6	27.5	—2.5	85.8	1	.....	4	2	7	7	4	3	.....	.....	.....	8	.....	.....
Munich	N. 48 09	E. 11 34	0.55 p.m.	1732	528	28.08	713.1	29.92	760.0	30.7	2.6	70.8	8	2	7	1	.....	.....	4	3	3	.....	.....	6	0.84	21.2
Neufahrwasser	N. 54 24	E. 18 40	1.25 p.m.	16	5	29.97	761.3	29.99	761.7	30.9	—0.6	81.3	2	6	1	8	3	6	2	.....	.....	.....	.....	7	0.62	15.7
Neustadt a.	N. 49 21	E. 8 08	0.41 p.m.	479	146	29.34	745.2	29.87	758.6	41.2	5.1	77.3	.....	4	4	5	1	.....	.....	.....	13	.....	.....	7	2.20	56.0
Stuttgart	N. 48 47	E. 9 11	0.45 p.m.	879	268	28.93	734.9	29.85	758.2	41.7	5.4a	70.0	10	3	5	1	3	.....	3	3	.....	.....	.....	5	1.63	41.5
Thorn	N. 53 01	E. 18 36	1.24 p.m.	171	52	29.76	755.9	29.95	760.6	32.2	0.1	76.0	.....	5	2	7	3	4	3	3	1	.....	.....	8	0.59	14.3
Weissenburg	N. 49 02	E. 10 58	0.52 p.m.	1414	431	28.37	720.6	29.89	759.2	38.8	3.8	74.4	.....	2	8	5	2	2	2	3	4	.....	.....	7	0.75	19.1
Wustrow	N. 54 21	E. 12 24	0.58 p.m.	23	7	29.90	759.4	29.92	760.0	29.5	—1.4	95.2	3	2	3	2	4	3	9	1	1	.....	.....	8	1.20	30.5
Greek Series.																										
Athens	N. 37 58	E. 23 43	1.43 p.m	266	81	29.53	750.0	29.94	760.4	51.4	10.8	.....	2	3	2	3	1	.....	.....	17	.....	.....	.....	6	.....	.....
Indian Series.																										
Kurachee	N. 24 47	E. 67 04	4.36 p.m.	49	15	29.90	759.4	29.95	760.7	75.8	24.9	66.4	.....	.....	1	17	8	.....	.....	2	.....	.....	.....	3	0.06	1.5
Deesa a	N. 24 16	E. 72 14	4.57 p.m.	474	144	29.46	748.3	29.93	760 2	85.6	29.8	20.4	2	4	9	6	2	.....	1	3	.....	.....	.....	4	0	0
Bombay	N 18 54	E. 72 49	4.59 p.m.	37	11	29.91	759.7	29.95	760.7	81.5	27.5	66.1	.....	16	9	2	.....	.....	.....	1	.....	.....	.....	1	0	0
Poona	N. 18 28	E. 74 10	5.05 p.m.	2000	610	28.05	712.7	29.89	759.2	86.2	30.1	17.6	2	1	7	4	4	2	6	2	.....	.....	.....	2	0	0
Belgaum	N. 15 52	E. 74 42	5.07 p.m.	2550	777	27.38	695.4	29.89	759.2	82.4	28.0	22.4	1	.....	1	11	2	1	7	5	.....	.....	.....	2	0	0
Lahore	N. 31 34	E. 74 20	5.41 p.m.	732	223	29.21	741.9	29.97	761.2	72.3	22.4	41.9	3	1	8	.....	.....	.....	4	3	9	.....	.....	5	1.32	33.5
Roorkee	N. 29 52	E. 77 56	5.20 p.m.	887	270	29.05	737.9	29.97	761.2	71.4	21.9	49.1	2	5	3	.....	1	1	.....	4	12	.....	.....	5	0.32	8.1
Agra	N. 27 10	E. 78 05	5.20 p.m.	555	175	29.41	747.0	29.97	761.2	79.5	26.4	29.7	1	2	10	2	2	2	0	2	1	.....	.....	2	0	0
Nagpur	N. 21 09	E. 71 11	4.52 p.m.	1025	312	28.90	734.0	29.93	760.2	86.8	30.4	30.3	.....	2	.....	5	3	4	2	1	11	.....	.....	5	0	0
Jubulpore	N. 23 09	E. 79 59	5.28 p.m.	1351	412	28.60	726.4	29.98	761.5	77.0	25.0	34.8	8	3	4	.....	.....	.....	2	7	4	.....	.....	4	0.24	6.1
Lucknow	N. 26 50	E. 81 00	5.32 p.m.	369	112	29.59	751.6	29.97	761.2	77.4	25.2	38.0	11	5	5	.....	.....	1	.....	4	2	.....	.....	3	0.06	1.5
Alahabad a.	N. 25 26	E. 81 52	5.36 p.m.	307	94	29.04	752.8	29.96	761.0	73.8	23.2	45.2	3	3	1	.....	.....	.....	.....	2	18	.....	.....	3	0.04	1.0
Patna	N. 25 37	E. 85 08	5.48 p.m.	179	55	29.81	757.2	29.99	761.7	74.6	23.7	59.7	1	1	25	.....	.....	.....	1	.....	.....	.....	.....	3	0.04	1.0
Hazaribagh	N. 24 00	E. 85 24	5.49 p.m.	2010	613	27.93	709.4	29.97	761.2	73.0	22.8	30.9	4	18	4	.....	.....	1	.....	.....	1	.....	.....	2	0	0
Cuttack	N. 20 29	E. 85 54	5.52 p.m.	80	24	29.88	758.9	29.96	761.0	82.8	28.2	42.2	.....	1	1	1	5	3	.....	1	16	.....	.....	1	0	0
Calcutta	N. 22 33	E. 88 21	6.01 p.m.	18	5	29.92	760.0	29.95	760.7	77.5	25.3	40.4	1	6	4	7	3	.....	1	.....	10	.....	.....	1	0	0
Goalpara	N. 20 11	E. 90 40	6.11 p.m.	386	118	29.54	750.3	29.95	760.7	72.3	22.4	55.2	1	4	6	1	.....	.....	.....	5	11	.....	.....	1	0.02	0.5
Chittagong a	N. 22 21	E. 91 50	6.15 p.m.	90	25	29.89	759.2	29.98	761.5	75.3	24.1	67.0	.....	2	14	8	2	.....	.....	1	.....	.....	.....	1	0	0
Sibsagar	N. 26 59	E. 94 40	6.27 p.m.	332	101	29.66	753.4	30.00	762.0	66.4	19.1	78.4	.....	2	1	2	.....	3	1	19	.....	.....	.....	4	1.85	47.0
Italian Series.																										
Udine	N. 46 04	E. 13 14	1.01 p.m.	381	116	29.56	750.8	29.98	761.4	44.8	7.1	51.4	.....	.....	.....	1	.....	.....	7	.....	20	.....	.....	5	0.30	9.1
Milan	N. 45 28	E. 9 11	0.45 p.m.	482	147	29.44	747.8	29.97	761.3	42.1	5.6	72.3	2	1	1	9	3	2	4	0	.....	.....	.....	0	0	0
Padua	N. 45 24	E. 11 53	0.56 p.m.	102	31	29.87	758.6	29.98	761.5	43.3	6.3	70.9	5	5	1	1	1	3	1	9	2	.....	.....	0	0.30	7.5
Moncalieri	N. 44 59	E. 7 41	0.39 p.m.	853	260	29.06	738.0	29.98	761.0	40.5	4.7	69.0	2	0	.....	.....	1	.....	10	3	.....	.....	.....	5	0.44	11.3
Genoa	N. 44 25	E. 8 30	0.42 p.m.	157	48	29.75	755.7	29.95	760.7	49.5	9.7	55.0	17	1	.....	2	1	.....	2	5	.....	.....	.....	0	1.77	44.7
Mondovi	N. 44 22	E. 7 48	0.39 p.m.	1824	556	28.03	711.9	30.01	762.2	40.5	4.7	66.0	3	6	14	1	.....	.....	3	1	.....	.....	.....	4	0.11	2.7
Pesaro	N. 43 55	E. 12 53	1.00 p.m.	46	14	29.91	759.8	29.97	761.3	44.1	6.7	78.9	1	21	2	2	1	.....	.....	1	.....	.....	.....	7	0.72	18.3
Florence	N. 43 46	E. 11 14	0.53 p.m.	240	73	29.66	753.3	29.92	759.9	49.6	9.8	53.6	5	5	1	1	.....	.....	.....	10	.....	.....	.....	0	0.20	5.2
Leghorn a	N. 43 32	E. 10 18	0.49 p.m	79	24	29.81	757 2	29.90	759.5	50.4	10.2	64.4	3	1	1	1	1	.....	19	.....	.....	.....	.....	7	0.01	0.2
Rome	N. 41 54	E. 12 29	0.58 p.m.	164	50	29.71	754 7	29.89	759.2	53.8	12.1	48.1	9	5	2	2	.....	.....	3	1	0	.....	.....	5	0.96	24.5
Lecce	N. 40 21	E. 18 12	1.21 p.m.	236	72	29.05	753.1	29.90	759.4	52.5	11 4	64.6	5	5	5	1	3	3	0	.....	..	.....	.....	5	1.42	36.1
Cosenza	N. 39 18	E. 16 15	1.13 p.m.	840	256	29.00	736.7	29.91	759.7	50.2	10.1	71.1	3	11	2	.....	.....	.....	0	1	5	.....	.....	8	0.85	173.9
Cagliari	N. 39 13	E. 9 10	0.45 p.m.	180	55	29.67	753.6	29.87	758.6	58.5	14.7	62.2	.....	12	.....	.....	1	7	7	.....	1	.....	.....	7	2.58	65.4
Palermo	N. 38 07	E. 13 22	1.02 p.m.	236	72	29.62	752.4	29.89	759.2	57.2	14.0	57.8	1	8	2	5	1	2	3	4	2	.....	.....	8	5.10	129.5
Syracuse a	N. 37 03	E. 15 18	1.09 p.m.	43	13	29.84	757.8	29.87	758.8	57.2	14.0	09.1	1	1	4	3	1	5	11	1	.....	.....	.....	8	3.82	97.0
Sub-Series.																										
Naples	N. 40 52	E. 14 18	1.05 p.m.	489	149	29.36	745.8	29.89	759.2	53.6	12.0	60.6	4	5	2	3	3	1	4	0	.....	.....	.....	4	1.46	37.0
Stelvio	N. 46 37	E. 10 32	0.50 p.m.	8343	2543	22.06	560.4	.....	.....	20.7	—6.3	70.7	1	.....	1	0	0	2	6	0	.....	.....	.....	4	0.71	18.0
Valdobbia	N. 45 47	E. 12 00	0.56 p.m.	8360	2548	21.97	558.1	.....	.....	23.0	—5.0	76.6	3	1	.....	.....	1	5	10	2	.....	.....	.....	5	1.02	26.0
Japanese Series.																										
Hiroshima	N. 34 20	E. 132 27	8.58 p.m.	14	4	30.19	766.7	30.21	767.4	37.6	3.1	76.5	19	1	3	1	1	.....	.....	3	.....	.....	.....	4	2.59	65.7
Kioto	N. 35 01	E. 135 46	9.14 p.m.	162	49	29.98	761.5	30.17	766.3	35.6	2.0	81.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	3.17	80.6
Nagasaki	N. 32 44	E. 129 51	8.47 p.m.	189	58	29.98	761.6	30.20	767.0	41.7	5.4	79.9	7	5	1	1	1	2	.....	4	7	.....	.....	5	4.11	104.5
Tokei	N. 35 40	E. 139 45	9.27 p.m.	63	19	30.00	761.9	30.06	763.6	37.4	3.0	73.2	4	7	2	1	2	2	3	4	3	.....	.....	4	2.39	60.6
Wakayama	N. 34 14	E. 135 09	9.09 p.m.	48	15	30.10	764.6	30.16	766.1	39.9	4.4	75.7	9	0	2	.....	.....	1	8	2	.....	.....	.....	6	2.71	68.9
Mauritius Ser's.																										
Mauritius	S. 20 06	E. 57 33	3.58 p.m.	181	55	29.82	757.4	30.01	762.2	80.6	27.0	65.6	.....	1	1	1	1	2	17	5	.....	.....	.....	5	3.85	97.8
Mexican Series.																										
Leon	N. 21 07	W. 101 35	5.22 a.m.	5902	1799	24.45	621.0	30.24	768.2	50.0	10.0	82.7	13	6	4	3	.....	1	.....	1	.....	.....	.....	4	0.13	3.4
Mazatlan	N. 23 11	W. 106 17	5.03 a.m.	249	76	29.70	755.8	30.02	762.5	65.5	18.6	84.4	7	3	.....	.....	1	.....	11	6	.....	.....	.....	3	0.09	2.2
Mexico	N. 19 26	W. 99 00	5.32 a.m.	7490	2283	23 10d	586.8d	30 2 d	768.6d	45.9	7.7	68.5	.....	1	1	2	.....	.....	.....	.....	24	.....	.....	3	0.24	6.0
Pabellon a	N. 22 04	W. 102 04	5.20 a.m.	6312	1924	23.91	607.2	30.00	762.1	47.8	8.8	70.2	3	2	1	2	.....	1	.....	1	17	.....	.....	4	0.18	4.5
Puebla	N. 19 02	W. 98 03	5.36 a.m.	7113	2168	23.38	593.7	30.29	769.3	43.2	6.2	45.7	1	.....	.....	1	2	.....	.....	.....	24	.....	.....	2	.....	.....
San Luis Potosi	N. 22 10	W. 100 51	5.25 a.m.	6211	1893	24.24	615.6	30.27	768.9	48.2	9.0	58.7	.....	.....	1	13	1	4	8	1	.....	.....	.....	4	.....	.....
Tlacotalpam	N. 18 37	W. 95 32	5.40 a.m.	13	4	30.01	762.2	30.02	762.5	67.5	19.7	90.5	8	3	2	1	6	1	.....	7	.....	.....	.....	6	0.38	9.6
Zacatecas a	N. 22 44	W. 102 26	5.18 a.m.	8189	2496	22.48	571.1	30.27	768.8	43.2	6.2	60.7	e	.....	.....	2	1	.....	3	.....	10	.....	.....	7	0.08	2.0

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for February, 1881.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	O	Miles	Kil.	0–10	Inch.	Mill.
Netherland Series.	o /	o /																								
Flushing	N. 51 24	E. 3 35	0.22 p.m.	0	0	29.85	758.2	29.85	758.2	39.7	4.3	.....	5	3	1	2	5	5	6	1	.....	.....	.....	.....	2.19	55.7
Groningen	N. 53 12	E. 6 34	0.34 p.m.	0	0	29.80	757.0	29.86	758.4	34.9	1.6	.....	6	.....	2	4	4	.....	4	.....	.....	.....	.....	.....	1.35	34.4
Helder	N. 52 58	E. 4 45	0.27 p.m.	0	0	29.82	757.5	29.82	757.5	34.5	1.4	.....	4	2	.....	2	7	2	4	7	.....	.....	.....	.....	2.77	70.3
Hellevoetsluis	N. 51 49	E. 4 80	0.25 p.m.	0	0	29.84	757.8	29.84	757.8	38.8	3.8	.....	1	2	1	2	3	5	11	1	2	.....	.....	.....	0.32	8.1
Utrecht	N. 52 05	E. 5 07	0.29 p.m.	43	13	29.82	757.3	29.86	758.5	38.8	3.8	81.4	5	3	1	5	2	3	6	3	.....	.....	.....	2	3.08	78.1
Norwegian Series.																										
Bergen	N. 60 24	E. 5 20	0.29 p.m.	49	15	29.86	758.5	29.93	760.1	32.0	0.0	71.1	1	.....	1	.....	2	3	.....	.....	21	.....	.....	5	1.64	41.7
Christiania	N. 59 55	E. 10 45	0.51 p.m.	134	41	29.89	759.1	30.04	763.1	22.8	—5.1	69.7	7	3	.....	.....	.....	5	3	8	2	.....	.....	6	0.68	17.4
Gjæsvær	N. 71 07	E. 25 22	1.49 p.m.	23	7	29.93	760.2	29.95	760.7	21.4	—5.9	.....	3	1	4	4	3	6	.....	4	3	.....	.....	6	.....	.....
Lodingen	N. 68 24	E. 16 01	1.12 p.m.	43	13	29.99	761.8	30.04	763.0	22.3	—5.4	71.1	4	.....	4	.....	5	2	2	3	8	.....	.....	4	1.06	27.0
Portuguese Series.																										
Angra	N. 38 39	W. 27 14	10.19 a.m.	144	44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Campo Major	N. 39 02	W. 6 59	11.40 a.m.	945	288	28.97	735.8	29.98	761.5	54.3	12.4	59.2	1	.....	3	12	2	7	3	.....	.....	.....	.....	8	4.08	103.7
Funchal	N. 32 38	W. 16 55	11.00 a.m.	82	25	30.03	762.8	30.12	765.1	63.3	17.4	59.2	1	.....	3	12	2	7	3	.....	.....	.....	.....	5	1.33	33.8
Lisbon	N. 38 42	W. 9 08	11.31 a.m.	335	102	29.67	753.5	30.03	762.8	55.6	13.1	74.9	5	5	4	6	3	.....	.....	3	2	.....	.....	7	3.85	97.7
Ponta Delgada	N. 37 45	W. 25 41	10.25 a.m.	66	20	30.10	764.6	30.17	766.4	58.6	14.8	71.9	6	3	3	9	4	.....	1	1	1	.....	.....	6	2.30	58.5
Russian Series.																										
Akmolinski	N. 51 03	E. 71 22	4.54 p.m.	?	?	29.06	738.1	30.26	768.5	4.5	-15.3	79.6	1	1	3	10	1	3	2	2	5	.....	.....	5	.....	.....
Archangel	N. 64 33	E. 40 32	2.50 p.m.	16	5	30.07	763.7	30.09	764.2	10.2	-12.1	88.4	3	1	6	.....	7	4	3	1	3	.....	.....	8	.....	.....
Astrakhan	N. 46 21	E. 48 02	3.20 p.m.	‖ 72	‖ 22	30.27	768.9	30.19	766.8	26.4	—3.1	78.9	4	3	2	.....	.....	1	7	8	3	.....	.....	8	.....	.....
Barnaul	N. 53 20	E. 83 47	5.45 p.m.	482	147	29.80	756.9	30.36	771.1	- 2.4	-19.1	70.6	.....	.....	.....	14	.....	.....	.....	2	12	.....	.....	4	.....	.....
Dorpat	N. 58 23	E. 26 43	1.55 p.m.	223	68	29.82	757.3	30.08	764.0	19.9	—6.7	83.9	2	.....	3	1	5	4	11	2	.....	.....	.....	7	.....	.....
Ekaterinburg	N. 56 49	E. 60 35	4.11 p.m.	876	267	29.13	739.9	30.18	766.5	34.3	1.3	62.6	2	3	9	5	1	6	.....	.....	2	.....	.....	6	.....	.....
Kasan	N. 55 47	E. 49 08	3.25 p.m.	249	76	29.98	701.4	30.27	768.9	14.9	—9.5	72.3	6	.....	6	4	3	5	1	1	2	.....	.....	6	.....	.....
Kertch	N. 45 21	E. 36 29	2.34 p.m.	20	6	30.00	762.0	30.03	762.8	34.0	1.1	85.5	6	1	.....	.....	3	2	7	8	1	.....	.....	6	.....	.....
Kieff	N. 50 26	E. 30 31	2.10 p.m.	600	183	29.43	747.5	30.11	764.8	23.7	—4.6	86.7	5	2	1	1	3	5	7	4	.....	.....	.....	9	.....	.....
Lugan	N. 48 35	E. 39 20	2.46 p.m.	187	57	29.93	700.1	30.14	765.6	20.4	—3.1	79.3	3	.....	.....	1	.....	2	11	11	.....	.....	.....	8	.....	.....
Moscow	N. 55 46	E. 37 40	2.39 p.m.	512	156	29.05	753.1	30.24	768.2	19.6	—6.9	74.5	2	.....	1	1	12	5	2	3	2	.....	.....	7	.....	.....
Nertchinsk	N. 51 19	E. 119 37	8.07 p.m.	1942	592	27.85	707.4	30.50	774.8	-13.5	-25.3	68.8	1	6	.....	.....	.....	.....	.....	.....	21	.....	.....	3	.....	.....
Nikolaiev	N. 46 58	E. 31 58	2.16 p.m.	62	19	30.03	762.7	30.10	764.5	27.3	—2.6	88.3	11	.....	.....	.....	2	1	5	9	.....	.....	.....	8	.....	.....
Nikolaievsk *a*	N. 53 08	E. 140 45	9.31 p.m.	59	18	29.72	755.0	29.81	757.2	- 1.8	-18.8	74.4	.....	.....	17	.....	.....	.....	.....	.....	10	.....	.....	6	.....	.....
Nukuss *b*	N. 42 27	E. 59 37	4.07 p.m.	216	66	29.92	759.9	30.04	763.1	38.1	3.4	71.0	3	3	3	3	.....	1	2	7	4	.....	.....	5	.....	.....
Pekin	N. 39 57	E. 116 29	7.54 p.m.	125	38	30.17	766.2	30.31	769.8	25.5	—3.6	44.4	.....	5	.....	3	1	3	.....	1	15	.....	.....	2	.....	.....
St. Petersburg	N. 59 56	E. 30 16	2.09 p.m.	16	5	30.11	764.7	30.13	765.3	18.7	—7.4	78.8	1	3	3	.....	3	11	4	1	2	.....	.....	7	.....	.....
Tashkend	N. 41 19	E. 69 16	4.45 p.m.	1621	494	28.57	725.7	30.17	766.2	45.3	7.4	67.1	1	3	.....	.....	.....	.....	1	2	21	.....	.....	7	.....	.....
Tiflis	N. 41 43	E. 44 47	3.07 p.m.	1342	409	28.61	726.8	30.06	763.4	46.8	8.2	61.9	1	5	.....	.....	3	7	5	.....	7	.....	.....	9	.....	.....
Warsaw	N. 52 13	E. 21 02	1.32 p.m.	394	120	29.57	751.1	30.02	762.4	29.5	—1.4	74.4	3	3	1	4	1	11	3	.....	2	.....	.....	8	.....	.....
Wilna	N. 54 51	E. 25 18	1.49 p.m.	387	118	29.05	753.0	30.10	764.4	27.7	—2.4	80.0	2	1	1	3	8	8	1	1	3	.....	.....	8	.....	.....
Yeniseisk	N. 58 27	E. 92 09	6.16 p.m.	128	39	30.00	761.9	30.32	770.1	—5.3	-20.7	73.4	.....	1	2	5	3	8	.....	.....	9	.....	.....	3	.....	.....
Scottish Series.																										
Leith	N. 55 58	W. 3 10	11.55 a.m.	83	25	.....	.....	29.83	757.7	38.3	3.5	79.1	2	2	6	3	4	1	6	4	.....	.....	.....	7	2.81	71.4
Monach Lt. House	N. 57 31	W. 7 42	11.37 a.m.	150	46	.....	.....	29.77	756.1	41.2	5.1	90.7	2	.....	2	1	3	10	6	4	.....	.....	.....	6	4.40	111.8
North Unst	N. 60 51	W. 0 53	0.04 a.m.	230	70	.....	.....	29.87	758.7	.....	.....	.....	3	2	.....	1	9	2	5	6	.....	.....	.....	6	.....	.....
Spanish Series.																										
Barcelona	N. 41 23	E. 2 11	0.16 p.m.	98	30	29.81	757.1	29.94	760.5	55.9	13.3	74.5	1	.....	5	2	2	4	9	5	.....	.....	.....	4	4.01	101.9
Bilbao	N. 43 15	W. 2 59	11.56 a.m.	56	17	29.90	759.5	29.96	760.9	59.5	15.3	61.3	1	6	1	1	8	9	1	1	.....	.....	.....	6	3.04	77.2
Burgos	N. 42 20	W. 3 46	11.53 a.m.	2821	860	26.99	685.5	.....	.....	46.4	8.0	71.3	3	1	4	7	3	5	1	4	.....	.....	.....	7	2.07	52.5
Madrid	N. 40 25	W. 3 42	11.53 a.m.	2152	656	27.73	704.4	29.98	761.6	52.3	11.3	69.5	1	3	2	3	6	6	2	5	.....	.....	.....	7	1.67	42.5
Murcia †	N. 37 59	W. 1 10	0.03 p.m.	141	43	29.79	756.6	29.94	760.5	64.2	17.9	60.9	.....	10	6	3	1	3	1	4	.....	.....	.....	6	2.70	68.6
Santiago	N. 42 53	W. 8 28	11.34 a.m.	863	263	28.99	736.3	29.88	759.0	53.6	12.0	81.2	2	2	1	11	4	7	.....	1	.....	.....	.....	8	7.39	187.6
Sub-Series.																										
Havana	N. 23 08	W. 82 28	7.39 a.m.	62	19	30.02	762.4	30.09	764.2	68.2	20 1	80.2	6	2	.....	.....	.....	7	4	2	7	.....	.....	3	2.55	64.7
Manilla	N. 14 36	E. 121 00	8.12 p.m.	56	17	29.97	761.2	30.02	762.4	80.2	26.8	69.1	.....	.....	.....	1	.....	10	14	3	.....	.....	.....	1	0	0
San Fernando	N. 36 28	W. 6 13	11.43 a.m.	95	29	29.93	760.2	30.03	762.8	58.8	14.9	74.1	1	5	10	4	2	2	2	2	.....	.....	.....	7	3.72	94.6
San Juan de Porto Rico	N. 18 30	W. 66 10	7.44 a.m.	82	25	29.97	761.1	30.06	763.4	72.7	22.6	88.1	2	.....	.....	10	3	6	4	3	.....	.....	.....	6	2.16	54.8
Tugnegarao	N. 17 37	E. 121 30	8.15 p.m.	?	?	29.94	760.4	30.08	764.1	75.2	24.0	79.9	.....	17	4	2	3	2	.....	.....	.....	.....	.....	4	0.01	0.2
Swedish Series.																										
Haparanda	N. 65 47	E. 23 15	1.41 p.m.	29	9	30.12	765.0	30.16	766.0	1.9	-16.7	96.5	11	.....	.....	1	6	1	2	2	5	.....	.....	5	0.38	9.6
Umea	N. 63 50	E. 20 17	1.29 p.m.	39	12	30.10	764.5	30.15	765.8	12.2	-11.0	87.3	6	4	.....	1	5	.....	1	4	7	.....	.....	6	0.61	15.4
Hernosand	N. 62 32	E. 17 57	1.20 p.m.	46	14	30.11	764.8	30.16	766.1	11.8	-11.2	83.4	8	1	.....	1	4	.....	.....	3	11	.....	.....	7	0.97	24.7
Stockholm	N. 59 20	E. 18 04	1.20 p.m.	144	44	29.84	757.9	30.02	762.4	21.4	—5.9	85.4	10	.....	2	1	2	2	5	6	.....	.....	.....	9	1.35	34.4
Wisby	N. 57 39	E. 18 19	1.20 p.m.	52	16	29.86	758.4	29.92	760.0	28.8	—1.8	87.2	2	2	2	4	2	5	5	3	3	.....	.....	8	1.83	46.5
Sub-Series.																										
Upsala	N. 59 51	E. 17 37	1.19 p.m.	79	24	29.94	760.4	30.02	762.6	17.6	—8.0	91.4	14	2	.....	1	2	1	3	5	.....	.....	.....	8	1.07	27.1
Swiss Series.																										
Geneva	N. 46 12	E. 6 08	0.33 p.m.	1338	408	28.52	724.4	29.97	761.3	42.4	5.8	65.7	17	1	2	4	3	.....	.....	1	.....	.....	.....	6	1.72	43.8
Zurich	N. 47 22	E. 8 33	0.38 p.m.	1542	470	28.28	718.2	29.97	761.1	39.6	4.2	73.6	.....	2	15	.....	1	.....	.....	.....	10	.....	.....	5	3.18	80.7
Turkish Series.																										
Constantinople	N. 41 00	E. 28 59	2.02 p.m.	?	?	.....	.....	30.00	761.9	41.7	5.4	80.0	16	1	.....	1	.....	1	.....	9	.....	.....	.....	8	3.09	78.5
Valona	N. 40 27	E. 19 27	1.25 p.m.	?	?	.....	.....	29.86	758 5	56.1	13.4	.....	.....	13	8	6	.....	.....	1	.....	.....	.....	.....	4	1.85	47.0
Sub-Series.																										
Beirut	N. 33 54	E. 35 29	2.30 p.m.	98	30	.....	.....	29.90	759.4	61.0	16 1	67.7	1	1	4	8	1	10	3	.....	.....	.....	.....	7	9.72	246.9

‖ Below sea level.

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea		Result of Simultaneous Observations for February, 1881.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
U. S. Series.	° ′	° ′																								
Albany	N. 42 40	W. 73 45	7.13 a.m.	75	23	30.14	765.5	30.23	767.8	23.7	—4.6	78.8	3	4	5	.....	7	.....	1	7	1	4358	7013	6	2.50	63.5
Alpena	N. 45 05	W. 83 28	6.34 a.m.	609	185	29.45	748.0	30.18	766.6	8.1	—13.3	74.0	4	8	2	3	2	6	.....	2	1	6345	10211	5	5.04	128.0
Atlanta	N. 33 45	W. 84 23	6.31 a.m.	1131	345	28.95	735.3	30.13	765.3	40.3	4.6	69.9	1	9	2	4	1	1	10	.....	.....	8527	13723	6	10.41	264.4
Atlantic City	N. 39 22	W. 74 25	7.11 a.m.	13	4	30.19	766.8	30.20	767.1	29.8	—1.2	84.0	10	5	2	1	2	4	1	2	1	6898	11101	4	5.03	127.8
Attou, Aleutian I.	N. 52 38	E. 172 30	11.38 p.m.	.....	.....	29.64	752.8	.....	.....	30.8	—0.7	84.2	3	2	.....	.....	13	3	.....	5	2	7781	12522	8	2.91	73.9
Augusta	N. 33 28	W. 81 54	6.41 a.m.	183	56	30.01	762.2	30.22	767.6	43.6	6.4	81.3	.....	1	4	2	3	6	3	1	8	3926	6318	5	3.98	101.1
Baltimore	N. 39 18	W. 76 38	7.02 a.m.	45	14	30.18	766.6	30.23	767.8	30.5	—0.8	76.6	1	11	2	2	2	3	.....	6	1	4332	6971	5	5.68	144.3
Barnegat	N. 39 48	W. 74 09	7.12 a.m.	20	6	30.17	766.3	30.19	766.8	26.5	—3.1	83.9	9	5	2	1	5	2	2	2	.....	9784	15745	5	5.39	136.9
Bismarck	N. 46 48	W. 100 38	5.26 a.m.	1693	516	28.22	716.8	30.08	764.0	5.0	—15.0	87.7	3	10	1	.....	.....	4	3	1	6	5658	9106	6	0.78	19.8
Boise City	N. 43 46	W. 116 06	4.24 a.m.	2750	838	27.21	691.1	30.17	766.3	33.2	0.7	84.3	3	7	1	.....	1	8	3	2	3	3313	5332	7	3.51	89.2
Boston	N. 42 21	W. 71 04	7.23 a.m.	142	43	30.01	762.2	30.17	766.3	23.4	—4.8	79.4	.....	10	6	4	2	2	3	.....	1	7388	11890	5	4.89	124.2
Brackettville	N. 29 17	W. 100 51	5.27 a.m.	1170	356	28.87	733.3	29.95	760.7	43.1	6.2	79.1	9	1	.....	.....	2	5	6	1	4	4852	7808	4	0.39	9.9
Brownsville *a*	N. 26 00	W. 97 30	5.38 a.m.	43	13	30.00	762.0	30.05	763.3	55.8	13.2	92.9	8	2	.....	.....	5	3	3	2	4	4614	7425	7	1.18	30.0
Buffalo	N. 42 53	W. 78 55	6.52 a.m.	664	202	29.42	747 3	30.17	766.3	19.1	—7.2	78.1	2	2	1	13	1	3	3	.....	.....	6189	9960	8	2.43	61.7
Burlington	N. 40 49	W. 91 07	7.15 a.m.	268	82	29.90	759.4	30.21	767.3	18.6	—7.4	73.7	4	3	1	1	10	1	5	3	.....	5798	9331	7	1.79	45.5
Cairo	N. 37 00	W. 89 12	6.11 a.m.	377	115	29.76	755.9	30.17	766.3	34.3	1.3	77.7	5	6	.....	1	3	3	4	4	2	5797	9329	7	4.97	126.2
Campo	N. 32 22	W. 116 08	4.22 a.m.	2500	762	27.48	698.0	30.05	763.3	33.1	0.6	83.0	.....	4	3	3	6	2	10	.....	.....	3419	5502	3	0.53	13.5
Camp Thomas	N. 32 04	W. 110 06	4.49 a.m.	2710	826	27.26	692.4	.....	.....	34.3	1.3	71.2	1	2	1	.....	.....	.....	3	3	18	.....	.....	2	0.13	3.3
Cape Henry	N. 36 56	W. 76 00	7.04 a.m.	16	5	30.18	766.6	30.19	766.8	36.0	2.2	75.3	8	4	2	2	2	4	.....	5	1	10459	16832	4	4.06	103.1
Cape May	N. 38 56	W. 74 58	7.08 a.m.	27	8	30.17	766.3	30.20	767.1	30.5	—0.8	79.0	4	9	1	1	2	5	.....	5	1	13118	21111	4	4.23	107.4
Castroville *c*	N. 29 25	W. 98 50	5.33 a.m.	780	238	29.26	743.2	29.98	761.5	45.1	7.3	81.3	.....	12	.....	.....	2	2	3	3	1	4196	7236	5	0.85	21.6
Cedar Keys	N. 28 12	W. 83 02	6.36 a.m.	22	7	30.11	764.8	30.14	765.5	54.0	12.2	83.8	5	6	1	1	2	4	5	.....	1	7830	12601	3	3.51	89.2
Champaign	N. 40 07	W. 88 14	6.15 a.m.	767	234	29.25	743.2	30.11	764.8	22.3	—5.4	71.5	2	3	3	3	4	5	2	5	1	9109	14659	8	0.49	164.8
Charleston	N. 32 45	W. 79 55	6.49 a.m.	52	16	30.14	765.5	30.20	767.1	47.0	8.3	76.1	10	2	1	5	5	1	1	3	.....	6540	10525	4	1.56	39.6
Charlotte	N. 35 13	W. 80 51	6.45 a.m.	808	246	29.31	744.5	30.15	765.8	37.2	2.9	75.4	2	1	2	7	1	1	5	9	.....	4988	8027	5	3.95	100.3
Chattanooga	N. 35 04	W. 85 15	6.27 a.m.	783	239	29.33	745.0	30.16	766.1	39.3	4.1	74.3	2	6	3	4	3	3	1	2	4	6280	10100	6	0.19	157.2
Cheyenne	N. 41 12	W. 104 42	5.09 a.m.	6089	1856	23.93	607.8	29.87	758.7	23.0	—5.0	60.4	5	14	5	3	.....	.....	.....	.....	1	9061	14582	4	0.22	5.6
Chicago	N. 41 52	W. 87 35	6.18 a.m.	661	201	29.38	746.2	30.12	765.0	21.5	—5.8	73.0	2	5	2	3	6	6	1	2	.....	5723	9210	6	5.98	151.9
Chincoteague	N. 37 55	W. 77 20	7.06 a.m.	18	5	30.19	766.8	30.21	767.3	29.5	—1.4	85.0	4	8	3	4	.....	4	2	3	.....	10963	17643	4	4.72	119.9
Cincinnati	N. 39 06	W. 84 26	6.30 a.m.	620	189	29.50	749.3	30.19	766.8	31.7	—0.2	73.5	4	4	2	2	2	4	5	.....	.....	5054	8133	7	4.95	125.7
Cleveland	N. 41 30	W. 81 47	6.42 a.m.	690	210	29.40	749.7	30.18	766.6	22.1	—5.5	82.9	4	1	2	5	8	4	5	.....	.....	6910	11130	8	2.57	65.3
Coleman City	N. 31 55	W. 99 10	5.32 a.m.	1750	533	28.25	717.5	29.99	761.7	34.5	1.4	72.8	7	5	1	8	1	2	.....	3	1	7324	11787	4	0.01	15.5
Columbus	N. 39 57	W. 83 03	6.36 a.m.	805	245	29.28	743.7	30.17	766.3	25.7	—3.5	79.3	4	3	4	3	1	4	7	2	.....	6471	10414	8	4.44	112.8
Concho	N. 31 22	W. 100 20	5.26 a.m.	1900	579	28.11	714.0	29.85	758.2	35.8	2.1	81.5	2	6	4	1	4	1	.....	2	8	6570	10573	3	0.51	13.0
Corsicana	N. 32 05	W. 96 30	5.41 a.m.	448	136	29.65	753.1	30.13	765.3	41.2	5.1	77.2	5	6	.....	1	3	4	.....	9	4609	7417	4	3.37	85.6
Davenport	N. 41 32	W. 90 30	6.06 a.m.	615	187	29.44	747.8	30.14	765.5	14.8	—9.6	81.4	3	3	4	2	2	6	5	1	7006	11275	8	4.14	105.2
Dayton	N. 39 45	W. 105 04	5.08 a.m.	5255	1605	24.72	[illegible]	29.94	760.5	23.0	—5.0	65.8	4	2	3	2	6	9	.....	2	.....	3413	5493	3	1.22	31.0
Des Moines	N. 41 35	W. 93 40	5.53 a.m.	849	259	29.22	742.2	30.17	766.3	10.6	—8.6	79.4	6	3	1	4	3	6	.....	4	1	5372	8645	6	2.68	68.1
Detroit	N. 41 21	W. 83 07	6.36 a.m.	645	197	29.42	747.3	30.15	765.8	23.3	—4.8	88.7	4	2	6	2	5	3	3	.....	.....	6749	10861	6	6.41	162.8
Dodge City	N. 37 39	W. 100 08	5.27 a.m.	2512	766	27.38	695.4	29.81	757.2	21.2	—6.0	69.0	8	8	6	2	2	1	7	2	.....	8934	14378	3	1.63	41.4
Dubuque	N. 42 30	W. 90 44	6.05 a.m.	665	203	29.40	746.7	30.16	[illegible]	14.0	—10.0	79.3	2	8	3	3	3	3	5	.....	1	4 85	7540	7	3.75	95.2
Duluth	N. 46 48	W. 92 08	6.00 a.m.	644	184	29.44	747.8	30.19	[illegible]	11.2	—11.6	84.3	1	4	2	9	.....	1	.....	10	1	6556	10551	6	1.79	45.5
Eagle Pass	N. 28 40	W. 100 15	5.26 a.m.	780	238	29.29	744.0	30.04	763.0	45.7	7.6	76.3	4	6	1	.....	3	8	1	1	4	4141	6664	3	0.34	8.6
Eagle Rock	N. 43 30	W. 112 04	4.40 a.m.	4781	1457	25.27	641.8	29.92	760 0	18.4	—7.6	84.1	10	1	.....	12	.....	.....	.....	.....	5	6034	5711	8	5.14	130.6
Eastport	N. 44 55	W. 66 54	7.40 a.m.	61	18	30.01	762.2	30.08	764.0	20.3	—6.5	71.2	3	1	4	2	.....	4	2	.....	.....	8443	13587	4	4.11	104.4
El Paso	N. 31 46	W. 106 32	5.02 a.m.	3760	1146	26.22	666.0	.....	.....	39.9	4.4	45.6	5	10	4	2	5	1	2	.....	.....	3943	6350	1	0.24	6.1
Erie	N. 42 07	W. 80 10	6.47 a.m.	681	208	29.40	746.7	30.16	766.1	22.2	—5.4	81.2	2	2	3	6	8	4	.....	3	.....	7932	12765	7	1.93	49.0
Escanaba	N. 45 46	W. 87 14	6.20 a.m.	612	186	29.46	748.3	30.18	766.6	7.7	—13.5	82.6	11	4	1	1	5	1	1	.....	4	4831	7775	6	2.10	53.3
Florence	N. 33 03	W. 111 17	4.43 a.m.	1490	454	28.45	722.9	30.12	765.0	42.9	6.1	56.3	.....	.....	2	5	4	2	3	5	7	2115	3404	1	0.03	0.8
Fort Apache	N. 33 47	W. 109 58	4.49 a.m.	5050	1539	25.01	635.2	30.46	773.7	27.4	—2.6	60.5	1	.....	.....	1	.....	1	11	13	1	3984	6412	2	1.17	29.7
Fort Assiniboine	N. 48 37	W. 109 43	4.49 a.m.	2710	826	27.14	689.3	.....	.....	12.0	—11.1	70.20	.....	1	.....	13	.....	.....	.....	8	6	6377	10263	8	0.70	17.8
Fort Bennett *c*	N. 44 42	W. 100 38	5.26 a.m.	1510	457	28.47	723.1	.....	.....	7.8	—13.4	71.9	5	6	.....	1	1	5	.....	3	4	5290	8513	5	1.18	30.0
Fort Benton	N. 47 51	W. 110 40	4.45 a.m.	2700	823	27.17	690.1	.....	.....	15.4	—9.2	78.4	2	3	7	3	.....	.....	.....	1	12	4932	6489	7	0.66	16.8
Fort Buford	N. 48 03	W. 103 58	5.12 a.m.	1900	579	28.03	711.9	30.05	763.5	2.8	—16.2	76.0	3	3	3	3	1	1	2	.....	12	3868	6289	5	1.10	27.9
Fort Custer	N. 45 48	W. 107 38	4.58 a.m.	3040	927	26.82	681.2	.....	.....	15.2	—9.3	85.2	8	1	1	5	2	1	.....	10	.....	3574	5752	7	0.51	13.0
Fort Davis	N. 30 30	W. 103 45	5.13 a.m.	4940	1506	25.16	639.1	30.12	765.0	35.5	1.9	64.5	3	3	3	5	3	2	1	3	5	4859	7895	1	0.14	3.6
Fort Elliot *a*	N. 35 31	W. 100 27	5.28 a.m.	2650	808	27.24	691 9	29.64	752.8	23.8	—4.6	55.0	5	7	1	.....	1	.....	6	1	4	8343	13420	3	0.74	18.8
Fort Gibson	N. 35 43	W. 95 16	5.48 a.m.	540	165	29.53	750.0	30.10	764.5	39.4	—0.9	86.7	7	5	1	.....	1	5	1	.....	8	6102	9820	6	4.14	105.2
Fort Grant*	N. 32 25	W. 109 56	4.49 a.m.	4860	1481	25.17	639.3	29.97	761.2	43.0	6.1	40.5	6	7	.....	.....	1	1	2	9	2	5921	9529	2	0.33	8.4
Fort Griffin	N. 32 53	W. 99 21	5.33 a.m.	1260	384	28.70	729.0	30.02	762.5	35.1	1.7	71.1	3	7	3	1	3	4	.....	.....	7	7492	12057	3	1.39	35.3
Fort Keogh	N. 46 17	W. 105 55	5.05 a.m.	2372	723	27.50	698.5	.....	.....	11.7	—11.3	79.1	2	3	2	7	.....	.....	.....	.....	12	2401	3864	7	0.36	9.1
Fort McKavett	N. 30 48	W. 99 58	5.28 a.m.	2240	683	27.76	705.1	29.74	755.4	37.0	2.8	74.8	2	4	6	6	3	2	1	3	1	6118	9840	3	0.19	4.8
Fort Macon	N. 34 42	W. 76 40	7.01 a.m.	11	3	30.17	766.3	30.18	766.6	40.9	4.9	82.3	8	4	3	4	2	2	.....	5	.....	9738	15672	4	4.09	103.9
Fort Missoula	N. 46 50	W. 114 01	4.32 a.m.	3140	957	26.70	678.2	.....	.....	22.9	—5.1	91.6	1	2	.....	2	7	3	3	1	9	2247	3010	8	2.40	61.0
Fort St. Michael	N. 63 48	W. 161 00	1.24 a.m.	?	?	30.04	763.0	30.07	763.8	—1.2	—18.4	100.0	14	.....	.....	.....	.....	.....	.....	2	12	7430	11957	1	.....	.....
Fort Shaw	N. 47 29	W. 111 46	4.41 a.m.	3550	1082	26.31	668.3	.....	.....	22.5	—5.3	78.3	.....	2	12	9	1	.....	1	2	1	8101	13037	6	0.49	12.4
Fort Sill	N. 34 40	W. 98 30	5.34 a.m.	1200	366	28.81	731.8	29.98	761.5	30.3	—0.9	79.5	9	4	.....	1	6	1	2	3	1	7925	12754	4	3.45	87.6
Fort Stevenson	N. 47 36	W. 101 23	5.22 a.m.	1750	534	28.19	716.0	.....	.....	4.7	—15.2	84.9	4	5	4	.....	2	5	1	2	5	4779	7686	6	0.50	14.2
Fort Verde	N. 34 24	W. 111 53	4.38 a.m.	?	?	.....	.....	.....	.....	32.3	0.2	61.4	3	10	12	2	.....	1	.....	.....	.....	.....	.....	1	0.12	3.0
Fredericksburg	N. 30 20	W. 98 40	5.33 a.m.	1700	518	28.29	718.6	29.68	753.9	42.4	5.8	80.5	8	4	6	1	3	.....	2	1	2	5436	8748	4	0.59	15.0
Galveston	N. 29 18	W. 94 50	5.49 a.m.	40	12	30.03	762.7	30.07	763.8	52.0	11.1	83.9	3	4	3	1	3	8	3	3	.....	6945	11177	6	8.29	210.6
Grand Haven	N. 43 05	W. 86 18	6.23 a.m.	620	189	29.42	747.3	30.12	765.0	19.6	—6.9	87.6	1	2	4	1	2	2	8	3	1	7132	11478	8	0.13	155.7
Hatteras	N. 35 14	W. 75 30	7.06 a.m.	19	6	30.16	766.1	30.18	766.6	39.9	4.4	86.5	5	4	2	1	4	2	2	8	.....	12158	19566	4	5.87	149.1
Helena	N. 46 33	W. 112 02	4.40 a.m.	4100	1250	25.75	654.0	.....	.....	22.1	—5.5	62.8	1	1	6	2	7	1	.....	.....	10	2782	4477	5	0.51	13.0
Henrietta	N. 33 42	W. 98 00	5.36 a.m.	980	300	29.06	738.1	30.04	763.0	32.7	0.4	75.5	3	8	.....	.....	1	9	1	4	2	7886	12691	4	0.86	21.8
Indianapolis	N. 39 47	W. 86 09	6.24 a.m.	746	227	29.30	744.2	30.13	765.3	26.0	—3.3	76.8	4	2	4	1	2	5	6	2	2	5042	8114	8	6.43	163.3
Indianola	N. 28 32	W. 96 38	5.42 a.m.	26	8	30.03	762.7	30.06	763.5	52.1	11.2	85.4	8	2	1	.....	2	6	3	.....	.....	9912	15952	5	4.21	106.9
Jacksboro	N. 33 10	W. 98 00	5.35 a.m.	1120	341	28.89	733.8	30.07	763.8	35.6	2.0	.....	6	4	2	1	2	5	3	.....	5	6198	9975	.....	2.08	52.8
Jacksonville	N. 30 24	W. 80 40	6.41 a.m.	43	13	30.12	765.0	30.17	766.3	53.0	11.7	75.0	9	1	3	3	2	3	3	4	.....	6495	10452	5	1.12	28.4
Keokuk	N. 40 23	W. 91 25	6.02 a.m.	618	188	29.43	747.5	30.13	765.3	20.2	—6.6	79.1	4	6	3	2	1	4	6	2	.....	7077	12355	8	2.58	65.5
Key West	N. 24 32	W. 81 48	6.41 a.m.	27	8	30.08	764.0	30.12	765.0	68.6	20.3	79.3	5	2	.....	1	1	5	7	7	.....	7041	12297	4	0.35	8.9
Kitty Hawk	N. 36 00	W. 75 23	7.05 a.m.	22	7	30.18	766.6	30.21	767.3	38.1	3.4	83.2	10	3	1	2	4	2	2	4	.....	12464	20058	4	3.97	100.8
Knoxville	N. 35 56	W. 83 58	6.32 a.m.	980	299	29.12	739.6	30.17	766.3	36.2	2.3	70.5	2	.....	3	6	.....	.....	1	12	4	5253	8454	7	4.20	106.7
La Crosse	N. 43 48	W. 91 23	6.03 a.m.	702	214	29.36	745.7	30.16	766.1	13.1	—10.5	76.9	7	2	1	2	9	4	2	1	.....	5472	8803	7	1.20	32.0
La Mesilla	N. 32 17	W. 106 48	5.01 a.m.	3900	1189	26.10	662.9	30.24	768.1	34.4	1.3	52.9	6	4	4	.....	1	1	2	10	2400	3862	2	Inap.	Inap
Laredo	N. 27 32	W. 99 26	5.30 a.m.	460	136	29.61	752.1	29.96	761.0	51.2	10.7	83.3	5	1	.....	2	3	2	1	3	11	2932	4718	4	0.31	7.9
Leavenworth	N. 39 19	W. 94 58	5.48 a.m.	842	256	29.21	741.9	30.12	765.0	19.8	—6.8	79.1	3	10	.....	1	2	5	2	1	4	6320	10171	6	4.84	122.9
Lewiston	N. 46 25	W. 116 59	4.20 a.m.	6191	1881	29.23	742.4	29.90	759.4	34.2	1.2	84.3	.....	1	4	2	3	1	11	6	.....	2493	4012	7	4.33	110.0
Little Rock	N. 34 40	W. 92 12	5.59 a.m.	298	91	29.78	756.4	30.11	764.8	38.5	3.6	81.9	3	8	2	2	1	4	2	3	3	4919	7916	6	0.34	101.0
Los Angeles	N. 34 03	W. 188 16	4.15 a.m.	371	113	29.71	754.6	30.08	764.0	50.0	10.0	75.0	4	4	2	4	.....	1	3	7	15	4404	7184	2	0.30	9.1
Louisville	N. 38 18	W. 85 52	6.25 a.m.	530	162	29.56	750.8	30.14	765.5	31.8	—0.1	79.7	5	2	2	4	2	2	6	5	.....	6983	11238	8	4.05	102.9
Lynchburg	N. 37 30	W. 79 02	6.52 a.m.	652	199	29.49	749.0	30.21	767.3	33.4	0.8	75.7	.....	1	4	1	3	1	1	5	12	2588	4165	3	2.37	60.2
Madison	N. 43 03	W. 89 30	6.10 a.m.	949	289	29.06	738.1	30.12	765.0	14.7	—9.6	80.0	6	3	4	3	4	3	4	1	.....	8128	13080	7	5.42	137.7
Marquette	N. 46 33	W. 87 36	6.19 a.m.	673	205	29.40	746.7	30.18	766.6	10.3	—12.1	68.8	3	9	7	1	5	1	.....	1	1	6261	10076	7	2.80	71.1
Mason	N. 30 42	W. 99 02	5.32 a.m.	1620	494	28.40	721.3	30.22	767.6	40.4	4.7	79.6	1	10	5	2	2	4	3	.....	1	5546	8925	3	0.70	17.8
Memphis	N. 35 07	W. 90 07	6.08 a.m.	321	98	29.78	756.4	30.13	765.3	38.3	3.5	81.4	.....	5	2	1	1	1	7	4	7	2092	3367	6	0.41	102.8
Milwaukee	N. 43 03	W. 87 54	6.17 a.m.	697	212	29.35	745.5	30.13	765.3	20.3	—6.5	84.8	3	4	7	2	4	3	3	2	.....	9172	14761	8	5.39	136.9
Mobile	N. 30 42	W. 87 59	6.16 a.m.	41	12	30.04	763.0	30.11	764.8	47.4	8.6	80.1	7	7	2	3	1	4	3	1	.....	6907	11116	5	8.00	203.2
Montgomery	N. 32 22	W. 86 23	6.23 a.m.	219	66	29.92	760.0	30.17	766.3	43.8	6.6	78.2	6	4	3	1	4	7	1	1	.....	5849	9413	6	7.05	179.1
Moorhead	N. 46 52	W. 96 40	5.41 a.m.	923	281	29.10	739.1	30.16	766.1	2.1	—16.6	78.9	6	3	2	2	3	8	.....	2	2	8977	14447	6	2.13	54.1
Morgantown	N. 39 36	W. 79 52	6.48 a.m.	963	293	29.14	740.1	30.18	766.6	30.4	—0.9	70.7	4	3	1	5	2	1	2	1	9	4398	7078	8	3.50	90.4
Mt. Washington	N. 44 16	W. 71 16	7.22 a.m.	6272	1902	23.51	597.1	29.87	758.7	6.8	—14.0	75.9	.....	16	4	4	1	.....	.....	3	.....	27190	43757	5	6.62	168.1

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for February, 1881.																			Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.														
						Actual.		Reduced.					Directions.									Total Movement.					
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
U.S. Series—*Continued.*																											
Nashville	N. 36 11	W. 86 53	6.21 a.m.	507	154	29.60	751.8	30.16	766.1	36.5	2.5	75.5	1	3	6	2	1	3	9	1	2	4102	6601	7	5.48	139.2
New Haven	N. 41 17	W. 72 57	7.16 a.m.	107	32	30.07	763.8	30.20	767.1	22.4	−5.3	76.4	7	4	1	.....	.....	.....	1	4	11	3488	5613	5	6.17	156.7
New London	N. 41 22	W. 72 09	7.19 a.m.	47	14	30.14	765.5	30.20	767.1	25.0	−3.9	77.5	9	8	2	2	2	.....	1	1	3	4419	7112	5	7.06	179.3
New Orleans	N. 29 58	W. 90 07	6.08 a.m.	52	16	30.02	762.5	30.09	764.3	52.2	11.2	78.8	3	5	1	2	2	3	5	6	1	7082	11397	5	5.80	147.3
Newport	N. 41 29	W. 71 19	7.23 a.m.	44	13	30.12	765.0	30.17	766.3	26.2	−3.2	81.6	6	5	5	1	1	3	2	2	4	6766	10888	4	8.28	210.3
New River *g*	N. 34 30	W. 77 23	6.58 a.m.	.....	.....	.....	.....	.....	.....	41.1	5.1	88.0	8	.....	2	5	.....	1	1	3	1	.....	.....	4	.....	.....
New Shoreham	N. 41 10	W. 71 37	7.22 a.m.	27	8	30.15	765.8	30.18	766.6	28.6	−1.9	78.9	11	4	.....	1	3	3	1	2	3	11056	17793	5	4.74	120.4
New York	N. 40 43	W. 74 00	7.12 a.m.	164	50	30.02	762.5	30.21	767.3	26.1	−3.3	87.8	5	6	5	1	1	3	1	6	.....	6428	10345	5	5.06	128.5
Norfolk	N. 36 51	W. 76 19	7.03 a.m.	30	9	30.18	766.6	30.20	767.1	36.4	2.4	75.0	12	2	.....	4	4	2	1	2	1	7159	11521	5	2.88	73.2
North Platte	N. 41 08	W. 100 53	5.24 a.m.	2841	866	27.08	687.8	29.84	757.9	14.2	−9.9	80.0	5	3	10	2	3	1	1	2	1	8151	13117	3	0.76	19.3
Olympia	N. 47 02	W. 122 56	3.56 a.m.	36	11	29.90	759.4	29.94	760.5	41.6	5.3	91.2	4	.....	1	.....	19	2	1	.....	1	3201	5248	9	16.28	413.5
Omaha	N. 41 16	W. 96 00	5.45 a.m.	1113	339	28.93	734.8	30.12	765.0	14.3	−9.8	84.4	8	2	.....	2	6	4	2	4	.....	8401	13520	7	3.09	78.5
Oswego	N. 43 29	W. 76 35	7.01 a.m.	304	93	29.84	757.9	30.18	766 6	21.0	−6.1	78.9	5	2	2	3	6	6	1	1	2	6701	10783	7	4.74	120.4
Pensacola	N. 30 25	W. 87 12	6.19 a.m.	30	9	30.11	764.8	30.14	765.5	49.8	9.9	81.7	6	8	1	4	1	3	3	2	.....	6781	10913	5	8.99	228.3
Philadelphia	N. 39 57	W. 75 10	7.07 a.m.	52	16	30.16	766.1	30.21	767.3	26.3	−3.2	84.8	8	4	3	1	1	1	1	9	.....	8052	12958	6	4.76	120.9
Phœnix	N. 33 18	W. 112 00	4.40 a.m.	1120	341	28.91	734.3	30.79	782.1	40.9	4.9	65.0	..	1	3	2	.....	.....	19	3	.....	2066	3325	2	0.20	5.1
Pikes Peak	N. 38 48	W. 104 59	5.07 a.m.	14134	4308	17.49	444.2	29.70	754.4	1.3	−17.1	59.1	.....	10	10	6	.....	.....	.....	2	.....	18109	29143	4	1.47	37.3
Pilot Point	N. 30 20	W. 95 50	5.40 a.m.	800	244	29.29	744.0	30.17	766.3	35.5	1.9	83.1	6	5	1	2	2	5	4	3	.....	6438	10361	5	5.90	151.4
Pioche	N. 37 57	W. 114 26	4.30 a.m.	6110	1862	24.03	610.4	29.80	756.9	29.8	−1.2	56.3	1	10	5	2	5	1	.....	.....	4	4035	6494	8	0.29	7.4
Pittsburg	N. 40 32	W. 80 02	6.48 a.m.	776	236	29.33	745.0	30.19	766.8	25.7	−3.5	78.1	1	5	4	4	1	2	4	6	1	4503	7343	8	3.45	87.6
Port Huron	N. 42 58	W. 82 29	6.38 a.m.	633	193	30.12	765.0	30.15	765.8	18.4	−7.6	82.0	5	3	1	3	9	3	1	3	.....	7146	11500	7	4.91	124.7
Portland, Maine	N. 43 40	W. 70 16	7.27 a.m.	45	14	30.09	764.3	30.14	765.5	24.0	−4.4	72.2	.....	16	4	3	2	.....	1	1	1	5383	8663	5	5.30	134.6
Portland, Oregon	N. 45 30	W. 122 28	3.57 a.m.	67	20	29.95	760.7	30.03	762.7	42.4	5.8	91.0	1	2	.....	1	13	5	4	1	1	4531	7292	8	13.36	339.3
Portsmouth	N. 35 02	W. 76 04	7.04 a.m.	40	12	.....	.....	.....	.....	41.0	5.0	75.8	1	2	2	5	.....	3	.....	15	.....	13041	20987	4	5.98	151.9
Prescott	N. 34 29	W. 112 31	4.38 a.m.	5300	1615	24.76	628.9	30.12	765.0	30.3	−0.9	55.4	10	.....	1	1	10	1	2	.....	3	3904	6283	1	0.10	2.5
Punta Rassa	N. 26 36	W. 82 10	6.40 a.m.	13	4	30.09	764.3	30.11	764.8	61.2	16.2	79.7	10	1	1	1	.....	3	7	5	.....	8454	13605	5	0.52	13.2
Red Bluff	N. 40 10	W. 122 16	3.59 a.m.	350	106	29.76	755.9	30.11	764.8	48.9	9.4	85.5	6	5	.....	.....	12	3	.....	1	1	4652	7487	6	2.79	70.9
Rio Grande City *a*	N. 26 22	W. 98 45	5.33 a.m.	230	70	29.85	758.2	30.08	754.0	53.8	12.1	82.2	7	3	.....	1	.....	5	4	.....	7	5130	8256	7	1.06	26.9
Rochester	N. 43 08	W. 77 51	6.58 a.m.	589	179	29.52	749.8	30.18	766.6	20.6	−6.3	83.0	2	2	10	8	1	4	1	.....	.....	5324	8508	7	2.80	72.6
Roseburg	N. 43 10	W. 123 16	3.55 a.m.	511	156	29.50	749.3	30.08	764.0	44.0	6.7	88.6	.....	2	.....	4	2	2	4	.....	14	1722	2771	7	8.19	208.0
Sacramento	N. 38 35	W. 121 31	4.02 a.m.	70	21	30.07	763.8	30.14	765.5	49.9	9.9	90.9	2	3	.....	.....	1	19	1	1	1	4038	6498	5	5.00	128.5
St. Louis	N. 38 37	W. 90 15	6.07 a.m.	568	173	29.52	749.8	30.12	765.0	27.0	−2.8	82.2	2	8	3	.....	3	5	4	3	.....	8421	13552	8	4.16	105.7
St. Paul	N. 44 53	W. 93 05	5.56 a.m.	811	247	29.23	742.4	30.12	765.0	13.0	−10.6	79.4	3	8	.....	4	.....	6	.....	1	.....	7003	11270	6	2.65	67.3
St. Vincent	N. 48 58	W. 97 03	5.40 a.m.	804	245	29.26	743.2	30.15	765 8	−0.5	−18.1	98.7	3	9	.....	1	4	7	3	.....	1	7410	11925	6	0.56	14.2
Salt Lake City	N. 41 10	W. 112 00	4.40 a.m.	4348	1325	25.66	651.8	29.98	761.5	34.3	1.3	58.2	2	3	.....	.....	1	5	2	1	14	2072	3334	5	2.44	62.0
San Antonio	N. 29 28	W. 98 22	5.34 a.m.	676	206	29.38	746.2	30.10	764.5	46.2	7.9	82.3	7	3	1	.....	3	1	2	3	8	3221	5184	4	1.24	31.5
San Diego	N. 32 32	W. 117 08	4.20 a.m.	67	20	30.03	752.7	30.10	764.5	50.1	10.1	77.9	5	2	1	.....	1	.....	7	5	7	3521	5666	3	0.45	11.4
Sandusky	N. 41 27	W. 82 43	6.37 a.m.	639	195	29.44	747.8	30.16	766.1	24.1	−4.4	78.9	2	6	2	6	4	3	2	3	.....	9778	15736	6	3.25	82.5
Sandy Hook	N. 40 28	W. 74 01	7.12 a.m.	28	8	30.16	766.1	30.20	767.1	26.2	−3.2	77.4	9	4	4	1	1	.....	.....	5	3	8059	12969	5	5.37	136.4
San Francisco	N. 37 48	W. 122 26	3.58 a.m.	60	18	30.08	754.0	30.14	765.5	52.7	11.5	86.0	4	5	3	5	4	5	1	.....	1	4763	7665	5	4.05	118.1
Santa Fé	N. 35 41	W. 106 10	5.04 a.m.	7049	2148	23.18	588.8	29.72	754.9	27.7	[illegible]	69.2	15	.....	2	.....	.....	.....	3	2	6	4611	7420	2	0.22	5.6
Savannah	N. 32 05	W. 81 08	6.44 a.m.	87	26	30.09	764.3	30.19	766.8	48.1	8.9	75.1	1	4	5	5	1	3	1	8	.....	6580	10589	5	1.16	29.5
Shreveport	N. 32 30	W. 93 45	5.54 a.m.	227	69	29.85	758.2	30.11	764.8	42.7	5.9	82.5	3	6	.....	.....	2	2	6	2	7	4542	7309	6	6.51	165.4
Silver City	N. 32 48	W. 108 15	4.55 a.m.	5890	1795	24.24	615.7	30.60	777.2	32.4	0.2	58.8	5	3	3	.....	.....	.....	.....	.....	17	1952	3141	2	0.73	18.5
Smithville	N. 33 55	W. 78 01	6.56 a.m.	33	10	30.20	767.1	30.21	767	42.7	5.9	84.4	12	2	1	5	2	1	1	4	.....	7522	12105	4	2.31	58.7
Socorro	N. 34 05	W. 106 55	5.01 a.m.	4535	1391	25.40	645.1	29.47	748.5	33.2	0.7	62.2	4	16	.....	.....	1	2	1	3	1	4914	7908	3	0.01	0.3
Spokane Falls, W. T.	N. 47 39	W. 117 24	4.18 a.m.	1200?	366?	27.98	710.7	29.91	759.7	24.4	−4.2	88.1	.....	.....	.....	1	6	5	3	8	.....	5	3254	5237	8	3.85	97.8
Springfield, Ill.	N. 39 48	W. 89 48	6.10 a.m.	644	196	29.42	747.3	30.13	765.3	25.2	−3.8	77.6	3	5	4	2	4	3	4	3	.....	7230	11645	6	5.85	148.6
Springfield, Mass.	N. 42 06	W. 72 36	7.18 a.m.	120	37	30.06	753.5	30.20	767.1	21.4	−5.9	67.4	9	5	1	2	2	.....	.....	2	7	3497	5628	5	4.50	114.3
Stockton *a*	N. 30 50	W. 102 50	5.16 a.m.	3010	917	26.96	684.8	29.96	761.0	35.8	2.1	69.1	2	3	3	7	6	2	.....	4	.....	6177	9941	1	0.13	3.3
Thatcher's Island	N. 42 36	W. 70 34	7.26 a.m.	48	15	30.11	734.8	30.17	766.3	25.0	−3.9	77.7	4	7	3	4	2	4	.....	3	1	10782	17352	5	4.73	120.1
Toledo	N. 41 40	W. 83 32	6.34 a.m.	651	198	29.42	747.3	30.15	765.8	23.1	−4.9	81.5	6	1	1	7	2	5	.....	2	2	4	6301	10140	7	4.28	108.7
Tucson	N. 32 14	W. 110 56	4.44 a.m.	2369	722	27.54	699.5	30.09	764.3	43.4	6.3	45.2	1	2	1	5	9	8	1	1	.....	2831	4556	1	0.25	6.3
Umatilla	N. 45 55	W. 119 21	4.11 a.m.	340	103	29.74	755.4	30.26	768.6	30.4	−0.9	91.5	.....	6	8	1	.....	6	5	2	.....	3998	6434	8	1.92	48.8
Uvalde *b*	N. 29 13	W. 99 40	5.29 a.m.	930	283	29.15	740.4	29.99	761.7	44.3	6.8	70.8	7	2	.....	.....	4	8	2	1	2	3166	5095	4	0.82	20.8
Vicksburg	N. 32 23	W. 90 54	6.04 a.m.	244	74	29.84	757.9	30.11	764.8	45.5	7.5	78.5	2	3	4	2	2	6	5	4	.....	6120	9949	6	7.20	182.9
Visalia	N. 36 20	W. 119 16	4.11 a.m.	348	106	29.75	755.6	30.13	765.3	47.6	8.7	88.9	.....	9	2	.....	2	10	2	1	2	2011	3236	4	1.10	27.9
Washington	N. 38 53	W. 77 01	7.00 a.m.	106	32	30.09	764.3	30.25	768.3	27.7	−2.4	81.1	3	9	1	1	4	.....	2	5	3	3833	6168	5	4.01	101.9
Wickenburg	N. 33 58	W 112 42	4.37 a.m.	?	?	.....	.....	.....	.....	32.4	0.2	60.9	2	11	14	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....
Wilmington	N. 34 11	W. 78 10	6.56 a.m.	73	22	30.14	765.5	30.20	767.1	43.2	6.2	77.4	2	3	2	4	2	1	1	12	1	5107	8219	5	2.80	71.1
Winnemucca	N. 41 00	W. 119 21	4.17 a.m.	4342	1323	25.65	651.5	30.01	762.2	34.9	1.6	76.8	3	.....	.....	.....	13	4	2	.....	3	5470	8813	5	1.59	40.4
Wood's Holl	N. 41 33	W. 70 40	7.26 a.m.	35	11	30.12	765 0	30.16	766.1	26.0	−3.3	80.6	7	9	.....	2	1	6	2	.....	1	9981	16063	6	5.40	138.7
Yankton	N. 42 45	W. 97 30	5.38 a.m.	1228	374	28.77	730.7	30.19	766.8	9.9	−12.3	54.5	8	3	3	1	2	2	4	1	4	7279	11714	0	2.70	68.6
Yuma	N. 32 44	W. 114 36	4.30 a.m.	141	43	29.86	758.4	30.02	762.5	51.5	10.8	76.5	3	2	2	4	2	.....	2	8	5	3097	5550	6	0	0
Sub-Series.																											
Bogota	N. 4 36	W. 74 14	7.41 a.m.	8704	2653	22.07	560.6	.....	.....	51.8	11.0	78.5	.....	.....	.....	.....	.....	.....	.....	28	.....	.....	.....	6	5.59	142.0
Buff Bay Town, Jamaica	N. 18 15	W. 76 39	7.01 a.m.	?	?	29.85	758.2	30.17	766.3	68.1	20.1	87.9	*a*	.....	2	1	1	5	15	.....	.....	.....	.....	1	.....	.....
Havana	N. 23 09	W. 82 22	6.39 a.m.	50	15	30.04	763.0	30.09	764.3	70.9	21.6	73.0	4	1	.....	.....	.....	8	.....	3	12	.....	.....	3	2.52	64.0
Jakobshavn	N. 69 13	W. 50 55	8.44 a.m.	43	13	29.81	757.1	29.87	758.6	3.7	−15.7	.....	.....	1	11	2	8	.....	.....	6	.....	.....	.....	3	0.03	0.8
Kingston	N. 18 58	W. 76 48	7.01 a.m.	10	3	30.02	762.5	30.03	762.7	70.0	21.1	77.0	6	.....	.....	.....	.....	.....	.....	.....	22	1980	3186	.....	0.50	12.7
Navassa	N. 19 25	W. 75 03	7.43 a.m.	77	23	29.92	760.0	30.00	762.0	75.4	24.1	73.8	3	2	.....	.....	.....	.....	4	19	.....	.....	.....	10	0.90	22.9
Param ribo	N. 5 50	W. 55 13	8.27 a.m.	0	2	29.98	761.5	29.98	761.5	77.5	25.3	80.0	.....	.....	.....	.....	.....	2	19	7	.....	.....	.....	5	6.56	166.6
Puerto Berrio	N. 6 32	W. 74 28	7.10 a.m.	542	165	29.42	747.3	29.98	761.5	79.0	26.1	83.5	3	.....	.....	.....	.....	.....	2	1	22	.....	.....	6	1.25	31.7
Rivas	N. 11 26	W. 85 47	6.25 a.m.	150	46	.....	.....	.....	.....	72.9	22.7	.....	.....	.....	.....	1	1	16	9	1	.....	.....	.....	2	0.45	11.5
Santiago deCuba	N. 19 55	W. 75 50	7.04 a.m.	21	6	30.03	762.7	30.06	763.5	73.5	23.1	73.0	15	4	.....	.....	.....	.....	1	2	6	.....	.....	3	0.88	22.4
St. Thomas	N. 18 20	W. 64 56	7.48 a.m.	110	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Upernavik	N. 72 47	W. 56 00	8.24 a.m.	10	3	29.82	757.5	29.90	759.4	−3.5	−19.7	.....	.....	2	12	.....	.....	2	.....	.....	12	.....	.....	2	0.38	9.7
York Factory	N. 57 02	W. 92 56	5.58 a.m.	45	14	30.17	766.3	30.22	767.6	−22.4	−30.2	.....	3	8	7	7	2	.....	.....	1	.....	.....	.....	2	0.60	15.2

The following table of Ocean Square mean data, from observations taken at 7 A. M. Washington or 0.08 P. M. Greenwich mean time, is computed from the isobars, isotherms and wind directions of the daily international charts, which latter are based upon the data obtained from the logs of vessels for the month of FEBRUARY, 1881.

OCEAN SQUARE BOUNDED BY—	BAROMETER.		TEMPERATURE.		PREVAIL'G WIND.	FORCE 0–10
	INCH.	MILL.	FAH.	CENT.		
° ° ° °						
N. 30 & 35 W. 10 & 15	30.05	763.3	63.5	17.5	NE	2.7
35 40 10 15	30.06	763.5	58.9	14.9	SW	3.2
35 40 15 20	30.10	764.5	59.0	15.0	SW	3.1
30 35 15 20	30.14	765.5	63.1	17.3	SW	2.8
40 45 10 15	29.92	760.0	54.8	12.7	SW	3.6
45 50 10 15	29.87	758.7	52.5	11.4	SW	4.5
45 50 15 20	29.88	758.9	52.5	11.4	SW	4.6
40 45 15 20	29.99	761.7	55.0	12.8	SW	4.1
50 55 10 15	29.79	756.7	45.8	7.7	NE	3.9
55 60 10 15	29.79	756.7	41.0	5.0	NE	4.1
55 60 15 20	29.78	756.4	39.6	4.2	NE	4.1
50 55 15 20	29.78	756.4	45.2	7.3	NE	4.3
10 15 20 25	29.99	761.7	78.1	25.6	NE	3.0
15 20 20 25	30.03	762.7	74.8	23.8	NE	3.2
15 20 25 30	30.05	763.3	74.9	23.8	NE	3.3
10 15 25 30	30.00	762.0	78.1	25.6	NE	3.2
20 25 20 25	30.10	764.5	70.4	21.3	NE	3.2
25 30 20 25	30.14	765.5	67.4	19.7	NE	3.0
25 30 25 30	30.10	766.1	67.8	19.9	NE	3.2
20 25 25 30	30.12	765.0	70.5	21.4	NE	3.3
30 35 20 25	30.16	766.1	63.3	17.4	SW	3.0
35 40 20 25	30.15	765.8	59.3	15.2	SW	3.0
35 40 25 30	30.15	765.8	59.0	15.0	SW	3.0
30 35 25 30	30.18	766.6	63.0	17.2	SW	2.9
40 45 20 25	29.97	761.2	54.8	12.7	SW	3.9
45 50 20 25	29.87	758.7	52.1	11.2	SW	4.6
45 50 25 30	29.85	758.2	51.4	10.8	SW	4.5
40 45 25 30	29.94	760.5	54.0	12.2	SW	4.2
50 55 20 25	29.76	755.9	45.0	7.2	SW	4.3
55 60 20 25	29.77	756.1	37.2	2.9	NE	4.2
55 60 25 30	29.76	755.9	35.6	2.0	NE	3.7
50 55 25 30	29.74	755.4	43.0	6.1	SW	4.2
10 15 30 35	30.00	762.0	78.6	25.9	NE	3.3
15 20 30 35	30.06	763.5	75.0	23.9	NE	3.4
15 20 35 40	30.07	763.8	75.6	24.2	NE	3.6
10 15 35 40	30.00	762.0	78.7	25.9	NE	3.4
20 25 30 35	30.13	765.3	71.1	21.7	NE	3.3
25 30 30 35	30.15	765.8	68.1	20.1	NE	3.4
25 30 35 40	30.14	765.5	68.1	20.1	NE	3.1
20 25 35 40	30.12	765.0	72.0	22.2	NE	3.6
30 35 30 35	30.15	765.8	63.1	17.3	NW; SW	3.1
35 40 30 35	30.11	764.8	58.9	14.9	SW	2.7
35 40 35 40	30.07	763.8	58.2	14.6	SW	3.2
30 35 35 40	30.11	764.8	63.0	17.2	SW	3.1
40 45 30 35	29.94	760.5	52.8	11.6	SW	4.2
45 50 30 35	29.82	757.4	49.3	9.6	NW	3.0
45 50 35 40	29.80	756.9	46.5	8.1	NW	4.4
40 45 36 40	29.88	758.9	49.1	9.5	SW	4.2
50 55 30 35	29.74	755.4	40.5	4.7	NW	4.4
55 60 30 35	29.74	755.4	33.7	0.9	NE	3.4
55 60 35 40	29.75	755.6	32.1	0.1	NE	3.5
° ° ° °						
N. 50 & 55 W. 35 & 40	29.74	755.4	36.5	2.5	NE	4.0
10 15 40 45	30.00	762.0	79.0	26.1	NE	3.2
15 20 40 45	30.07	763.8	76.1	24.5	NE	3.7
15 20 45 50	30.06	763.5	76.0	24.4	NE	3.8
10 15 45 50	30.00	762.0	79.2	26.2	NE	3.3
20 25 40 45	30.09	764.3	72.3	22.4	NE	3.4
25 30 40 45	30.11	764.8	68.5	20.3	NE	3.4
25 30 45 50	30.08	764.0	68.0	20.0	NE	3.4
20 25 45 50	30.08	764.0	72.7	22.6	NE	3.8
30 35 40 45	30.08	764.0	62.3	16.8	NE	3.4
35 40 40 45	30.05	763.3	57.1	13.9	SW	3.8
35 40 45 50	30.00	762.0	56.1	13.4	NW	4.1
30 35 45 50	30.02	762.5	61.6	16.4	NE	3.7
40 45 40 45	29.88	758.9	46.4	8.0	NW	4.5
45 50 40 45	29.81	757.2	40.9	4.9	NW	4.5
45 50 45 50	29.82	757.4	34.7	1.5	NW	4.3
40 45 45 50	29.87	758.7	39.6	4.2	NW	4.6
50 55 40 45	29.72	754.9	33.1	0.6	NW	4.2
55 60 40 45	29.74	755.4	29.3	— 1.5	NE	3.4
55 60 45 50	29.75	755.6	25.4	— 3.7	NW	3.2
50 55 45 50	29.78	756.4	25.3	— 3.7	NW	3.4
10 15 50 55	29.99	761.7	79.3	26.3	NE	3.1
15 20 50 55	30.03	762.7	75.9	24.4	NE	3.6
15 20 55 60	30.06	763.5	76.3	24.6	NE	3.5
10 15 55 60	29.98	761.5	79.2	26.2	NE	2.8
20 25 50 55	30.05	763.3	73.0	22.8	NE	3.6
25 30 50 55	30.04	763.0	69.4	20.8	NE	3.4
25 30 55 60	30.05	763.3	69.5	20.8	NE	3.6
20 25 55 60	30.06	763.5	73.5	23.1	NE	3.6
30 35 50 55	30.01	762.2	61.6	16.4	NE	3.8
35 40 50 55	30.00	762.0	54.3	12.4	NW	4.1
35 40 55 60	30.03	762.7	52.9	11.6	NW	4.1
30 35 55 60	30.06	763.5	59.8	15.4	NW	3.9
40 45 50 55	29.90	759.4	35.7	2.1	NW	4.4
40 45 55 60	29.98	761.5	32.1	0.1	NW	4.1
20 25 60 65	30.09	764.3	73.3	22.9	NE	3.6
25 30 60 65	30.09	764.3	69.6	20.9	NE	3.6
25 30 65 70	30.13	765.3	69.2	20.7	NE	3.6
20 25 65 70	30.11	764.8	73.1	22.8	NE	3.3
30 35 60 65	30.10	764.5	60.1	15.6	NE	3.5
35 40 60 65	30.08	764.0	50.5	10.3	NW	4.0
35 40 65 70	30.11	764.8	47.4	8.6	NW	4.0
30 35 65 70	30.14	765.5	54.4	12.4	NW	4.0
40 45 60 65	30.05	763.3	31.6	— 0.2	NW	3.9
40 45 65 70	30.10	764.5	28.7	— 1.8	NW	3.7
25 30 70 75	30.14	765.5	68.1	20.1	NE	3.6
25 30 75 80	30.15	765.8	63.4	17.4	NE	3.4
30 35 70 75	30.17	766.3	55.6	13.1	NE	4.3
35 40 70 75	30.17	766.3	41.8	5.4	NW; NE	4.0
30 35 75 80	30.19	766.8	49.5	9.7	NW	3.4

The following table shows the position of Ocean Squares, the total number of observations and the number of days on which observations were taken for each square during the month of FEBRUARY, 1881.

OCEAN SQUARE BOUNDED BY—	No. DAYS.	No. OBS.
° ° ° °		
N. 10 & 15 W. 20 & 25	1	1
15 20 20 25	3	3
15 20 50 55	9	10
15 20 55 60	7	7
20 25 25 30	3	3
20 25 30 35	4	4
20 25 35 40	1	1
20 25 40 45	2	2
20 25 45 50	1	1
20 25 50 55	4	4
20 25 55 60	3	3
20 25 60 65	6	7
20 25 65 70	2	2
20 25 70 75	4	4
25 30 20 25	3	3
25 30 25 30	3	3
25 30 30 35	1	1
25 30 45 50	2	2
25 30 55 60	1	1
25 30 60 65	8	9
25 30 65 70	1	1
25 30 70 75	4	4
25 30 75 80	3	3
30 35 10 15	1	1
30 35 15 20	6	7
° ° ° °		
N. 30 & 35 W. 20 & 25	3	3
30 35 25 30	1	1
30 35 30 35	2	2
30 35 35 40	3	3
30 35 40 45	2	2
30 35 45 50	2	2
30 35 50 55	3	3
30 35 55 60	8	8
30 35 60 65	3	3
30 35 65 70	2	2
30 35 70 75	10	11
30 35 75 80	4	4
35 40 10 15	4	5
35 40 15 20	2	2
35 40 25 30	1	1
35 40 35 40	1	1
35 40 40 45	1	1
35 40 45 50	2	2
35 40 50 55	2	2
35 40 60 65	2	2
35 40 65 70	3	3
35 40 70 75	8	8
35 40 75 80	2	2
40 45 10 15	8	10
40 45 15 20	3	3
° ° ° °		
N. 40 & 45 W. 25 & 30	1	1
40 45 30 35	2	2
40 45 35 40	3	3
40 45 40 45	4	5
40 45 45 50	10	14
40 45 50 55	15	19
40 45 55 60	14	18
40 45 60 65	10	12
40 45 65 70	10	17
40 45 70 75	3	3
45 50 10 15	11	14
45 50 15 20	7	8
45 50 20 25	5	5
45 50 25 30	12	12
45 50 30 35	17	22
45 50 35 40	15	18
45 50 40 45	9	12
45 50 45 50	6	7
45 50 50 55	1	1
50 55 10 15	7	7
50 55 15 20	11	14
50 55 20 25	11	14
50 55 25 30	6	6
50 55 30 35	2	2
55 60 10 15	1	1

GENERAL REMARKS.

All data which appears in the DAILY BULLETIN OF SIMULTANEOUS METEOROLOGICAL OBSERVATIONS are copied from the regular exchanges of this office. The barometer readings for land stations, in the first and second columns, are reduced to freezing and their respective standards; those in the third and fourth columns to sea-level. When necessary, corrections for instrumental error, temperature and reduction to sea-level are applied at this office. In the Naval and Marine Series, corrections for temperature and reduction to sea-level are always applied, while those for instrumental error only, when such corrections can be ascertained with close approximation, as by comparison when vessels are at or near land stations. Relative humidity generally requires computation from the hygrometrical observations. When rain has fallen, but neither the amount or duration is recorded, the word "blank" is published in the rain-fall column. The weather is generally published as given. The following symbols and abbreviations are common to all series, viz.: †, aneroid; *, instrumental error not known; ‡, observations taken at 7.35 a. m., Washington mean time; c, cirrus; k, cumulus; s, stratus; n, nimbus; d, scud; f, fracto; p, pallio; hz, haze; fg, fog; sk, smoke; d. clouds, detached clouds. The movement of the air is published as given on the originals, when indicated by velocity in miles per hour, in meters per second, or by force, all variations of the latter being reduced to the common scale of 0 to 10. Those stations reporting the movement in pounds pressure per square foot are reduced to force on the common scale, and those in kilometers per hour, to meters per second and miles per hour. The distinction between upper and lower clouds is carefully made in the United States and a portion of the Canadian series, and the various formations are indicated by the letters heretofore given and their combinations. In the MONTHLY SUMMARY OF INTERNATIONAL SIMULTANEOUS METEOROLOGICAL OBSERVATIONS the position of stations (latitude and longitude) are obtained from Keith Johnson's Index Geographicus, except where more exact information is furnished. The elevations of stations are obtained either from the annual, semi-annual and monthly publications of the various meteorological bureaus here represented, or from the original forms, upon which are entered the daily observations. In the United States series the elevations are computed from the latest surveys, and are carefully revised each month, in order to note any change in the elevation of the barometer cistern at any station. It is believed for the most part, that throughout the European and other series, the elevations as given, represent the height of the barometer cistern above sea-level; at least this should be the case. The local time, where omitted or not given correctly in the originals, is carefully computed at this office. Generally, all conversions are made at this office. A letter placed opposite the name of a station or some portion of the data credited thereto, indicates that a certain number of observations are missing, corresponding to the relative position in the alphabet of the letter so used. The following remarks relate to the individual peculiarities in the *methods* of recording and the *times* of taking the international simultaneous meteorological observations, under the auspices of the various Meteorological Bureaus:

ALGERIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level; temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10. The rain-fall is measured at 7 a. m., local time, and the amount indicated in millimeters.

AUSTRALIAN SERIES.—At Melbourne the conversions are published as given in the originals. The movement of the air is indicated by velocity in miles per hour. The kind of clouds is not given except by inference from general weather terms. At Hobart Town the barometer is given in English inches reduced to sea-level. The movement of the air is indicated in pounds pressure per square foot. The kind of clouds is given and indicated by abbreviating the English nomenclature.

AUSTRO-HUNGARIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. At the following stations the rain-fall is measured by local time: Lemburg, 7 p. m.; Vienna, 2 p. m.; Trieste, 7 a. m. The weather is given by the Vienna symbols or in general terms. At Gratz observations are made at 2 p. m., local time.

BELGIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The weather is occasionally given by the Vienna symbols. Except for Brussels, the distinction between upper and lower clouds is not made. At Furnes observations are taken at 12.26 p. m., local time, and at Maeseyck at 1 p. m., local time.

BRITISH SERIES.—In general the originals do not give rain-fall or distinction between upper and lower clouds. Relative humidity, except for Bradford and Silloth Rectory, is not given on the originals, but is computed from hygrometrical observations. At Cardington, Galway, Oxford and Sandwick Manse the barometers are given as read off. At Free Town the barometer is reduced to freezing on the originals, but not to sea-level. The movement of the air is indicated by force, on a scale of 0 to 12, except pounds pressure per square foot at Greenwich. At the following stations rain-fall is measured by local time: Bradford, 9 a. m.; Nottingham, 6 p. m.; and Aberdeen, 10 a. m. The wind directions are given to 32 points and weather by the Beaufort notation.

CANADIAN SERIES.—The originals give the barometer reduced to sea-level in English inches and the temperature in Fahrenheit. The movement of the air is indicated by the Beaufort scale, except at St. Pierre, where it is given on a scale of 0 to 7. Charlottetown, St. Andrews, Windsor and those stations marked with a star (*) give the clouds on a scale of 0 to 4, while the remainder report them on a scale of 0 to 10.

CAPE COLONY SERIES.—At Cape Town the barometer is given on the original as corrected for temperature only. Upper and lower clouds are given on a scale of 0 to 10 and the kind occasionally indicated by abbreviating Poëy's classification.

CHINESE SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is given in meters per second and the direction to 16 points. The kind of clouds is occasionally given, and the degree of cloudiness on the scale of 0 to 10; distinction between upper and lower clouds is sometimes made. The weather is given in general (French) terms. The rain-fall is given in millimeters and measured at the moment of simultaneous observation.

COSTA RICAN SERIES.—At San Jose the originals give the barometer as corrected for temperature only and the thermometer in Centigrade. Relative humidity is not given on the originals, but is computed from the hygrometrical observations. Upper and lower clouds are given, the amount on a scale of 0 to 10 and the kind by Howard's classification. The rain-fall is apparently measured at midnight.

DANISH SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force, on a scale of 0 to 6. The weather is occasionally given by the Vienna symbols, but it is not certain that they always refer to the moment of simultaneous observations, except at Copenhagen. No distinction is made between upper and lower clouds and the direction of movement, together with the rain-fall, is entirely omitted.

FRENCH SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 6, except in meters per second, for Mont Louis and Perpignan. In general, the rain-fall is measured at 9 a. m., local time, but at Lyons at the moment of simultaneous observation. The direction of upper and lower clouds is given, but no distinction is made in kind. The degree of cloudiness is given on a scale of 0 to 4 at Clermont-Ferrand, Commune de Greasque and Puy de Dome, while at other stations the scale of 0 to 10 is employed, or general weather terms, from which the amount of cloudiness is inferred. The weather is given in general terms, except occasionally by the Vienna symbols at Mont Louis and Perpignan.

GERMAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10, except at Carlsruhe, where the scale of 0 to 4 is used. No distinction is made between upper and lower clouds; the amount is given on a scale of 0 to 10, but the kind is rarely given. The weather is given in Vienna symbols or in general terms.

GREEK SERIES.—The originals give the barometer corrected for temperature only and the thermometer in Centigrade. Hygrometrical observations are not given, and the rain-fall is omitted. The kind of clouds is occasionally given, and the amount is inferred from the general weather terms. The movement of the air is indicated by force and is given on the scale of 0 to 10.

INDIAN SERIES.—The barometric observations refer to the Calcutta standard, which requires a correction of —0.011 inch, or 0.28 m. m. as compared with the Kew standard. The wind-velocity given is the average rate of wind since the observation of the preceding day. All conversions are published as given in the originals, where the data are recorded to an additional decimal. The weather is given by the Beaufort notation, Vienna symbols, or special symbols.

ITALIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometers per hour or by force on a scale of 0 to 4 at Mondovi, Florence and Cagliari. No distinction is made between upper and lower clouds and the amount is given on a scale of 0 to 10. The weather is given in Vienna symbols.

JAPANESE SERIES.—The rain-fall is measured at 9.30 a. m., local time, and the conversions are all published as given in the originals. Distinction is generally made between upper and lower clouds and the amount is given on the scale of 0 to 10. The weather is given in general terms.

MAURITIUS SERIES.—All conversions are published as given in the originals. The direction of the wind is given to 64 points and the rain-fall is measured at 9.30 a. m., local time.

MEXICAN SERIES.—All conversions (subject to correction at this office) are published as given in the originals. The kind of clouds are given, and also the direction and amount of both upper and lower. The degree of cloudiness is indicated on the scale of 0 to 10.

NETHERLAND SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by pressure in kilograms per square meter, except at Hellevoetsluis, which gives force on the scale of 0 to 12. The humidity is not given on the originals, but for two stations it is computed from the hygrometrical observations. The weather is only given for Utrecht, from which the amount of cloudiness at that station is inferred.

NORWEGIAN SERIES.—The originals give the barometer in millimeters, reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by velocity in meters per second or by force on a scale of 0 to 6. The weather is occasionally given by Vienna symbols. At Bergen, observations upon the weather and degree of cloudiness are made at 2 p. m., local time.

PORTUGUESE SERIES.—In the originals the barometer is given in millimeters and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometers per hour, except at Angra, which gives force on the scale of 0 to 9. The weather is occasionally given by the Vienna symbols. The rain-fall is measured at noon of each day.

RUSSIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. At Astrakhan barometer cistern below sea-level. The movement of the air is indicated by velocity in meters per second. No distinction is made between upper and lower clouds; the amount is given on the scale of 0 to 10 and the kind occasionally. The weather is occasionally given by the Vienna symbols. The rain-fall is not given.

SCOTTISH SERIES.—The originals give the barometer as read off and the movement of the air is indicated by force on a scale of 0 to 6. Distinction is made between upper and lower clouds as to degree and the amount of cloudiness is given on a scale of 0 to 10. The direction of upper clouds is given separately. The rain-fall and humidity are not given at North Unst. The wind direction is given to 32 points.

SPANISH SERIES.—The originals give the barometer at Barcelona, Bilbao, Burgos, Murcia, and Santiago as corrected for temperature only. The movement of the air, except for sub-series, is given in kilometers per hour. The kind of clouds is occasionally given and the degree of cloudiness on a scale of 0 to 10. The rain-fall at San Juan is measured at 4 p. m., local time and at San Fernando at midnight. The weather is given in general (Spanish) terms.

SWEDISH SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force, on a scale of 0 to 6, except in meters per second for Upsala. The kind of clouds is not given, but the degree of cloudiness is indicated on a scale of 0 to 10. The rain-fall is measured at 8 a. m., local time and the weather is occasionally given by the Vienna symbols.

SWISS SERIES.—The originals give the barometer in millimeters, corrected for temperature only and the thermometer in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10 and at Zurich on a scale of 0 to 4. The rain-fall at Zurich is measured at 9 a. m., local time.

TURKISH SERIES.—The originals give the barometer in millimeters reduced to sea-level. The temperature is given in Centigrade. The movement of the air is indicated by force, on a scale of 0 to 7 for Valona and on a scale of 0 to 12 for Beirut. At Constantinople the velocity is given in meters per second. The kind of clouds is not given, but the amount is indicated on a scale of 0 to 10, except at Valona, at which station it is inferred from the general weather terms.

UNITED STATES SERIES.—The originals generally give the barometer reduced to sea-level and the temperature in Fahrenheit. At Bogota the barometer is corrected for temperature only; at Navassa and Puerto Berrio is given as read off and at Rivas is omitted. The amount of cloudiness is given on the scale of 0 to 4, except for Rivas, Paramaribo and York Factory. The movement of the air is generally indicated by velocity in miles per hour, except on a scale of 0 to 10 for Bogota, Paramaribo and Rivas, and 0 to 12 for Puerto Berrio. The wind-direction is generally given to 16 points, except 8 points for Bogota and 32 points for Rivas. The rain-fall at Rivas is given in centimeters and millimeters.

BRITISH NAVAL SERIES.—The originals give the barometer as read off. The wind direction is given to 32 points. The movement of the air is indicated by force on a scale of 0 to 12. The distinction between upper and lower clouds is made as to direction, but not as to amount. The height of sea-disturbance is given on the scale of 0 to 9 and the weather by the Beaufort notation. The direction of movement of wind, clouds and sea is compass direction, corrected only for deviation caused by the iron in the ship, while the correction for magnetic variation is applied at this office. The humidity is not given, but is computed from the hygrometrical observations.

GERMAN NAVAL SERIES.—No vessels reporting.

PORTUGUESE NAVAL SERIES.—The originals give the barometer in millimeters, corrected for temperature only and the thermometer in Centigrade. The movement of the air is indicated by force on the scale of 0 to 10. The humidity is not given, but is computed from the hygrometrical observations. The kind of clouds is not given, but the amount is indicated on the scale of 0 to 10; the direction of movement is given without distinction between upper and lower. The height of sea disturbance is given on the scale of 0 to 9, and the weather by the Beaufort notation. The rain-fall is not measured, but the duration is generally given in hours and minutes.

SWEDISH NAVAL SERIES.—The originals give the barometer as read off. The movement of the air is indicated by force on the scale of 0 to 12, and the direction is corrected for magnetic variation at this office. The humidity is not given, but is computed from the hygrometrical observations. The rain-fall is omitted. The height of the sea-swell is given on the scale of 0 to 9, and the weather by the Beaufort notation.

UNITED STATES NAVAL SERIES.—The originals give the barometer as read off. The humidity is not given, but is computed from the hygrometrical observations. The sea-swell and the weather are given in general terms. The direction of the wind is compass direction, corrected for variation.

BRITISH MERCHANT-MARINE SERIES.—Same as the Naval, except that frequently the direction of the wind is given to the true meridian.

GERMAN MERCHANT-MARINE SERIES.—Same as U. S. Naval, except that the S. S. Braunschweig gives the sea-swell occasionally on the scale of 0 to 9 and the S. S. Leipsig on the scale of 0 to 12.

SWEDISH MERCHANT-MARINE SERIES.—Same as Swedish Naval.

UNITED STATES MERCHANT-MARINE SERIES.—Same as U. S. Naval.

ERRATA.

DAILY BULLETIN, JANUARY, 1881.—1st, page 1, Algerian Series, Mogador, Morocco, should read, Mogador, Morocco,‡; the double dagger should appear after each station in a similar manner; make similar corrections in each "BULLETIN" from 2d to 31st inclusive.

FEBRUARY, 1881—1st, page 1, Algerian Series, Mogador, Morocco, should read, Mogador, Morocco,‡; the double dagger should appear after each station in a similar manner; make similar corrections in each "BULLETIN" from 2d to 28th inclusive. Austro-Hungarian Series, Szegodin, barometer, 29.21, should read, 29.52. Page 2, Canadian Series, St. John's, Newfoundland, weather, fine, should read, fair. Page 5, Russian Series, Krotkowo, observations, 29.72, &c., should read, ——, so that each column of matter moves down one station, 29.72, &c., appearing opposite Lugan and 30.48, &c., opposite Yeniseisk. Page 6, United States Series, Fort Apache, New Mexico, should read, Fort Apache, Arizona; make similar correction in each "BULLETIN" from 2d to 28th inclusive. Page 9, British Naval Series, H. M. S. Zephyrs, should read, H. M. S. Zephyr; make similar corrections on the 3d, 5th, 7th, 9th, 11th, 13th, 15th, 17th, 19th, 21st, 23d, 25th, 27th. Page 7, United States Series, Socorro, New Mexico, barometer, 25.65, should read, 25.63; Springfield, Ill., barometer reduced, 707.1 m. m., should read, 767.1 m. m.; Yuma, Ariz., barometer, 701.5 m. m , should read 761.5 m. m. Page 10, United States Naval Series, S. S. Richmond, Hong-Kong, China, wind direction, ESE., should read, ENE. Page 11, German Merchant Marine Series, S. S. Leipzig, rain-fall, ¼ hour, should read, ½ hour.

2d, page 11, British Merchant Marine Series, S. S. Majestic, should read, S. S. Majestic; make similar correction on the 11th, 14th, 17th, 20th, 23d, 26th. Page 4, Indian Series, Nagpur, barometer, 29.90, should read, 28.90. Page 5, Russian Series, Krotkowo observations, 29.87, &c., should read, ——, so that each column of matter moves down one station, 29.87, &c., appearing opposite Lugan and 30.51, &c., opposite Yeniseisk. Page 7, United States Series, Savannah, Georgia, barometer, 29.94 inches or 760.5 m. m., should read 30.04 or 763.0. Page 11, S. S. Wyberton, position, N. 39° 27′, W. 9° 26′, should read, N. 39° 27′, W. 9° 36′.

3d, page 6, United States Series, Fort Verde, Arizona, wind direction, N., should read, W. Page 9, British Naval Series, H. M. S. Urgent, Port Royal, Jamaica, W. I., wind velocity, 1 meter per second, should read, force 1. Page 12, United States Merchant Marine Series, S. S. Pennsylvania, rain-fall, 25.40 m. m., should read 25 m. m.

5th, page 12, United States Merchant Marine Series, S. S. Senator, temperature, Centigrade, 13°, should read, 13°.9. S. S. Nederland, temperature, Centigrade, 3°.9, should read, 13°.9.

7th, page 5, Scottish Series, Monach Light-house, rain-fall, 12.7 m. m., should read, 13.0 m. m.

8th, page 1, Austro-Hungarian Series, Lemberg, barometer reduced, 29.86, should read, 29.80.

9th, page 12, United States Merchant Marine Series, S. S. Oceanic, rain-fall, 1.02 m. m., should read, 1.00 m. m.

10th, page 12, United States Merchant Marine Series, S. S. Illinois, Liverpool, England,*†, should read, S. S. Illinois, Liverpool, England; make similar correction on the 11th.

12th, page 4, Mauritius Series, Mauritius Observatory, Mauritius, temperature, Fahrenheit, 81°.0, should read, 81°.3. Page 11, Swedish Merchant Marine Series, Barque Adolph Fredholm, should read Barque Adolf Fredholm; make similar corrections on 15th, 18th, 21st, 24th, 28th. [illegible]an Series, Angra, barometer, 29.40, should read, 29.41. Page 6, United States Series, Fort Apache, Arizona, barometer, 640.3 m. m., should read, 640.6 m. m. Page 10, United States Naval Series, move up figures in force column, so that S. S. New Hampshire, Port Royal, S. C., reads 1; S. S. Nipsic, 2; S. S. Onward, 1; S. S. Palos, 4; S. S. Passaic, 3; S. S. Pensacola, 6; S. S. Portsmouth, 2; S. S. Powhattan, 2; S. S. Quinnebaug, 2; S. S. Richmond, 1; S. S. Saratoga, 3; S. S. St. Louis, 1; S. S. Tennessee, 1; S. S. Ticonderoga, 1—2; S. S. Trenton, 1; S. S. Wabash, 2; S. S. Wachusetts, 3.

13th, page 4, Mexican Series, Pabellon, Aguascalientes, temperature, Fahrenheit, 36°.7, should read, 39°.7.

14th, page 5, Scottish Series, Monach Light-house, rain-fall, 10.2 m. m., should read, 10.0 m. m. Page 6, United States Series, Cheyenne, barometer, 23.90 inches or 608.0 m. m., should read, 23.96 inches or 608.6 m. m.

16th, Page 12, United States Merchant Marine Series, S. S. Illinois, Liverpool, England, †, should read, S. S. Illinois, Liverpool, England.

17th, page 4, Mexican Series, Puebla, Catholic Institute, barometer reduced, 771.4 m. m., should read, 758.3 m. m. Page 10, United States Naval Series, S. S. Tennessee, New Orleans, La., barometer, 73.7 m. m., should read, 773.7 m. m.

18th, page 2, Chinese Sub-Series, Zi-Ka-Wei, rain-fall, 0.08 inch, should read, 0.083 inch.

19th, page 5, Portuguese Series, Angra Azores, weather, raining, should read, ——. Campo Major, weather, ——, should read, raining.

20th, page 3, French Series, Arras, Engineer School, velocity, 2 m les per hour, should read, ——.

22d, page 6, United States Series, Indianola, Texas, temperature, Centigrade, —10.6, should read, 10.6.

24th, page 4, Japanese Series, Nagasaki, I. M. Observatory, velocity, 5.1 meters per second, should read, 0.6 meters.

26th, page 8, British Naval Series, H. M. S. Cookatrice, should read, H. M. S. Cockatrice.

MONTHLY SUMMARY, JANUARY, 1881.—Page 3, Italian Sub-Series, Stelvio, total precipitation, 32.68 inches or 830.0 m. m., should read, 3.27 inches or 83.0 m. m.; Valdobbia, total precipitation 104.33 inches or 2650.0 m. m., should read 10.43 inches or 265.0 m. m. Page 4, Russian Series, Barnaul, should read, Barnaul, ‡. Spanish Sub-Series, Manilla, elevation, 108 feet or 33 meters, should read, 56 feet or 17 meters. Page 7, ocean square mean data, from observations taken at 7.35 a. m. Washington or 0.43 p. m. Greenwich mean time, should read, ocean square mean data, from observations taken at 7 a. m. Washington or 0.08 p. m. Greenwich mean time.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR:

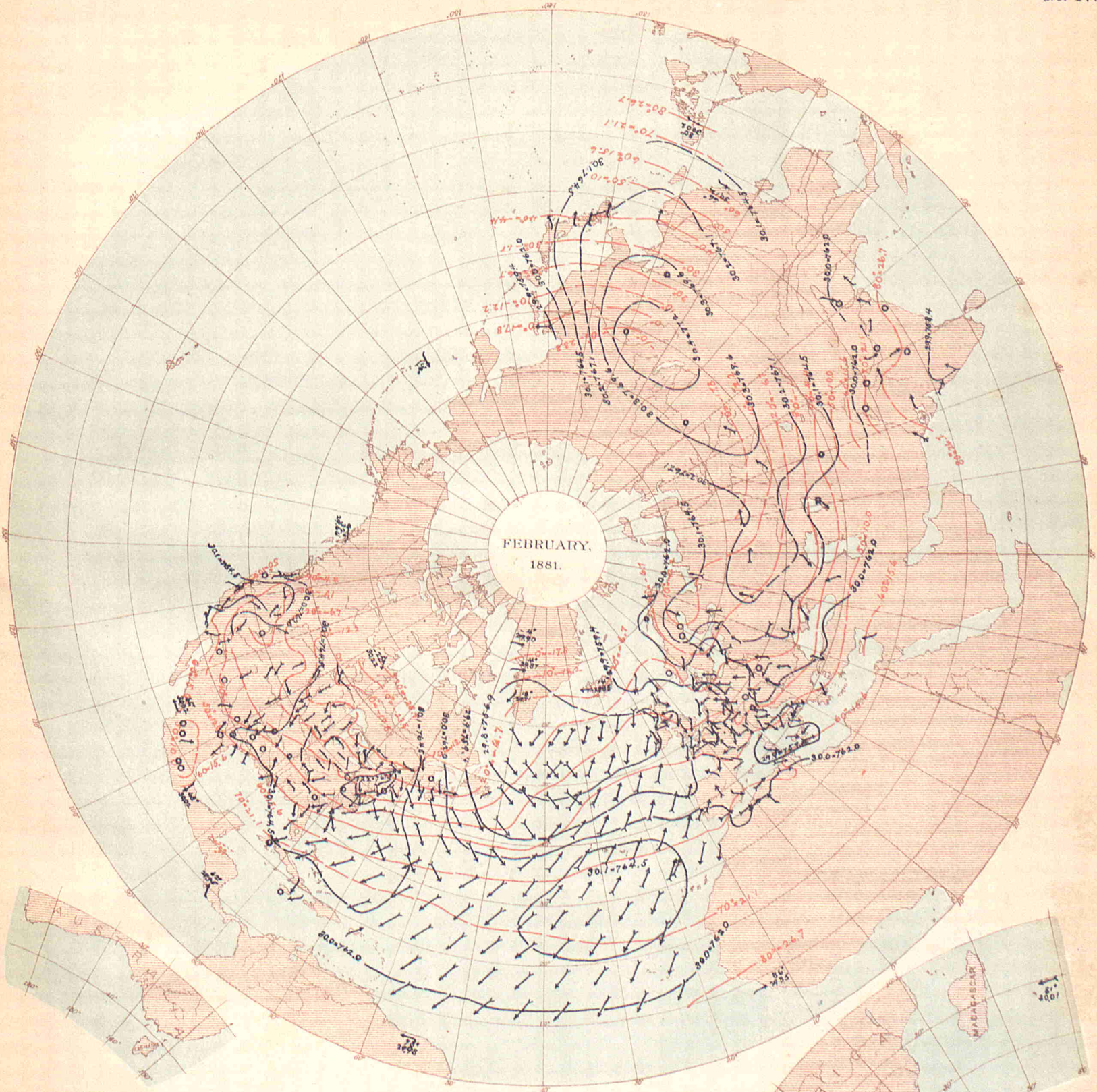
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Office of the Chief Signal Officer,

UNITED STATES ARMY.

Charted from Actual Observations taken Simultaneously, Series commencing January, 1877.

No. IV.



PREVAILING WINDS.

Arrows show the direction of and fly with, the wind.
Force is shown as follows:

Symbols.	Force.	Velocity.	
		Miles per hour.	Metres per second.
○	0	0	0
→	1, 2	0 to 9	0 to 4.0
→	3, 4	9.1 to 22.5	4.1 to 10.1
→	5, 6	22.6 to 40.5	10.1 to 18.1
→	7, 8	40.6 to 67.5	18.1 to 30.2
→	9, 10	67.6 up.	30.2 & over.

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

ISOBARS AND ISOTHERMS.

Isobars in *black*; detached barometer means in English inches.

Isotherms in *red*; detached temperature means in degrees Fahrenheit.

Broken lines, are doubtful.

INTERNATIONAL MONTHLY CHART.

Showing mean pressure, mean temperature, mean force and prevailing direction of winds at 7:00 A. M., Washington mean time, for the month of February, 1881, based on the daily charts of the International Bulletin.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 7, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.16	766.0	65.7	18.7	79	NE			6		1			0	0	Very fair	Dr. Ollive.
Nemours			30.10	764.4	65.5	18.6	75	W			5		1			0	0	Very fair	Raynard.
Algiers			30.00	761.9	61.9	16.6	68	W			3		0			0.189	4.8	Clear	Nicolas.
La Calle			30.02	762.5	50.0	10.0	87	NNW			7		10			0.366	9.3	Covered	Fonfréde.
Tunis			29.74	755.4															Jacques.
Sfax			29.88	758.9															Gau.
Saida			30.15	765.8	57.4	14.1	71	W			2		7			0	0	Very cloudy	Dumas.
Tebessa			29.90	759.5	39.6	4.2	80	N			7		5			0.091	2.3	Fair	Watrin.
Geriville																			Lonchamp.
Laghouat			29.99	761.8	60.4	15.8	67	W			6		4			0	0	Cloudy	Herbin.
Biskra			29.94	760.5															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.91	759.7	30.00	762.0	61.9	16.6	72	S	15	6.7			10			0	0	Dull	R. L. J. Ellery.
Sub-Series.																			
Hobart Town, Tasmania			30.08	764.0	72	22.2		SW			3		10kn			0	0	Covered	Francis Abbott, F.R.A.S.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.50	749.4	30.08	763.9	39.2	4.0	84	E			2		10			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.22	742.2	30.02	762.4	37.0	2.8	79	WNW	9.4	4.2			10			0	0		Dr. Wiersbicki.
Eperies	29.05	737.8	29.97	761.1	34.0	1.1	86	Calm			0		cs			0	0		Julius Mikolik.
Gratz‡	28.76	730.6	30.06	763.4	38.3	3.5	74	SW			1		5			0.055	1.4		Andreas Rospini.
Hermannstadt	28.39	721.0	29.86	758.4	37.0	2.8	87	SE			1		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.76	730.6	30.17	766.2	34.2	1.2	94	SW			2		10			0	0		The Staff.
Lemberg	28.93	734.9	29.96	761.0	34.0	1.1	85	SW			1		4			0	0		Dr. T. Stanecki.
Pola	29.82	757.4	29.93	760.3	44.6	7.0	63	ENE			5		10			0	0		I. R. HydrographicOffice
Szathmar	29.51	749.5	29.97	761.1	38.1	3.4	93	S			2		10			0	0		Beicht Peter, S. J.
Szegedin	29.70	754.4	29.99	761.8	33.8	1.0	92	N			2		5			0	0		Karl Stancel.
Trieste	29.87	758.8	29.98	761.4	43.7	6.5	64	ENE			3		8			0	0	Cloudy	P. Busin.
Vienna	29.36	745.8	30.11	764.7	36.7	2.6	75	W			3		10			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels	29.92	759.9	30.13	765.2	38.3	3.5	56	S			3	3		NW		0.197	5.0		Royal Observatory
Furnes	30.00	762.1	30.03	762.7	38.3	3.5	73	SSW			2		2			0.205	5.2	Raining	M. E. de Cae.
Maeseyck	30.03	762.8	30.10	766.0	39.2	4.0	69	S			2		1			0.299	7.6		M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed February 9, 1882.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 47° 05′, W. 38° 24′	30.25	768.3	44	6.7	84	WSW			3		5?		WSW			H'vy	SW	Clear?	Capt. J. W. Shackford.
S. S. Indiana, ‡ N. 43° 05′, W. 45° 44′ †	29.37	746.0	34	1.1	62	NNW			3		2		NW	Sn	ow	Mod.	N	Clear	Capt. R. W. Sargent.
S. S. Ohio, ‡ Liverpool, England *†	29.96	761.0	41	5.0	100	NE			3		2		NE	0	0			Fair	Wm. Shackford, 1st Off'r.
S. S. Pennsylvania, Liverpool, England †	29.81	757.2	45	7.2	61	E			3		2		E	0	0			Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, ‡ San Francisco, Cal. †	30.14	765.5	56	13.3	81	WNW			1		10			Driz	zles	Light	W	Foggy	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China †*	30.26	768.6	62	16.7	83	Calm			0		10		E					Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 32° 20′, E. 154° 45′	30.27	768.8	58	14.4	76	SE			4		10		S	0.01	0.3	Sl't	N	Overcast	Capt. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles
S. S. Oregon, N. 46° 08′, W. 124° 25′ †	29.81	757.2	49.5	9.7		SW			2		8		W			Mod.	SW	Clearing	Capt E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon. N. 35° 18′, W. 120° 56′ †	30.06	763.5	54	12.2	93	N			2		0					H'vy		Clear	Capt. J. N. Ingalls.
S. S. Idaho, Esquimalt, Vancouver Isl'd †	29.60	751.8	46	7.8	92	SW			2		10		SW					Raining	C. E. Lyons, 1st Officer.
S. S. Orizaba																			
S. S. Senator, N. 36° 05′, W. 121° 50′ †	30.10	764.5	54	12.2	100	NW			2		10					Mod.	W	Foggy	Thos. Wallace.
S. S. State of California, Astoria, Oregon †	29.79	756.7	50	10.0	93	Calm			0		10		SE	Ra	in			Raining	Capt. G. Debney. J. C. Hunter, 1st Officer.
S. S. Victoria																			
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 1st Officer.
S. S. City of New York, S. 34° —′, W. 172° —′ †	29.87	758.7	64	17.8	89	S			5		10		SW	Squ	alls	Mod.	SW	Cloudy	Wm. H. Hawes, 2d Officer. Capt. D. S. Austin.
S. S. City of Panama																			
S. S. City of Peking, Yokohama, Japan †	29.78	756.4	40	4.4	82	N			3		10		NE	0	0	Sm'h		Overcast	Capt. G. G. Berry.
S. S. City of Sidney, N. 0° 30′, W. 163° 43′ †	29.88	758.9	82	27.8	75	SE			2		10		E	0	0	Mod.	ENE	Hazy	Capt. H. C. Dearborn. A. L. Ritchie, 2d Officer.
S. S. City of Tokio																			
S. S. Colima, ‡ Panama, Panama †	29.93	760.2	72	22.2	90	NW			1		8		N	0	0			Cloudy	Capt. R. R. Searle. Capt. D. E. Griffiths.
S. S. Dakota																			
S. S. Granada																			
S. S. Zealandia, Sydney, N. S. W	30.11	764.8	73	22.8	67	N			3		0							Fine	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland ‡																			Capt. Sam'l Jackson.
S. S. Nederland, N 49° 26′, W. 8° 35′ †	30.00	762.0	61	10.6		Var.			2		8		N	Lig	ht	Sm'h		Squally	Capt. S. Stokes.
S. S. Rhynland, ‡ Jersey City, N. J	29.55	750.6	47	8.3		SSE			1					0.2	5.			Foggy	Capt. W. Geo. Randle. Capt. J. C. Jamison.
S. S. Vaderland ‡																			
MISCELLANEOUS.																			
Sch'r Abby K. Bentley, Jacksonville, Florida †	29.81	757.2	60	15.6		S			2		10		S	2.	51.			Threatening	Capt. A. Mehaffey.
Sch'r Addie Fuller, Leedstown, Va	29.54	750.3	53	11.7	93	SE	3	1.3			28			0.19	4.8			Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis, Martinique, W. I. †	29.91	759.7	80	26.7		NNE			1		2		N	0	0			Clear	Capt. S. S. Lewis.
Bark Carrie Heckle, N. 46° 36′, W. 9° 08′ †*	30.00	762.0	58	14.4		NNW			5		2		NNW			Long	NNW	Fair	Capt B. F. Woodbury. Capt. W. H. Champlin.
Brigantine George ‡																			
U. S. S. Fish Hawk, Navy Yard, Norfolk, Va †	29.64	752.8	51	10.6	93	SW	1	0.4		2c	2k			0.07	1.8			Raining	Capt. James S. Gawin.
Ship Jumna																			
Bark Sunbeam, ‡ N. 31° 30′, W. 72° 34′ †	29.87	758.7	71	21.7	?	S			8		10		S	Li	ght	R'gh	SE	Cloudy	Capt. Jos. Hand.

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W. B. HAZEN,
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